

SYSTIMAX®
SOLUTIONS

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SYSTIMAX® Solutions

SYSTIMAX
Solutions

Corporate Profile

SYSTIMAX Solutions™ is the global leader in structured connectivity solutions. Its parent company, CommScope Inc. (NYSE:CTV), is the world's largest manufacturer of broadband coaxial cable for HFC applications and a leading supplier of high-performance fiber optic and twisted pair cables.

The SYSTIMAX product portfolio includes some of the industry's highest performing connectivity solutions for voice, data, video and building management applications in both wired and wireless enterprise networks. According to independent research, SYSTIMAX Structured Connectivity Solution (SCS) is the most widely used cabling system in the world with over 1,000 miles (1,600 km) of SYSTIMAX cable being installed every day in approximately 120 countries.

Key to the SYSTIMAX SCS success is its commitment to manufacturing excellence and technological leadership through the on-going work of SYSTIMAX Labs, its global presence and reach, and its renowned 20-Year Extended Product Warranty and Applications Assurance.

Global Locations

SYSTIMAX Solutions is supported by over 1,000 people covering more than 100 countries and has four main manufacturing facilities around the world – Omaha, NE (USA), Bray (Ireland), Brisbane (Australia) and Jaguariuna (Brazil). Across all four plants, quality control standards are stringent and consistent in accordance with ISO-9001 certification.

SYSTIMAX Labs

SYSTIMAX Solutions prides itself on its technological leadership, which is maintained by employing world-class engineers and scientists. The SYSTIMAX Labs has a remarkable track record in innovation with over 600 active patents and applications worldwide. It aims to be the first to market with next generation, innovative systems and has consistently achieved that over the years with new Category 3, 4, 5 and 6 systems. SYSTIMAX Labs representatives are active participants in every major standard-setting body around the world.

Warranty

The SYSTIMAX Structured Connectivity Solutions (SCS) 20-year warranty is unique in that it provides applications assurance as well as an extended product warranty.

Global Presence

Through a global network of approximately 2,000 highly skilled BusinessPartners, SYSTIMAX Solutions has an established track record in supplying some of the world's leading companies, including three-quarters of the FORTUNE® 500.

Global Solutions

The SYSTIMAX Solutions' product portfolio includes: the UTP copper SYSTIMAX GigaSPEED® X10D Solution capable of supporting 10 Gigabit Ethernet, the copper based GigaSPEED® XL Solution, the fiber optic LazrSPEED® and TeraSPEED™ Solutions, the intelligent patching iPatch® System, the pre-connectorized fiber optic solution InstaPATCH™ Plus and the SYSTIMAX AirSPEED™ Solution, an enterprise wireless LAN solution.

Introduction to SYSTIMAX® Solutions Catalog

Introduction

A premises connectivity system, or distribution system, allows telephones, printers, personal computers (PCs) and other communications devices to communicate with each other. It does this by connecting them together through a combination of cables, adapters, connectors and other equipment such as wireless access points.

A structured connectivity solution is a cohesive way of organizing a connectivity system. The basic rules governing a structured connectivity solution are:

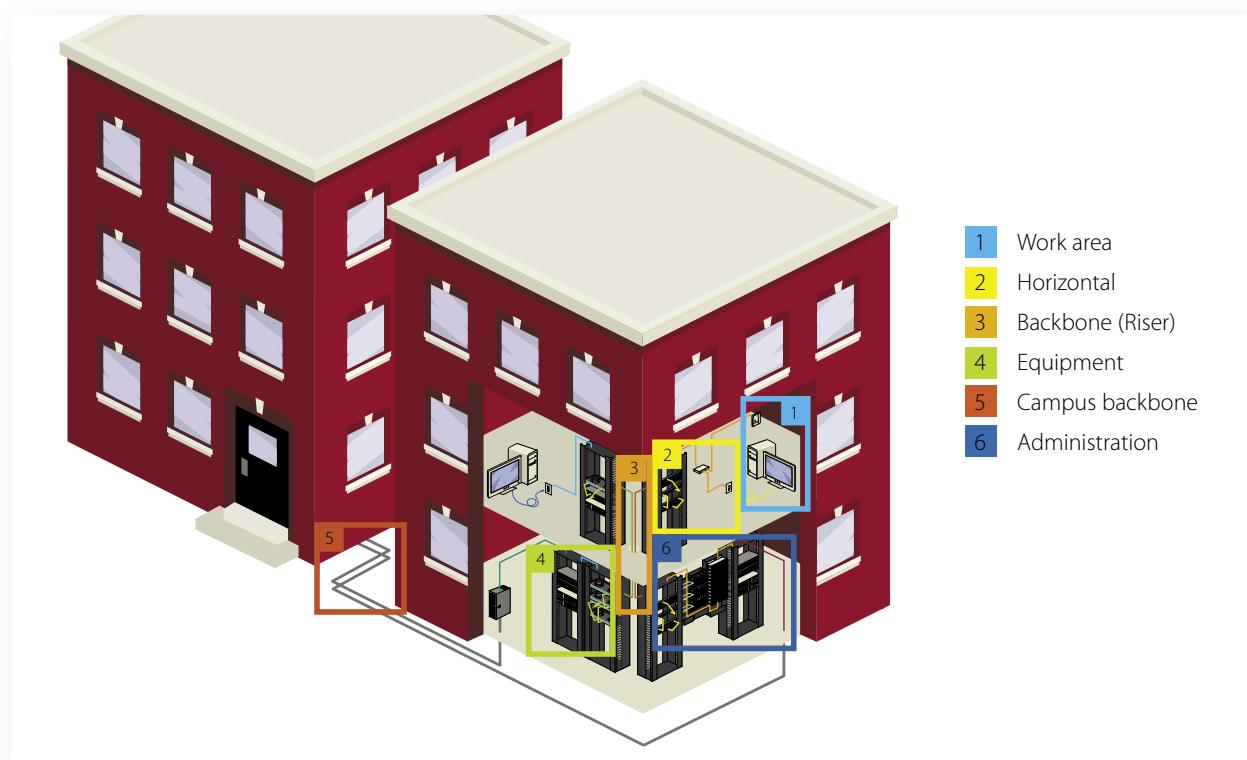
- It uses standardized media and layout for both backbone and horizontal cabling.
- It uses standard connection interfaces for the physical connection of equipment.
- It supports equipment and applications of many vendors — not just a single vendor. The cabling system is independent of the vendor's equipment, and thus, is more flexible. This is known as "Open Architecture."
- It has a consistent and uniform design. It follows a system plan and basic design principles.
- It is designed and installed as a total system. Cabling is not just installed on an as-needed basis.

SYSTIMAX SCS Subsystems

The complete structured connectivity solution can be divided into six discrete subsystems. Each subsystem provides modularity and flexibility; changes and rearrangements usually take place in just two of the subsystems. Configurations for different types of connectivity, for new applications, or for new standards may also involve just a few subsystems.

The following six subsystems, when linked together, provide a complete, integrated connectivity system:

- Work Area Subsystem
- Horizontal Subsystem
- Backbone (Riser) Subsystem
- Equipment Subsystem
- Campus Backbone Subsystem
- Administration Subsystem



Work Area Subsystem

The connection between the Information Outlet (IO) and the station equipment (such as PCs, telephones, printers and video monitors) in the work area is the Work Area Subsystem. It consists of cords, adapters, and other transmission electronics, such as wireless access points, that permit the station equipment to connect to the horizontal media via the IO.

In SYSTIMAX SCS for Building Automation Systems, this subsystem is called the Coverage Area Subsystem, and equipment typically includes smoke-, fire-, and temperature-sensing devices.

Horizontal Subsystem

The Horizontal Subsystem covers the distance from the Work Area to the Telecom Closet (TC). It includes the IO and the transmission media used to extend the outlet to the TC. Each floor of a building is served by its own Horizontal Subsystem.

SYSTIMAX SCS supports the use of UTP cable and/or multi-mode optical fiber and 8.3 micron singlemode optical fiber in the Horizontal Subsystem. The horizontal wiring is terminated on an IO in the Work Area and on cross-connect or interconnect hardware in the TC. The horizontal wiring shall be a star topology with each Work Area IO connected to a TC.

When UTP is used, SYSTIMAX SCS requires that individual 4-pair cables be run and terminated at each IO placed in the Work Area. The maximum length of the horizontal cable run is 295 feet (90 meters).

Backbone (Riser) Subsystem

The Backbone (Riser) Subsystem is the portion of the SYSTIMAX SCS that provides the main (or feeder) cable routes in a building. It usually supplies the multiple circuit facilities between two locations, especially where common system equipment is located at a central point. The Backbone (Riser) Subsystem consists of larger pair count copper cables and optical fiber cabling along with the associated hardware used to bring this cable to other locations. For communications within a building, the Backbone (Riser) Subsystem connects TCs to equipment areas. These areas may be a single main equipment room or multiple equipment locations within the building.

Equipment Subsystem

The Equipment Subsystem consists of shared, common communications equipment and the transmission media required to terminate this equipment on connecting hardware.

The Equipment Subsystem is made up of the cable, connectors and associated support hardware in an equipment room. These are used to extend the common equipment circuits to the main cross-connect wall field for connection to the SYSTIMAX SCS.

Campus Backbone Subsystem

The Campus Subsystem extends the cabling in one building to communication devices and equipment in other buildings on the premises. It is the portion of the distribution system that includes the transmission media and support hardware required to provide an inter-building communication facility. It consists of copper cable, optical fiber cable, and electrical protection devices that are used to prevent surges on the cable from entering buildings.

Fiber optic cable is often used as the Campus Backbone medium because it is immune to Electromagnetic Interference and Radio Frequency Interference (EMI and RFI) and can extend the distance over which signals can travel between buildings. Typically, the Campus Backbone Subsystem connects buildings in the equipment rooms.

Administration Subsystem

The Administration Subsystem consists of the cross-connects and interconnects that are made to join two subsystems together or to assign common equipment circuits to subsystems that exist in the TC and equipment areas. Cross-connects and interconnects allow easy administration of common equipment circuits for routing and rerouting to various parts of a building or a campus.

Cross-connects are made with hook-up wire or patch cords. A hook-up wire is a short length of single wire, whereas a patch cord contains several wires and has connectors at both ends. Patch cords provide an easy way to rearrange circuits without the need for the special tools required to install jumper wires. Interconnects accomplish the same purpose as cross-connects but use plug ended wires, jacks and adapters instead of jumper wires or patch cords.

It is recommended that the Administration System use the color coding for circuit labels and the circuit identification parameters outlined in TIA/EIA 606.

This catalog contains all the components to fulfill the requirements of each of the subsystems.

SYSTIMAX® Structured Connectivity Solutions (SCS)

Introduction



LazrSPEED/OptiSPEED/TeraSPEED

- 1 Outdoor and indoor/outdoor cables
- 2 Fiber optic LIUs/489 FIU
- 3 Indoor and indoor/outdoor cables
- 4 Equipment frame and cable management solution
- 5 InstaPATCH Plus connectivity solutions
- 6 Plenum, Riser and LSZH indoor cables
- 7 G2 fiber connectivity solution
- 8 Faceplates and multimedia outlet
- 9 Patch/work area cord

GigaSPEED X10D/GigaSPEED XL/PowerSUM

- 1 Protection products
- 2 Equipment frame and cable management
- 3 VisiPatch System
- 4 110 System
- 5 iPatch System
- 6 1100/UMP/PATCHMAX patch panels
- 7 Zone boxes
- 8 Outlets and faceplates
- 9 Patch/work area cord and media adapters
- 10 AirSPEED wireless access point

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Copper Solutions Reference

UTP Cable

Copper Conductor Sizes

Gauge	Diameter	DCR	Diameter	DCR
19	0.0359 in	8.05 Ohms/1,000 ft	0.912 mm	26.4 Ohms/km
22	0.0253 in	16.2 Ohms/1,000 ft	0.643 mm	53.2 Ohms/km
23	0.0226 in	20.3 Ohms/1,000 ft	0.574 mm	66.6 Ohms/km
24	0.0201 in	25.7 Ohms/1,000 ft	0.511 mm	84.2 Ohms/km
26	0.0159 in	41.0 Ohms/1,000 ft	0.404 mm	13.5 Ohms/km

Pair Colors

The 4-pair UTP cable, pair color combinations are as follows:

Pair Number	1010 Cable Pair Colors		2010 Cable Pair Colors		61, 71, 81, 91 Series Cable Pair Colors	
	(T)ip	(R)ing	(T)ip	(R)ing	(T)ip	(R)ing
1	W-BL	BL-W	W-BL	BL	W	BL
2	W-O	O-W	W-O	O	W	O
3	W-G	G-W	W-G	G	W	G
4	W-BR	BR-W	W-BR	BR	W	BR

The 25-pair UTP cable, pair color combinations are as follows:

Pair Number	Colors								
1	BL/W	6	BL/R	11	BL/BK	16	BL/Y	21	BL/V
2	O/W	7	O/R	12	O/BK	17	O/Y	22	O/V
3	G/W	8	G/R	13	G/BK	18	G/Y	23	G/V
4	BR/W	9	BR/R	14	BR/BK	19	BR/Y	24	BR/V
5	S/W	10	S/R	15	S/BK	20	S/Y	25	S/V

Color Codes:

Black - BK

Blue - BL

Brown - BR

Green - G

Orange - O

Slate - S

Violet - V

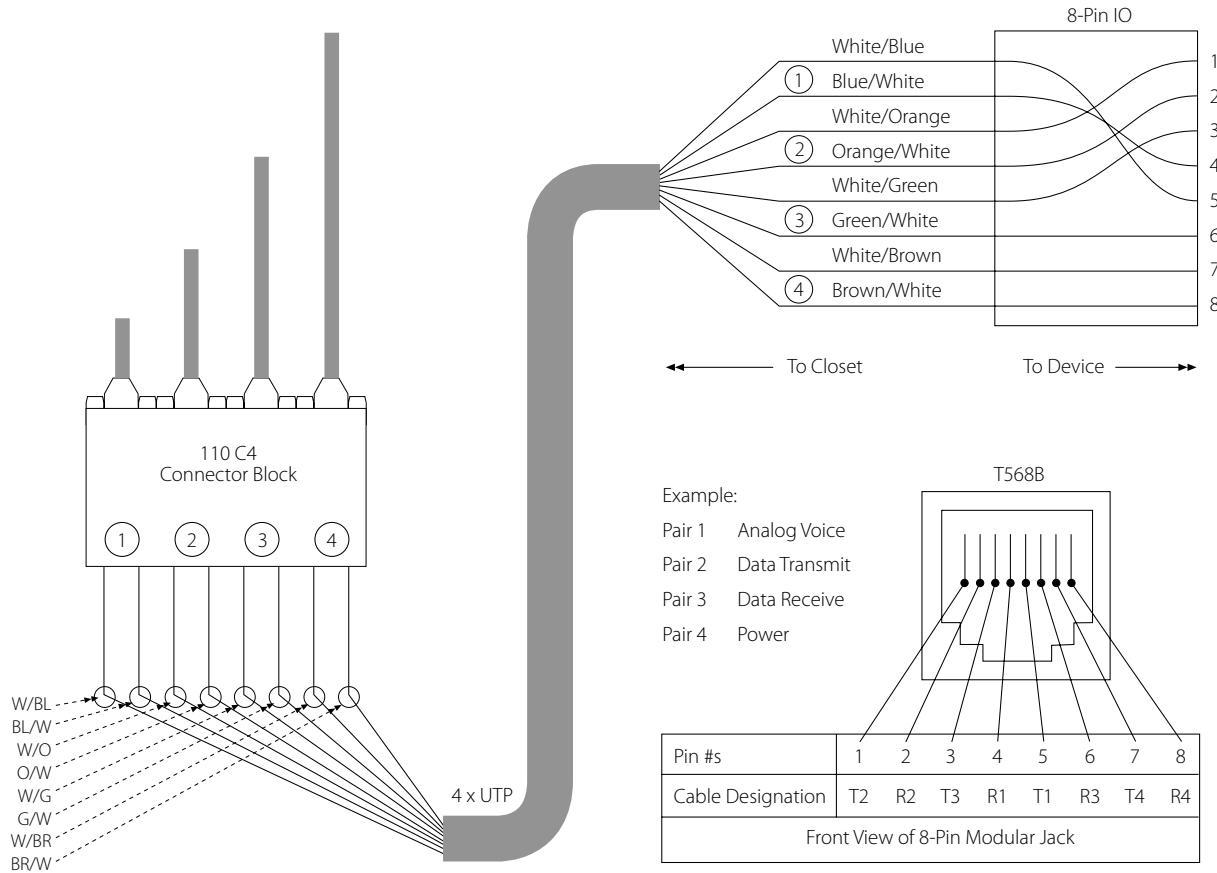
White - W

Yellow - Y

Information Outlet

ISO (International Standards Organization) Pin-Pair Assignment

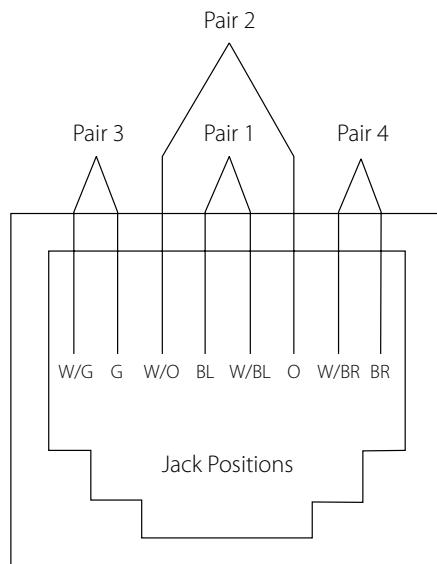
To permit circuit administration at the cross-connects, signals for different services may appear on specified wire pairs. The 8-pin IO is wired internally to make this happen. The 8-pin jack connects particular pins on the station side (the work area wiring) to particular twisted-wire pairs of the building distribution cable (the horizontal wiring).



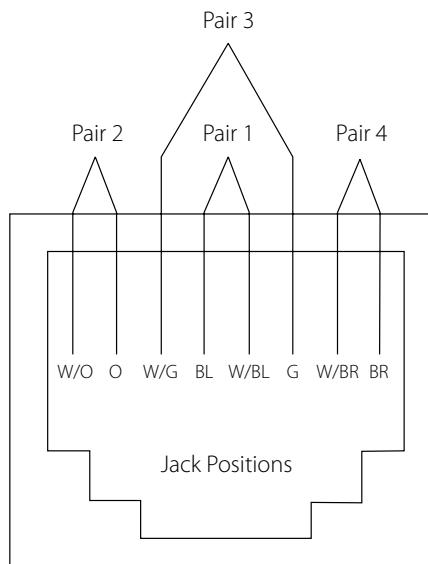
T568 Outlet Specifications

In the TIA/EIA 568B standard, there are two configurations for termination of the 4-pair cable. They are designated T568A and T568B. The T568A wiring has pair 2 (orange) terminated on pins 3 & 6 and pair 3 (green) terminated on pins 1 & 2. The T568B wiring just reverses the termination of the orange and green pairs. Although T568A and T568B wiring is supported for system registration, SYSTIMAX SCS recommends use of the T568B wiring.

T568A PIN-PAIR ASSIGNMENTS



T568B PIN-PAIR ASSIGNMENTS



The SYSTIMAX M-Series Modules are available with T568B and T568A universal color designations.

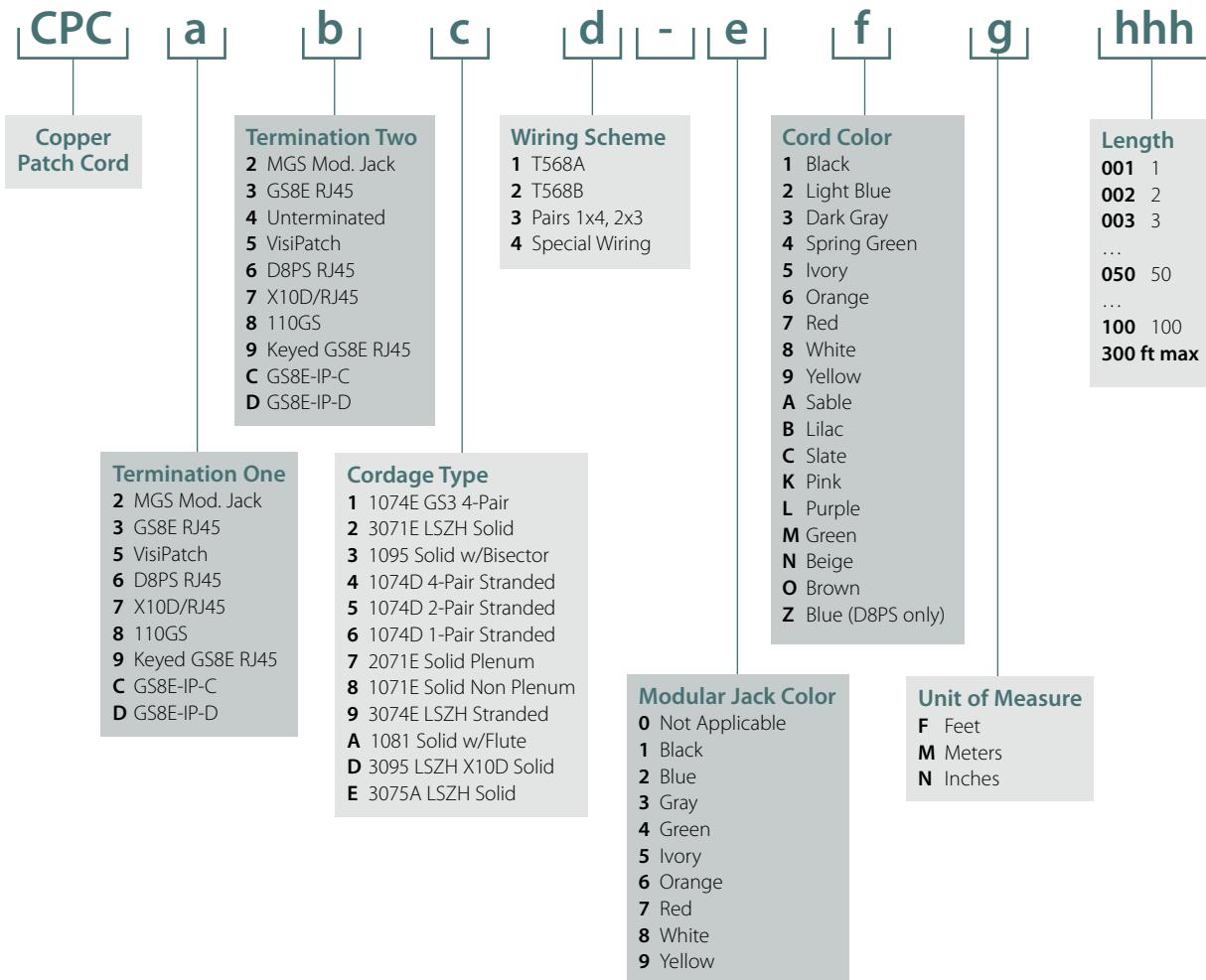
Copper Patch Cord Product Identifier

Patch Cords

Cord Order Process

The **Copper Patch Cord Product Identifier** provides for a flexible ordering system. The various patch cords are orderable with a 14-character feature configuration coding system. It allows for many different combinations of plug ends, cordage types, colors and lengths. However, as this product guide is global, regional portfolios differ. To confirm your region's offering, please contact your account representative or BusinessPartner.

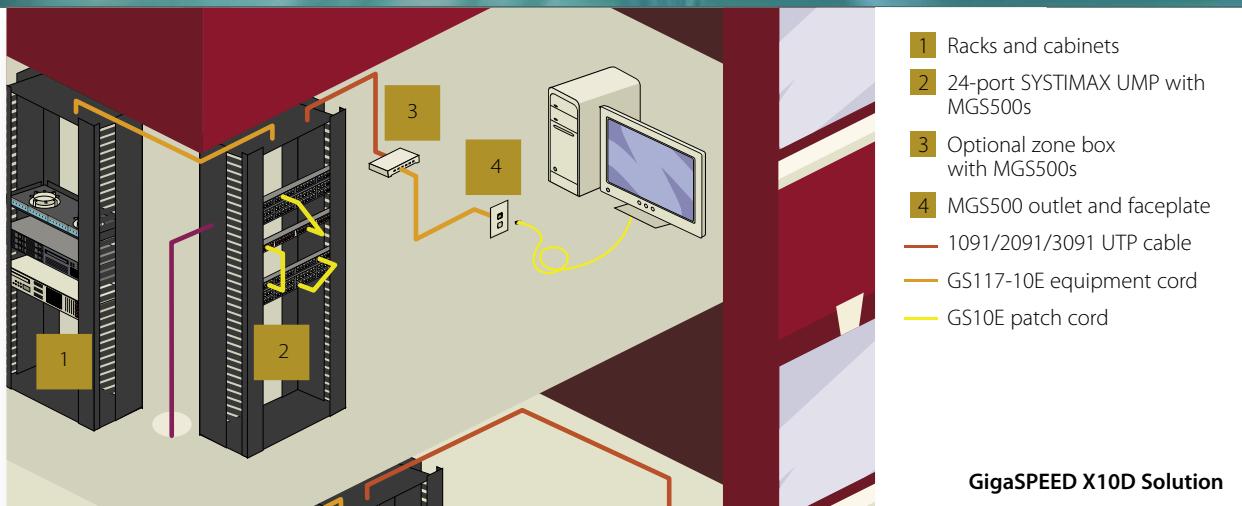
Copper Reference



Example:

The CPC code for a GigaSPEED XL RJ45 to RJ45, Stranded PVC, 568B wired, red, 7-foot patch cord is: CPC3312-07F007

GigaSPEED® X10D Solution Exceeding Category 6A



Features and Benefits:

- Performance guaranteed to meet or exceed draft Category 6A/Class E_A Channel Specifications to 500 MHz
- Performance guaranteed up to 4 connections, up to 100 meters, in a 6-around-1 cable bundle configuration
- Channel optimized using Modal Decomposition Modeling
- Supports IEEE 802.3 10GBASE-T, 1000BASE-T, TIA-854-A 1000BASE-TX, ATM Forum CB1G plus other legacy LANs and applications (Video, BAS)
- Backward compatible with existing SYSTIMAX cable and connecting hardware

The GigaSPEED X10D Solution fully complies with the latest IEEE 802.3an task force guidelines link segment specifications for 10GBASE-T, in addition to the latest TIA/EIA and ISO/IEC Augmented Category 6/Class E_A requirements.

The GigaSPEED X10D Solution will support up to 100 meter channel configuration with at least 4 connections and meet PSANEXT, PSAELFEXT and Insertion Loss specifications extrapolated to 500 MHz per draft IEEE 802.3an. The Alien Crosstalk performance of the GigaSPEED X10D Solution, which is crucial to successful 10 Gbps transmission, is guaranteed for the complete channel (not just cable) across the entire swept frequency (1-500 MHz) and tested in a stringent 6-around-1 configuration that is representative of worst-case installation conditions.

The GigaSPEED X10D Solution meets Category 6/Class E NEXT, PSNEXT, FEXT, ELFEXT, PSELFEXT and return loss extrapolated to 500 MHz per the ISO New Work Item Proposal (NWIP).

The GigaSPEED X10D components are fully backward compatible in terms of channel performance and installation techniques to existing SYSTIMAX UTP solutions. The new and innovative cable design coupled with new connectors that follow similar termination as the previous generations, installation of the complete channel is an evolution of previous SYSTIMAX solutions with a revolution in channel performance.

The GigaSPEED X10D Solution is backed by the SYSTIMAX 20-Year Extended Product Warranty and Applications Assurance when installed and registered by an authorized BusinessPartner.

GigaSPEED X10D products include:

- 4-Pair 1091/2091/3091 UTP Cables
- 24-Port UMP Modular Patch Panels
- MGS500 Information Outlets
- GS10E Patch and Workstation Cords

GigaSPEED® X10D Specifications

SYSTIMAX GigaSPEED X10D Category 6A Guaranteed Channel Performance

Guaranteed Performance Specifications for GigaSPEED X10D Solution

Electrical Parameters	Guaranteed Channel Margins to ISO/IEC 11801 : 2002 "Class E" (1 – 250 MHz)	Guaranteed Channel Margins to Draft ISO/IEC 11801 Edition 2.1 "Class E _A " (1 – 500 MHz)
Insertion Loss	5.0 %	2.0 %
NEXT	6.0 dB	1.0 dB
PSNEXT	7.5 dB	2.5 dB
ELFEXT	6.0 dB	6.0 dB
PSELFEXT	8.0 dB	8.0 dB
Return Loss	3.0 dB	0.0 dB
PSANEXT	N/A	0.0 dB
PSAELFEXT	N/A	0.0 dB

Frequency (MHz)	Insertion Loss (dB)	PSANEXT (dB)	PSAELFEXT (dB)	NEXT (dB)	ACR (dB)	PSNEXT (dB)	PSACR (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)	Delay (ns)	Delay Skew (ns)
1.0	2.1	75.0	75.0	71.0	68.9	69.5	67.4	69.3	68.3	22.0	580	40
4.0	4.0	74.0	65.0	69.0	65.0	68.0	64.0	57.2	56.2	22.0	562	40
8.0	5.6	71.0	58.9	64.2	58.5	63.1	57.5	51.2	50.2	22.0	557	40
10.0	6.3	70.0	57.0	62.6	56.3	61.5	55.2	49.3	48.3	22.0	555	40
16.0	7.9	68.0	52.9	59.2	51.3	58.1	50.2	45.2	44.2	21.0	553	40
20.0	8.9	67.0	51.0	57.6	48.7	56.5	47.6	43.2	42.2	20.5	552	40
25.0	10.0	66.0	49.0	56.0	46.1	54.8	44.9	41.3	40.3	20.0	551	40
31.3	11.2	65.1	47.1	54.4	43.3	53.2	42.1	39.4	38.4	19.5	550	40
62.5	15.9	62.0	41.1	49.4	33.4	48.1	32.2	33.3	32.3	17.0	549	40
100.0	20.4	60.0	37.0	45.9	25.6	44.6	24.2	29.3	28.3	15.0	548	40
200.0	29.4	55.5	31.0	40.8	11.4	39.4	10.0	23.2	22.2	12.0	547	40
250.0	33.1	54.0	29.0	39.1	6.0	37.7	4.5	21.3	20.3	11.0	546	40
300.0	36.5	52.8	27.5	32.7	-3.8	31.3	-5.3	19.7	18.7	8.0	546	40
400.0	42.7	51.0	25.0	30.6	-12.2	29.1	-13.7	17.2	16.2	8.0	546	40
500.0	48.3	49.5	23.0	28.9	-19.4	27.3	-21.0	15.3	14.3	8.0	546	40

Guaranteed Channel Performance Margin for registered SYSTIMAX installations performed by a SYSTIMAX BusinessPartner in accordance with the GigaSPEED X10D Design and Installation guidelines.

Note: The table provides reference values only. All parameters comply with the governing equations given above over the entire frequency range. All values and equations apply to worst-case channels utilizing 4-Pair 91A series cables with full cross-connects, consolidation points and work area outlets (4 connections in a channel) for the length up to 100 meters.

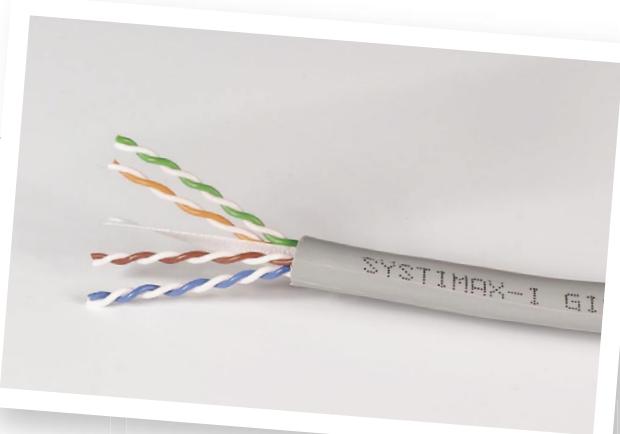
Non Plenum 1091, GigaSPEED® X10D Cable

The GigaSPEED X10D Solution includes a new type of 4-pair cable, the 91 series. GigaSPEED X10D Solution is designed to give channel performance exceeding Augmented Category 6 channel specifications, and in addition has substantially improved Alien Crosstalk performance.

The cable design has been dramatically enhanced using the SYSTIMAX Labs Cable Twist Accuracy Technology. The 91 series cables incorporate a round smooth shape that speeds the handling and termination process and minimizes variation in Alien Crosstalk performance. The cables have been designed to withstand an aggressive 6-around-1 channel test that SYSTIMAX Labs believes to be the most challenging test configuration representative of real life installations including large cable bundles. This is a Powersum computation of the Alien Crosstalk noise from 24-pairs of 6 channels surrounding a single 4-pair channel. The 91 series cables have been specified out to 550 MHz to support high bandwidth applications operating at 10 Gbps.

Features and Benefits:

- Electrical performance guaranteed to meet or exceed the channel specifications of the proposed TIA "Augmented Category 6" and ISO/IEC "Class E_A" up to 500 MHz when used as part of a GigaSPEED X10D channel in registered SYSTIMAX installations
- 4-pair construction with finned inner jacket surface and bisector center member provides the extra margin of performance required for high bandwidth applications



- Can support network line speeds up to at least 10 Gbps
- Qualifies for the SYSTIMAX 20-Year Extended Product Warranty and Applications Assurance when included as part of a registered SYSTIMAX GigaSPEED X10D channel

Physical Specifications:

Weight: 41.5 lbs/1,000 ft (18.82 kg/304.8 m)

Nominal Jacket Thickness: 0.057 in (1.45 mm)

Nominal Outside Diameter: 0.315 in (8 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 66%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Maximum Mutual Capacitance at 1 KHz: 6 nF/100 m

UL and cUL: CMR, CMG

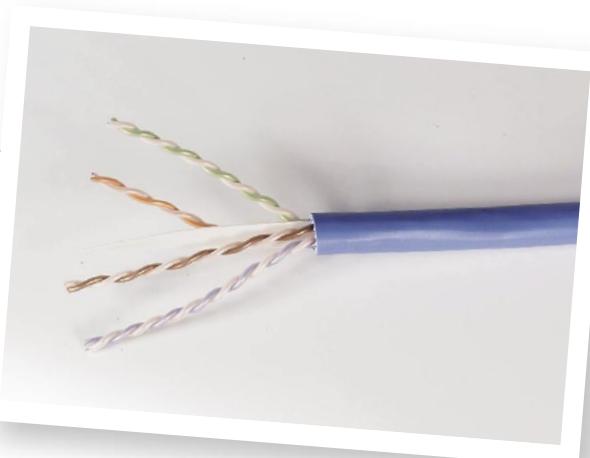
Product Number	Pair Count	Color	Length	Package	Material ID
1091004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	760021683
1091004AYL R1000	4	Yellow	1,000 ft (305 m)	Reel	760021725
1091004ASL R1000	4	Slate	1,000 ft (305 m)	Reel	760021709
1091004AWH R1000	4	White	1,000 ft (305 m)	Reel	760021717
1091004AOR R1000	4	Orange	1,000 ft (305 m)	Reel	760021733
1091004AGN R1000	4	Green	1,000 ft (305 m)	Reel	760047597
1091004ARD R1000	4	Red	1,000 ft (305 m)	Reel	760047589
1091004AOR R3000	4	Orange	3,000 ft (915 m)	Reel	760027185
1091004AYL R3000	4	Yellow	3,000 ft (915 m)	Reel	760027177
1091004ABL R3000	4	Blue	3,000 ft (915 m)	Reel	760027144
1091004ASL R3000	4	Slate	3,000 ft (915 m)	Reel	760027151
1091004AWH R3000	4	White	3,000 ft (915 m)	Reel	760027169
1091004A1BL R1000*	4	Blue	1,000 ft (305 m)	Reel	760024901
1091004A1WH R1000*	4	White	1,000 ft (305 m)	Reel	760024919
1091004A1SL R1000*	4	Slate	1,000 ft (305 m)	Reel	760024927

*Austel

Plenum 2091, GigaSPEED® X10D Cable

The GigaSPEED X10D Solution includes a new type of 4-pair cable, the 91 Series. GigaSPEED X10D Solution is designed to give channel performance exceeding Augmented Category 6 channel specifications, and in addition has substantially improved Alien Crosstalk performance.

The cable design has been dramatically enhanced using the SYSTIMAX Labs Cable Twist Accuracy Technology. The 91 series cables incorporate a round smooth shape that speeds the handling and termination process. The cables have been designed to withstand an aggressive 6-around-1 channel test that SYSTIMAX Labs believes to be the most challenging test configuration. This is a Powersum computation of the Alien Crosstalk noise from 24-pairs of 6 channels surrounding a single 4-pair channel. The 91 series cables have been specified out to 550 MHz to support high bandwidth applications operating at 10 Gbps.



Features and Benefits:

- Electrical performance guaranteed to meet or exceed the channel specifications of the proposed TIA "Augmented Category 6" and ISO/IEC "Class E_A" up to 500 MHz when used as part of a GigaSPEED X10D channel in registered SYSTIMAX installations
- 4-pair construction with finned inner jacket surface and bisector center member provides the extra margin of performance required for high bandwidth applications
- Can support network line speeds up to at least 10 Gbps
- Qualifies for the SYSTIMAX 20-Year Extended Product Warranty and Applications Assurance when included as part of a registered SYSTIMAX GigaSPEED X10D channel

Physical Specifications:

Weight: 46.3 lbs/1,000 ft (21 kg/304.8 m)

Nominal Jacket Thickness: 0.050 in (1.27 mm)

Nominal Outside Diameter: 0.308 in (7.82 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 68%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Maximum Mutual Capacitance at 1 KHz: 6 nF/100 m

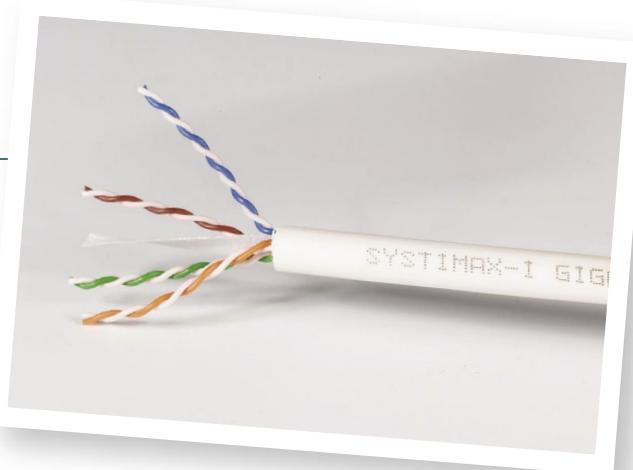
UL and cUL: CMP

Product Number	Pair Count	Color	Length	Package	Material ID
2091004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	760024190
2091004AOR R1000	4	Orange	1,000 ft (305 m)	Reel	760024232
2091004ASL R1000	4	Slate	1,000 ft (305 m)	Reel	760024208
2091004AWH R1000	4	White	1,000 ft (305 m)	Reel	760024216
2091004AYL R1000	4	Yellow	1,000 ft (305 m)	Reel	760024224
2091004AGN R1000	4	Green	1,000 ft (305 m)	Reel	760047571
2091004ARD R1000	4	Red	1,000 ft (305 m)	Reel	760042788

LSZH 3091, GigaSPEED® X10D Cable

The GigaSPEED X10D Solution includes a new type of 4-pair cable, the 91 series. GigaSPEED X10D Solution is designed to give channel performance exceeding Augmented Category 6 channel specifications, and in addition has substantially improved Alien Crosstalk performance.

The cable design has been dramatically enhanced using the SYSTIMAX Labs Cable Twist Accuracy Technology. The 91 series cables incorporate a round smooth shape that speeds the handling and termination process. The cables have been designed to withstand an aggressive 6-around-1 channel test that SYSTIMAX Labs believes to be the most challenging test configuration. This is a Powersum computation of the Alien Crosstalk noise from 24-pairs of 6 channels surrounding a single 4-pair channel. The 91 series cables have been specified out to 550 MHz to support high bandwidth applications operating at 10 Gbps.



Features and Benefits:

- Electrical performance guaranteed to meet or exceed the channel specifications of the proposed TIA "Augmented Category 6" and ISO/IEC "Class E_A" up to 500 MHz when used as part of a GigaSPEED X10D channel in registered SYSTIMAX installations
- 4-pair construction with finned inner jacket surface and bisector center member provides the extra margin of performance required for high bandwidth applications
- Can support network line speeds up to at least 10 Gbps
- Qualifies for the SYSTIMAX 20-Year Extended Product Warranty and Applications Assurance when included as part of a registered SYSTIMAX GigaSPEED X10D channel

Physical Specifications:

Weight: 42.8 lbs/1,000 ft (19.4 kg/304.8 m)

Nominal Jacket Thickness: 0.057 in (1.448 mm)

Nominal Outside Diameter: 0.315 in (8.001 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 66%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Maximum Mutual Capacitance at 1 kHz: 6 nF/100 m

Standards: IEC 60754 Part 2, IEC 61034 Part 2, IEC 60332 Part 3

Product Number	Pair Count	Color	Length	Package	Material ID
3091004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	760023242
3091004AWH R1000	4	White	1,000 ft (305 m)	Reel	760023226
3091004ABL R3000	4	Blue	3,000 ft (915 m)	Reel	760023275
3091004AWH R3000	4	White	3,000 ft (915 m)	Reel	760023234

GigaSPEED® X10D Universal Modular Patch Panel

SYSTIMAX Universal Modular Patch Panel is a 19 inch rack mounted panel. It accepts up to 24 GigaSPEED X10D MGS500 information outlets for patching and interconnection in the telecommunications closet or equipment room.



This modular concept allows termination of outlets in the field, coupled with high density and the ability to integrate InstaPATCH pre-terminated fiber modules in the same footprint, it is an ideal data center solution. It consists of a rack mounted base unit, three slide-in modules with interchangeable front bezels, cable management brackets and a flip-down removable front cover for close-out. The Universal Modular Patch Panel accepts GigaSPEED X10D and XL, PowerSUM, LazrSPEED and TeraSPEED apparatus.

The panel's 1U height maximizes rack space. Color coding is possible by use of colored outlets.

Features and Benefits

- Accommodates up to 24 GigaSPEED X10D MGS500 information outlets for easy termination of 4-pair copper cables, in addition to coaxial outlets and S-Video and RCA adapters
- 1U design maximizes rack space
- Integrated cable management enables enhanced cable routing
- Modularity will support up to three multimedia modules
- The multimedia modules can be configured to support GigaSPEED X10D/XL, PowerSUM, LazrSPEED and TeraSPEED pre-terminated fiber and coaxial outlets such as RCA and S-Video
- Three methods of labeling are provided: on the inside of the front cover, on the rear of the base and on the front of each of the bezels

Physical Specifications:

Height: 1.72 in (4.4 cm)

Width: 19 in (48.3 cm)

Depth: 4.17 in (10.6 cm)

Detailed Description	Material ID
UMP 24-Port Panel Kit (Panel, Brackets, Tie Wraps Screws, Cover and three 8-Port Bezel Kits)	760026682
UMP Blank Panel Kit (Bezel Kits not included)	760026740
UMP 24-Port Panel without cover	760034710
UMP Cover Kit	760035501
UMP 8-Port Bezel Kit	760026716
Label Kit for UMP 24-Port Panel	760036079

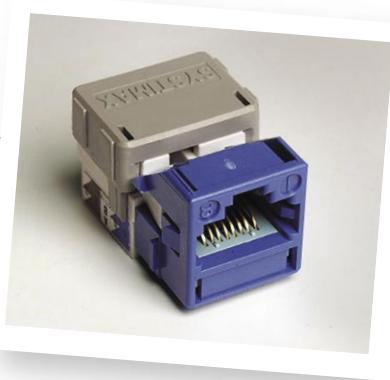


MGS500 Series

GigaSPEED® X10D

Information Outlet

The MGS500 information outlet, the latest result of many years continuous product development at SYSTIMAX Labs, features patented crosstalk cancellation and compensation techniques. The MGS500 connectivity, consistent at the panels and outlet, exhibit huge improvements in high frequency crosstalk enabled via new PWB (Printed Wiring Board) materials and compensation technology. In addition, large improvements in connector Alien Crosstalk mitigation have been achieved through new materials and PWB compensation enhancements. This connector design excellence has been made possible by the SYSTIMAX Labs Connector Field Pattern Modeling technology, coupled with the system level MDM tool enabling high frequency cross coupling effects to be eliminated.



Features and Benefits:

- Electrical performance guaranteed to meet or exceed the channel specifications of the proposed TIA "Augmented Category 6" and ISO/IEC "Class E_A" up to 500 MHz when used as part of a GigaSPEED X10D channel in registered SYSTIMAX installations
- Snaps into standard SYSTIMAX M-Series faceplates, surface-mount boxes, consolidation point boxes, SYSTIMAX Universal Modular Panel (UMP) or FlexiMAX panels. Can also be mounted either at 90 degrees (straight) or 45 degrees (angled) in any SYSTIMAX faceplate
- Universal design and label supports both T568A & B wiring
- IDC connector terminations on rear of base allow quick and easy installation of 22 to 24 AWG cable
- Qualifies for the SYSTIMAX 20-Year Extended Product Warranty and Applications Assurance when included as part of a registered SYSTIMAX GigaSPEED X10D channel

Physical Specifications:

Dimensions: HxWxD: 0.8 in x 0.8 in x 1.2 in (2.0 cm x 2.0 cm x 3.1 cm)
Universal A/B labeling

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel underplate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm) (26 to 22 AWG)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm) (24 to 22 AWG)

Insulation Size: 0.030 in to 0.046 in (0.76 mm to 1.17 mm)

Insulation Types: All plastic insulates, including: PVC, irradiated PVC, Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug

Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

UL and cUL Listed

Product Number	Color	Material ID
MGS500-003	Black	760023556
MGS500-318	Blue	760023648
MGS500-112	Orange	760023564
MGS500-226	Green	760023598
MGS500-123	Yellow	760023572
MGS500-361	Violet	760023655
MGS500-270	Gray	760023622
MGS500-215	Cream	760023580
MGS500-262	White	760023614
MGS500-246	Ivory	760023606
MGS500-317	Red	760023630



GS10E GigaSPEED® X10D Modular Patch Cord

The high performance GS10E modular patch cord family has a patent pending plug design featuring a distinctive aqua sled and anti-snag latch for easy and rapid field identification. The GS10E plug exhibits a dramatic reduction in variation of performance via the innovative plug design. As soon as the cordage enters the plug from the rear, pairs are controlled and the untwisting of pairs and nesting of conductors required in conventional plugs is thus avoided.

The GS117-10E cord is a single-ended version of the GS10E GigaSPEED X10D patch cord.

Patch cords are orderable using a 14-character feature configuration coding scheme which replaces the familiar 9-character Material ID. This allows maximum flexibility for ordering many different combinations of plug ends, cordage types, colors and lengths. Please use SYSTIMAX Copper Patch Cord Product Identifier (in Copper Reference Section) for ordering information or contact your SYSTIMAX BusinessPartner.



Features and Benefits:

- Electrical performance guaranteed to meet or exceed the channel specifications of the proposed TIA "Augmented Category 6" and ISO/IEC "Class E_A" up to 500 MHz when used as part of a GigaSPEED X10D channel in registered SYSTIMAX installations
- Can support network line speeds up to at least 10 Gbps

- Certified component of an integrated GigaSPEED X10D Solution
- Qualifies for the SYSTIMAX 20-Year Extended Product Warranty and Applications Assurance when included as part of a registered SYSTIMAX GigaSPEED X10D channel

Physical Specifications:

Contact Material: Phosphor Bronze

Contact Plating: Gold 50 micro-inch (1.27 microns), nickel 100 micro-inch (2.54 microns)

Insertion Life: 750 minimum

Plug Material: Polycarbonate UL-rated 94 V-O

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Electrical Specifications:

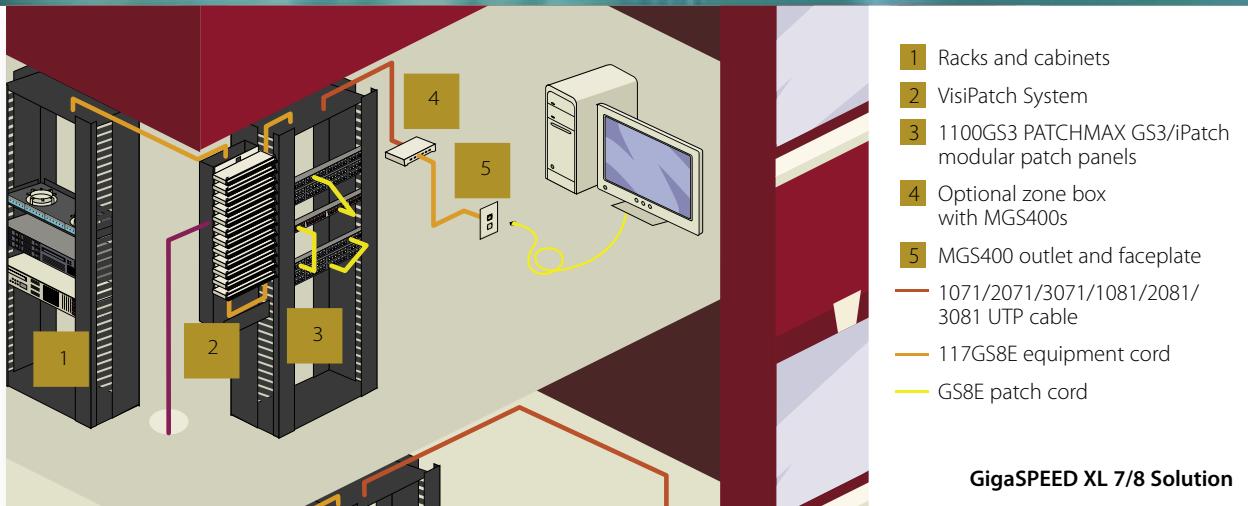
UL and cUL: CM (cordage)

Product Number	Detailed Description	CPC Code
GS10E	X10D Double Ended Cord	CPC7732
GS10H-LSZH	X10D LSZH Double Ended Cord	CPC77D2
GS117-10E	X10D Single Ended Cord	CPC7432





GigaSPEED® XL Solution Exceeding Category 6



Features and Benefits:

- Performance guaranteed to meet or exceed Category 6/Class E Channel Specifications to 250 MHz
- Performance guaranteed up to 6 connections in any length channel configuration up to 100 meters
- Channel optimized using Modal Decomposition Modeling
- Supports IEEE 802.3 1000BASE-T, TIA-854-A 1000BASE-TX, ATM Forum CB1G plus other legacy LANs and applications (Video, BAS)
- Backward compatible with existing SYSTIMAX cable and connecting hardware

SYSTIMAX channels comprised of GigaSPEED XL passive products, are capable of delivering potentially in excess of 1.2 Gbps to the workstation in accordance with application standards and are eligible for the SYSTIMAX SCS 20-Year Extended Product Warranty and Applications Assurance.

GigaSPEED XL products include:

- 4-Pair 1071/2071/3071 UTP Cables
- 4-Pair 1081/2081/3081 UTP Cables
- PATCHMAX GS3 and 1100GS3 Modular Patch Panels
- MGS400 Telecommunications Outlets
- GS8E Patch and Workstation Cords
- 110 VisiPatch System
- 110VP, 117VP and 119VP Patch Cords

GigaSPEED® XL7 Specifications

SYSTIMAX GigaSPEED XL7 Category 6 Guaranteed Channel Performance

Guaranteed Performance Specifications for GigaSPEED XL7 Solution

Electrical Parameter (1 - 250 MHz)	Guaranteed Channel Margins to Category 6/Class E TIA 568B.2-1 and ISO 11801 Edition 2.0
Insertion Loss	5.0 %
NEXT	6.0 dB
PSNEXT	7.5 dB
ELFEXT	6.0 dB
PSELFEXT	8.0 dB
Return Loss	4.0 dB

Frequency (MHz)	Insertion Loss (dB)	NEXT (dB)	ACR (dB)	PSNEXT (dB)	PSACR (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)	Delay (ns)	Delay Skew (ns)
1.0	2.0	71.0	69.0	69.5	67.5	69.3	68.3	23.0	580	30
4.0	3.8	69.0	65.2	68.0	64.2	57.2	56.2	23.0	562	30
8.0	5.4	64.2	58.8	63.1	57.7	51.2	50.2	23.0	557	30
10.0	6.0	62.6	56.6	61.5	55.5	49.3	48.3	23.0	555	30
16.0	7.6	59.2	51.6	58.1	50.4	45.2	44.2	22.0	553	30
20.0	8.6	57.6	49.1	56.5	47.9	43.2	42.2	21.5	552	30
25.0	9.6	56.0	46.4	54.8	45.2	41.3	40.3	21.0	551	30
31.3	10.8	54.4	43.6	53.2	42.4	39.4	38.4	20.5	550	30
62.5	15.6	49.4	33.7	48.1	32.4	33.3	32.3	18.0	549	30
100.0	20.2	45.9	25.7	44.6	24.3	29.3	28.3	16.0	548	30
200.0	30.0	40.8	10.8	39.4	9.4	23.2	22.2	13.0	547	30
250.0	34.1	39.1	5.0	37.7	3.5	21.3	20.3	12.0	546	30

Note: The table provides reference values only. All parameters comply with the governing equations over the entire frequency range. All values and equations apply to worst-case channels utilizing 4-pair 71E series cables with full cross-connects, consolidation points and work area outlets (4 connections in a channel) for any channel lengths up to 100 meters.

GigaSPEED® XL8 Specifications

SYSTIMAX GigaSPEED XL8 Category 6 Guaranteed Channel Performance

Guaranteed Performance Specifications for GigaSPEED XL8 Solution

Electrical Parameter (1 – 250 MHz)	Guaranteed Channel Margins to Category 6/Class E TIA 568B.2-1 and ISO 11801 Edition 2.0
Insertion Loss	7.5 %
NEXT	7.0 dB
PSNEXT	8.5 dB
ELFEXT	8.0 dB
PSELFEXT	10.0 dB
Return Loss	4.0 dB

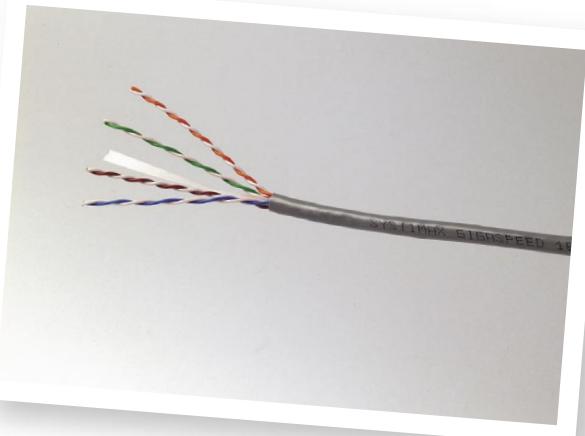
Frequency (MHz)	Insertion Loss (dB)	NEXT (dB)	ACR (dB)	PSNEXT (dB)	PSACR (dB)	ELFEXT (dB)	PSELFEXT (dB)	Return Loss (dB)	Delay (ns)	Delay Skew (ns)
1.0	2.0	72.0	70.0	70.5	68.5	71.3	70.3	23.0	580	30
4.0	3.7	70.0	66.3	69.0	65.3	59.2	58.2	23.0	562	30
8.0	5.2	65.2	59.9	64.1	58.9	53.2	52.2	23.0	557	30
10.0	5.9	63.6	57.7	62.5	56.6	51.3	50.3	23.0	555	30
16.0	7.4	60.2	52.8	59.1	51.6	47.2	46.2	22.0	553	30
20.0	8.3	58.6	50.3	57.5	49.1	45.2	44.2	21.5	552	30
25.0	9.4	57.0	47.7	55.8	46.5	43.3	42.3	21.0	551	30
31.3	10.5	55.4	44.9	54.2	43.7	41.4	40.4	20.5	550	30
62.5	15.2	50.4	35.1	49.1	33.9	35.3	34.3	18.0	549	30
100.0	19.7	46.9	27.2	45.6	25.9	31.3	30.3	16.0	548	30
200.0	29.2	41.8	12.6	40.4	11.2	25.2	24.2	13.0	547	30
250.0	33.2	40.1	6.9	38.7	5.4	23.3	22.3	12.0	546	30

Note: The table provides reference values only. All parameters comply with the governing equations over the entire frequency range. All values and equations apply to worst-case channels utilizing 4-pair 81A series cables with full cross-connects, consolidation points and work area outlets (4 connections in a channel) for any channel lengths up to 100 meters.



Non Plenum Category 6, 1071E GigaSPEED® XL Cable

The 1071E 4-Pair GigaSPEED XL cable meets or exceeds Category 6/Class E attenuation and NEXT requirements in ISO/IEC 11801, CENELEC EN50173 and TIA/EIA 568B. Further, these cables are UL verified as Category 6. The 71E GigaSPEED XL cables features a patent-pending thin and easy to remove bisector tape that delivers the performance benefits of more traditional fluted center members without the associated stiffness and size.



Physical Specifications:

Weight: 26.2 lbs/1,000 ft (11.88 kg/304.8 m)

Nominal Jacket Thickness: 0.022 in (0.559 mm)

Nominal Outside Diameter: 0.232 in (5.89 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 69%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Mutual Capacitance at 1 kHz: 5.6 nF/100 m

Standards: ANSI/TIA/EIA 568B.2-1 Category 6

ISO/IEC 11801: 2002 (Edition 2) Class E

CENELEC EN50173: 2002 (Edition 2) Category 6

UL and cUL: CMR

Product Number	Pair Count	Color	Length	Package	Material ID
1071004ESL R1000	4	Slate	1,000 ft (305 m)	Reel	700211923
1071004ESL R3000	4	Slate	3,000 ft (915 m)	Reel	760040097
1071004ESL W1000	4	Slate	1,000 ft (305 m)	We Tote™	700211931
1071004ELB R1000	4	Light Blue	1,000 ft (305 m)	Reel	700211956
1071004ELB R3000	4	Light Blue	3,000 ft (915 m)	Reel	760040105
1071004ELB W1000	4	Light Blue	1,000 ft (305 m)	We Tote	700211964
1071004EYL R1000	4	Yellow	1,000 ft (305 m)	Reel	700211980
1071004EYL W1000	4	Yellow	1,000 ft (305 m)	We Tote	700211998
1071004ERD W1000	4	Red	1,000 ft (305 m)	We Tote	700212020
1071004ERD R1000	4	Red	1,000 ft (305 m)	Reel	700212012
1071004EWH R1000	4	White	1,000 ft (305 m)	Reel	700214208
1071004EWH R3000	4	White	3,000 ft (915 m)	Reel	760040089
1071004EWH W1000	4	White	1,000 ft (305 m)	We Tote	700212046
1071004EGN R1000	4	Green	1,000 ft (305 m)	Reel	700212053
1071004EGN W1000	4	Green	1,000 ft (305 m)	We Tote	700212061
1071004ELL R1000	4	Lilac	1,000 ft (305 m)	Reel	700212087
1071004ELL W1000	4	Lilac	1,000 ft (305 m)	We Tote	700212095
1071004EOR W1000	4	Orange	1,000 ft (305 m)	We Tote	700212103
1071004EOR R1000	4	Orange	1,000 ft (305 m)	Reel	700212111
1071004EBK W1000	4	Black	1,000 ft (305 m)	We Tote	700212129
1071004EBL R1000	4	Blue	1,000 ft (305 m)	Reel	760004697
1071004EBL W1000	4	Blue	1,000 ft (305 m)	We Tote	760004689
1071004EPK W1000	4	Pink	1,000 ft (305 m)	We Tote	760011858
1071004EDG W1000	4	Dark Gray	1,000 ft (305 m)	We Tote	760039602
1071004EIV W1000	4	Ivory	1,000 ft (305 m)	We Tote	760039628
1071004ESA W1000	4	Sable	1,000 ft (305 m)	We Tote	760039636
1071004EPR W1000	4	Purple	1,000 ft (305 m)	We Tote	760039644
1071004EBR W1000	4	Brown	1,000 ft (305 m)	We Tote	760039594

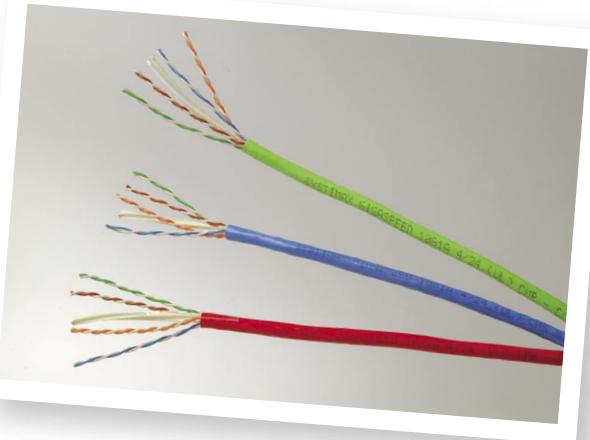
GigaSPEED
XL

Product Number	Color	Length	Package	Material ID
1071 004EGR W1000	4	Gray	1,000 ft (305 m)	We Tote
1071 004EBE W1000	4	Beige	1,000 ft (305 m)	We Tote
1071 004E1SL R1000*	4	Slate	1,000 ft (305 m)	Reel

*Austel

Non Plenum Category 6, 1081 GigaSPEED® XL Cable

The 81 series cables feature an innovative fluted design which provides significant margin (headroom) (10 dB) above the minimum Category 6 Near End Crosstalk (NEXT) and Powersum NEXT requirements in TIA/EIA 568B. Further, these cables are UL verified as Category 6.



Physical Specifications:

Weight: 28.4 lbs/1,000 ft (12.88 kg/304.8 m)
Nominal Jacket Thickness: 0.020 in (0.51 mm)
Nominal Outside Diameter: 0.262 in (6.65 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 69%
Maximum DC Resistance: 7.61 Ohms/100 m
Maximum DC Resistance Unbalance: 3%
Mutual Capacitance at 1 kHz: 5.6 nF/100 m
Standards: ANSI/TIA/EIA 568B.2-1 Category 6
 ISO/IEC 11801: 2002 (Edition 2) Class E
 CENELEC EN50173: 2002 (Edition 2) Category 6
UL and cUL: CMR

Product Number	Pair Count	Color	Length	Package	Material ID
1081004ASL R1000	4	Slate	1,000 ft (305 m)	Reel	108680802
1081004ASL R3000	4	Slate	3,000 ft (915 m)	Reel	108744921
1081004ALB R1000	4	Light Blue	1,000 ft (305 m)	Reel	108680810
1081004ABL R3000	4	Blue	3,000 ft (915 m)	Reel	108744947
1081004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	108680869
1081004AIV R1000	4	Ivory	1,000 ft (305 m)	Reel	108680877
1081004AYL R1000	4	Yellow	1,000 ft (305 m)	Reel	108680885
1081004ARD R1000	4	Red	1,000 ft (305 m)	Reel	108680893
1081004AWH R1000	4	White	1,000 ft (305 m)	Reel	108681115
1081004AWH R3000	4	White	3,000 ft (915 m)	Reel	108744939
1081004AGN R1000	4	Green	1,000 ft (305 m)	Reel	108681131
1081004ALL R1000	4	Lilac	1,000 ft (305 m)	Reel	108681149
1081004AOR R1000	4	Orange	1,000 ft (305 m)	Reel	108681156
1081004ABK R1000	4	Black	1,000 ft (305 m)	Reel	108744954

Plenum Category 6, 2071E GigaSPEED® XL Cable

The 2071E 4-pair GigaSPEED XL cable meets or exceeds Category 6/Class E attenuation and NEXT requirements in ISO/IEC 11801, CENELEC EN50173 and TIA/EIA 568B. Further, these cables are UL verified as Category 6. The 71E GigaSPEED XL cables features a patent-pending thin and easy to remove bisector tape that delivers the performance benefits of more traditional fluted center members without the associated stiffness and size.

The 2071E 4-pair cable is composed of bare solid copper conductors insulated with Fluorinated-Ethylene-Propylene (FEP). The core of twisted pairs is jacketed with a low smoke PVC. It conforms to the low flame, low smoke requirements of the NEC.

Physical Specifications:

Weight: 29.1 lbs/1,000 ft (13.2 kg/304.8 m)

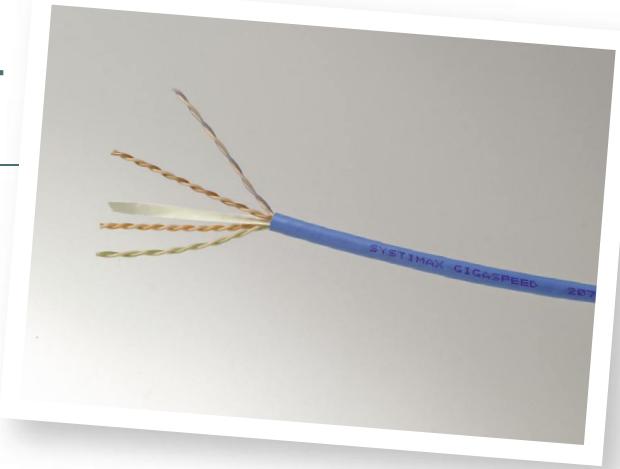
Nominal Jacket Thickness: 0.020 in (0.51 mm)

Nominal Outside Diameter: 0.224 in (5.69 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG



Electrical Specifications:

NVP (fastest pair @ 10 MHz): 71%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Mutual Capacitance at 1 kHz: 5.6 nF/100 m

Standards: ANSI/TIA/EIA 568B.2-1 Category 6

ISO/IEC 11801: 2002 (Edition 2) Class E

CENELEC EN50173: 2002 (Edition 2) Category 6

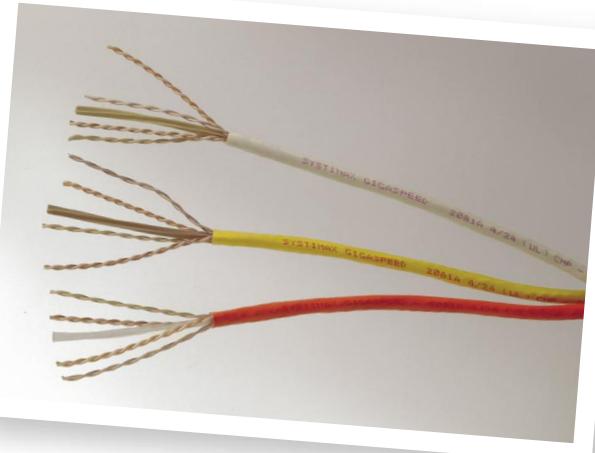
UL and cUL: CMP

Product Number	Pair Count	Color	Length	Package	Material ID
2071004EOR R1000	4	Orange	1,000 ft (305 m)	Reel	700210008
2071004EOR W1000	4	Orange	1,000 ft (305 m)	We Tote	700210024
2071004EWH R1000	4	White	1,000 ft (305 m)	Reel	700210032
2071004EWH W1000	4	White	1,000 ft (305 m)	We Tote	700208101
2071004EWH W1000	4	White	1,000 ft (305 m)	We Tote	700210073
2071004EBL R1000	4	Blue	1,000 ft (305 m)	Reel	700210081
2071004EBL W1000	4	Blue	1,000 ft (305 m)	We Tote	700208093
2071004EBL W1000	4	Blue	1,000 ft (305 m)	We Tote	700210115
2071004EYL W1000	4	Yellow	1,000 ft (305 m)	We Tote	700210123
2071004EYL R1000	4	Yellow	1,000 ft (305 m)	Reel	700210131
2071004EGN R1000	4	Green	1,000 ft (305 m)	Reel	700210156
2071004EGN W1000	4	Green	1,000 ft (305 m)	We Tote	700210164
2071004EGN R4500	4	Green	4,500 ft (1,372 m)	Reel	700210180
2071004ESL R1000	4	Slate	1,000 ft (305 m)	Reel	700210198
2071004ESL W1000	4	Slate	1,000 ft (305 m)	We Tote	700214372
2071004ELL R1000	4	Lilac	1,000 ft (305 m)	Reel	700210206
2071004ELL W1000	4	Lilac	1,000 ft (305 m)	We Tote	700210214
2071004EBK R1000	4	Black	1,000 ft (305 m)	Reel	700210222
2071004EBK W1000	4	Black	1,000 ft (305 m)	We Tote	700210230
2071004ERD R1000	4	Red	1,000 ft (305 m)	Reel	700210248
2071004ERD W1000	4	Red	1,000 ft (305 m)	We Tote	700210263
2071004EPK W1000	4	Pink	1,000 ft (305 m)	We Tote	760011841
2071004E1WH W1000*	4	White	1,000 ft (305 m)	We Tote	760003228

*Austel

Plenum Category 6, 2081 GigaSPEED® XL Cable

The 81 series cables feature an innovative fluted design which provides significant margin (headroom) (10 dB) above the minimum Category 6 Near End Crosstalk (NEXT) and Powersum NEXT requirements in TIA/EIA 568B. Further, these cables are UL verified as Category 6.



Physical Specifications:

Weight: 31.3 lbs/1,000 ft (14.2 kg/304.8 m)
Nominal Jacket Thickness: 0.017 in (0.43 mm)
Nominal Outside Diameter: 0.233 in (5.92 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 72%
Maximum DC Resistance: 7.61 Ohms/100 m
Maximum DC Resistance Unbalance: 3%
Mutual Capacitance at 1 kHz: 5.6 nF/100 m
Standards: ANSI/TIA/EIA 568B.2-1 Category 6
ISO/IEC 11801: 2002 (Edition 2) Class E
CENELEC EN50173: 2002 (Edition 2) Category 6
UL and cUL: CMP

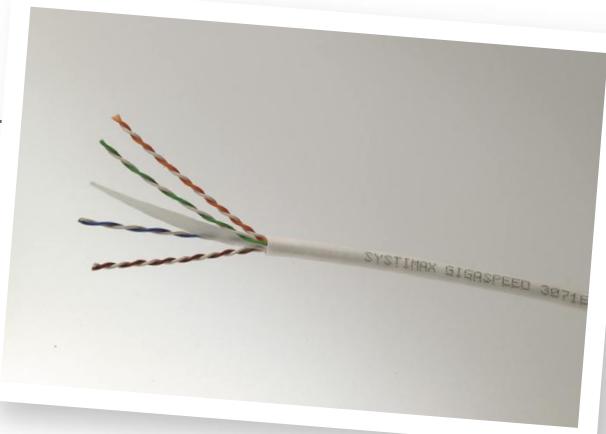


Product Number	Pair Count	Color	Length	Package	Material ID
2081004AWH R1000	4	White	1,000 ft (305 m)	Reel	108681172
2081004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	108681180
2081004AGN R1000	4	Green	1,000 ft (305 m)	Reel	108681206
2081004AYL R1000	4	Yellow	1,000 ft (305 m)	Reel	108681198
2081004ALL R1000	4	Lilac	1,000 ft (305 m)	Reel	108681222
2081004ASL R1000	4	Slate	1,000 ft (305 m)	Reel	108681214
2081004ABK R1000	4	Black	1,000 ft (305 m)	Reel	108681230
2081004AOR R1000	4	Orange	1,000 ft (305 m)	Reel	108681164
2081004ARD R1000	4	Red	1,000 ft (305 m)	Reel	108681248

Low Smoke Zero Halogen, Category 6, 3071E GigaSPEED® XL Cable

The 3071E 4-pair GigaSPEED XL cable meets or exceeds Category 6/Class E attenuation and NEXT requirements in ISO/IEC 11801, CENELEC EN50173 and TIA/EIA 568B. Further, these cables are UL verified as Category 6. The 71E GigaSPEED XL cables features a patent-pending thin and easy to remove bisector tape that delivers the performance benefits of more traditional fluted center members without the associated stiffness and size.

3071E cable is composed of solid copper conductors insulated with non-halogen high-density polyethylene and jacketed with a low smoke zero halogen compound.



Physical Specifications:

Weight: 27 lbs/1,000 ft (12.25 kg/304.8 m)

Nominal Jacket Thickness: 0.021 in (0.53 mm)

Nominal Outside Diameter: 0.231 in (5.87 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 69%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Mutual Capacitance at 1 kHz: 5.6 nF/100 m

Standards: ANSI/TIA/EIA 568B.2-1 Category 6

ISO/IEC 11801: 2002 (Edition 2) Class E

CENELEC EN50173: 2002 (Edition 2) Category 6

IEC 754 part 2, Non-halogen based on pH and conductivity measurements

IEC 1034 part 2, Smoke emission

IEC 332 part 1, Flammability and flame retardant

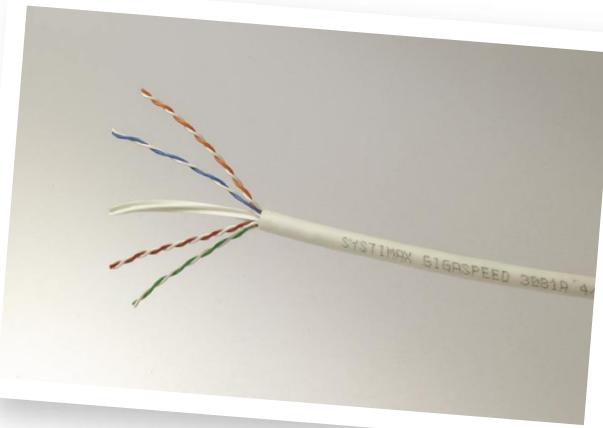
NES 713: Toxicity index

Product Number	Pair Count	Color	Length	Package	Material ID
3071004EWH R1000	4	White	1,000 ft (305 m)	Reel	700216443
3071004EWH W1000	4	White	1,000 ft (305 m)	We Tote	700216450
3071004EWH R4400	4	White	4,400 ft (1,341 m)	Reel	700216476
3071004EBL W1000	4	Blue	1,000 ft (305 m)	We Tote	700216492
3071004EBL R1000	4	Blue	1,000 ft (305 m)	Reel	700216484
3071004E3WH R4400*	4	White	4,400 ft (1,341 m)	Reel	760006353
3071004E3WH R1000*	4	White	1,000 ft (305 m)	Reel	760006346
3071004ALL W1000*	4	Lilac	1,000 ft (305 m)	We Tote	108896564
3071004E3WH W1000*	4	White	1,000 ft (305 m)	We Tote	760011544

*IEC 332 Part 3 Compliant

Low Smoke Zero Halogen, Category 6, 3081 GigaSPEED® XL Cable

The 81 series cables feature an innovative fluted design which provides significant margin (headroom) (10 dB) above the minimum Category 6 Near End Crosstalk (NEXT) and Powersum NEXT requirements in TIA/EIA 568B. Further, these cables are UL verified as Category 6.



Physical Specifications:

Weight: 35 lbs/1,000 ft (15.88 kg/304.8 m)

Nominal Jacket Thickness: 0.020 in (0.51 mm)

Nominal Outside Diameter: 0.262 in (6.65 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 23 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 69%

Maximum DC Resistance: 7.61 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Mutual Capacitance at 1 kHz: 5.6 nF/100 m

Standards: ANSI/TIA/EIA 568B.2-1 Category 6

ISO/IEC 11801: 2002 (Edition 2) Class E

CENELEC EN50173: 2002 (Edition 2) Category 6

IEC 754 part 2, Non-halogen based on pH and conductivity measurements

IEC 1034 part 2, Smoke emission

IEC 332 part 3, Flammability and flame retardant

NES 713: Toxicity index



Product Number	Pair Count	Color	Length	Package	Material ID
3081004AWH R1000	4	White	1,000 ft (305 m)	Reel	108687658
3081004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	108687674
3081004AWH R3000	4	White	3,000 ft (915 m)	Reel	108687682
3081004ABL R3000	4	Blue	3,000 ft (915 m)	Reel	108687690

Plenum Category 6, GigaSPEED® 4070 Limited Combustible Cable

The SYSTIMAX GigaSPEED 4070 limited combustible cable meets the TIA/EIA Category 6 and the UL limited combustible standards. Jacketed and insulated with a FEP fluoropolymer resin, the cable meets the stringent National Fire Protection Association (NFPA) 90A limited combustible requirements for low smoke generation and flame spread. The superior combination of fire safety and electrical performance makes 4070 an ideal candidate for applications requiring high speed, high bandwidth and high margin of fire safety. The limited combustible cables are also resistant to performance changes due to aging or environmental conditions, totally recyclable, chemical resistant and heavy metal free.



See protection product section for Category 6 protector units.

Physical Specifications:

Weight: 25.3 lbs/1,000 ft (11.48 kg/304.8 m)
Nominal Jacket Thickness: 0.010 in (0.25 mm)
Nominal Outside Diameter: 0.194 in (4.93 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 23 AWG

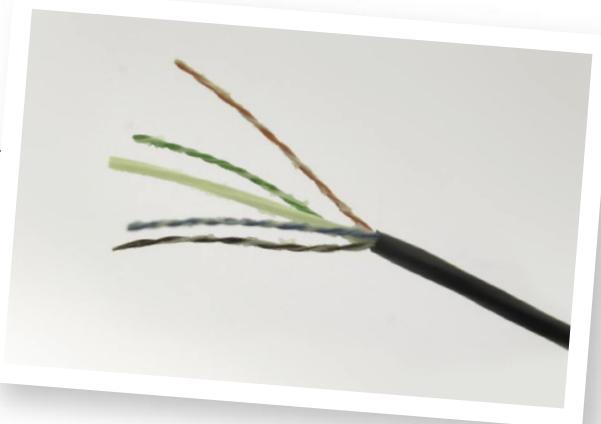
Electrical Specifications:

NVP (fastest pair @ 10 MHz): 71%
Maximum DC Resistance: 7.61 Ohms/100 m
Maximum DC Resistance Unbalance: 3%
Mutual Capacitance at 1 kHz: 5.6 nF/100 m
Standards: ANSI/TIA/EIA 568B.2-1 Category 6
ISO/IEC 11801: 2002 (Edition 2) Class E
CENELEC EN50173: 2002 (Edition 2) Category 6
UL and cUL: CMP-50
National Fire Protection Association (NFPA) 90A

Product Number	Pair Count	Color	Length	Package	Material ID
4070004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	700201361
4070004AOR R1000	4	Orange	1,000 ft (305 m)	Reel	760016519

Category 6, Outdoor 1571 Cable

The SYSTIMAX Category 6, Outdoor 1571 cable consists of polyethylene, insulated conductors, tightly twisted into four pairs. The pairs are stranded around a polyolefin fluted center member, filled with a flooding compound and jacketed with a black polyethylene jacket. The 1571 cable is fully compliant with Category 6 requirements of TIA/EIA 568B.2-1 and ISO/IEC 11801.



Physical Specifications:

Weight: 27.3 lbs/1,000 ft (12.38 kg/304.8 m)
Nominal Jacket Thickness: 0.020 in (0.51 mm)
Nominal Outside Diameter: 0.250 in (6.35 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -40°F to 140°F (-40°C to 60°C)
Gauge: 23 AWG

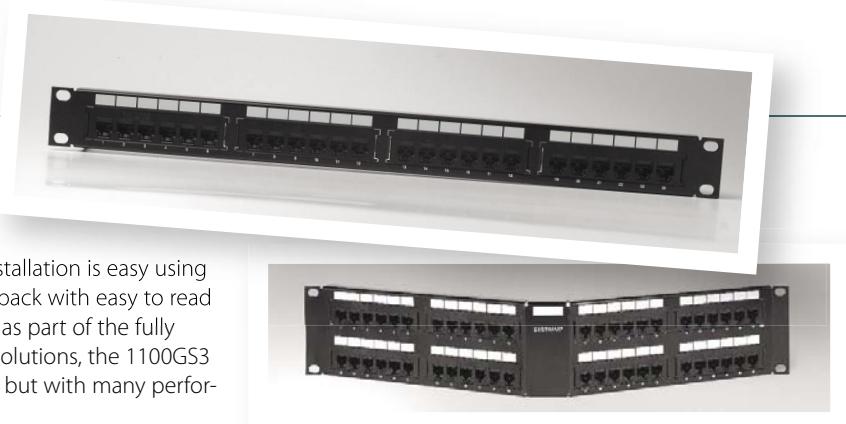
Electrical Specifications:

NVP (fastest pair @ 10 MHz): 62%
Maximum DC Resistance: 7.61 Ohms/100 m
Maximum DC Resistance Unbalance: 3%
Mutual Capacitance at 1 kHz: 5.6 nF/100 m
Standards: Category 6
TIA/EIA 568B.2-1
ISO/IEC 11801

Product Number	Pair Count	Color	Length	Package	Material ID
1571004ABK	4	Black	1,000 ft (305 m)	Reel	760008888

1100GS3 GigaSPEED® XL Modular Patch Panel

The 1100GS3 Modular Patch Panel is a 19-inch rack or wall mountable 8-pin modular jack panel that accommodates repeated line moves, additions and rearrangements. Installation is easy using proven 110 IDC gas tight terminations in the back with easy to read labeling guides. Designed by SYSTIMAX Labs as part of the fully tuned and integrated GigaSPEED XL cabling solutions, the 1100GS3 provides an industry standard panel footprint but with many performance and feature extras.



The SYSTIMAX 1100AGS3 panel is angled to allow the cable to flow to each side of the rack. This enables the patch cords to be routed directly into vertical cable managers. It also allows the labeling scheme and port identification to be visible at all times.

Features and Benefits:

- Electrical performance guaranteed to meet or exceed TIA/EIA 568B.2-1 Category 6 and ISO/IEC Category 6/Class E specifications
- Vertical and horizontal cord organizers available to improve patch cord management
- Available in 24- and 48-port configurations featuring universal A/B labeling
- 110 connector terminations on rear of panel allow quick and easy installation of 22 to 24 AWG cable
- Attractive black powder covered high-strength steel panel comes equipped with a removable rear mounted cable management bar

- Can support network line speeds in excess of 1 Gbps.
- Each panel comes ready to install, including front and rear labels
- Backward compatible with Category 5e, 5 and 3 cords and cables, however optimal performance is achieved when used with GigaSPEED GS8E patch cords
- Certified component of an integrated GigaSPEED XL Solution
- Qualifies for a 20-Year Extended Product Warranty and Applications Assurance when included in a certified SYSTIMAX GigaSPEED channel



Physical Specifications:

Height: 24-Ports: 1.74 in (4.38 cm)
48-Ports: 3.50 in (8.83 cm)

Width: 19 in (48.26 cm)

Depth: 1.60 in (4.06 cm)

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel underplate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm) (26 to 22 AWG)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm) (24 to 22 AWG)

Insulation Size: 0.030 in to 0.046 in (0.76 mm to 1.17 mm)

Insulation Types: All plastic insulates, including: PVC, irradiated PVC, Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon, and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug

Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 6

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

UL and cUL Listed

Product Number	Wiring	Number of Ports	Material ID
1100GS3-24	Universal A/B	24xRJ45	700173750
1100GS3-48	Universal A/B	48xRJ45	700173768
1100AGS3-24-Angled	Universal A/B	24xRJ45	760026757
1100AGS3-48-Angled	Universal A/B	48xRJ45	760026765
1100 ICON Label Holder Kit	N/A	N/A	760001404

1100GS3 Multimedia Distribution Hardware

1100GS3 Multimedia panel product lines are made up of basic panel kits, and various copper and fiber modules with LC, SC, ST adapters. The 1100GS3 panel kits have two configurations. The 1U kit supports four modules, and the 2U kit supports eight modules. There are six adapters in both SC and ST modules, and 12 adapters in the LC module.



This modular approach gives the customer total flexibility in selecting the required fiber adapters. In addition it provides for fiber and GigaSPEED XL copper solutions, since both fiber and GigaSPEED XL modules can fit into the same panel kit. This feature also supports existing GigaSPEED XL customers, by giving them the option of a cost effective upgrade from copper to fiber solutions, by simply replacing the copper modules with the fiber modules in conjunction with the cable changes.

The 1100GS3 Multimedia panel kits can be mounted in 19-inch racks for enterprise applications. Panel kits will include cable retainers and fasteners, labels, mounting screws and installation instructions.

1100GS3 Multimedia Panel

Product Number	Detailed Description	Modules/Ports	Material ID
1100GS3-1U	1100GS3-1U Panel Kit	4 Modules	760001776
1100GS3-2U	1100GS3-2U Panel Kit	8 Modules	760001784

1100GS3 Multimedia Modules

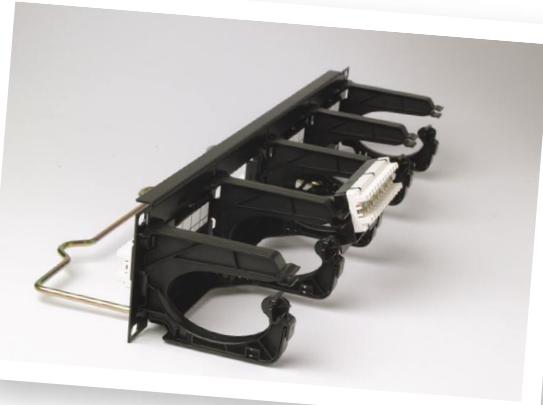
Product Number	Detailed Description	Modules/Ports	Material ID
1100-DM-GS3-RJ45	1100GS3 Copper Module	6 RJ45	700212137
1100-DM-GS3-LS-SC/SC	1100GS3 LazrSPEED SC Module	6 SC	760001792
1100-DM-GS3-LS-ST/ST	1100GS3 LazrSPEED ST Module	6 ST	760001800
1100-DM-GS3-LS-LC/LC	1100GS3 LazrSPEED LC Module	12 LC	760001818
1100-DM-GS3-MM-SC/SC	1100GS3 OptiSPEED SC Module	6 SC	760001826
1100-DM-GS3-MM-ST/ST	1100GS3 OptiSPEED ST Module	6 ST	760001834
1100-DM-GS3-MM-LC/LC	1100GS3 OptiSPEED LC Module	12 LC	760001842
1100-DM-GS3-SM -SC/SC	1100GS3 TeraSPEED SC Module	6 SC	760001859
1100-DM-GS3-SM-ST/ST	1100GS3 TeraSPEED ST Module	6 ST	760001867
1100-DM-GS3-SM-LC/LC	1100GS3 TeraSPEED LC Module	12 LC	760001875
	Blank Module		760018069

PATCHMAX® GS3 GigaSPEED® XL Distribution Hardware

The PATCHMAX GS3 panel system helps unleash the power of an integrated GigaSPEED XL copper and fiber optic LazrSPEED/TeraSPEED/OptiSPEED cabling solution while maintaining all of the innovative features that have made PATCHMAX unique in the industry. Its unique modularity and patch cord management system continue to provide unmatched flexibility to MIS managers with the ability to mix and match copper and fiber media in the same panel.

The 19-inch rack mountable patch panel is designed to accept 4 or 8 six-port Distribution Modules (DM) which can be rotated forward, allowing front access to the 110 type IDC terminals for easy cable termination. Built-in horizontal patch cord management brackets provide support for patch cords as well as a holder for the DM modules during installation.

This modular approach gives the customer total flexibility in selecting the required copper and fiber adapters. In addition it provides for fiber and GigaSPEED XL copper solutions, since both fiber and GigaSPEED XL modules can fit into the same panel kit. This feature also supports existing GigaSPEED XL customers, by giving them the option of a cost effective upgrade from copper to fiber solutions, by simply replacing the copper modules with the fiber modules in conjunction with the cable changes.



Physical Specifications:

Height: 4 Module Panel: 3.53 in (8.9 cm)
8 Module Panel: 5.29 in (13.34 cm)

Width: 4 Module Panel: 19 in (48.3 cm)
8 Module Panel: 19 in (48.3 cm)

Depth: 4 Module Panel: 8.13 in (20.5 cm)
8 Module Panel: 8.13 in (20.5 cm)

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel under plate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm) (26 to 22 AWG)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm) (24 to 22 AWG)

Insulation Size: 0.030 in to 0.046 in, (0.76 mm to 1.17mm)

Insulation Types: All plastic insulates, including: PVC, irradiated PVC, Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug

Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 6

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

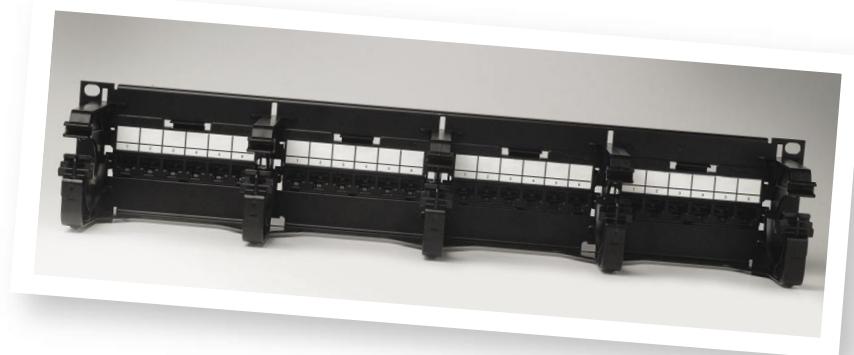
UL and cUL Listed

PATCHMAX GS3 Panels

Product Number	Detailed Description	Modules/Ports	Material ID
PM-GS3-24	PATCHMAX GS3 Copper Patch Panel - 24-Port	4 Modules	700173735
PM-GS3-48	PATCHMAX GS3 Copper Patch Panel - 48-Port	8 Modules	700173743
PM-GS3-2U	PATCHMAX GS3-2U Panel Kit (Modules not Included)	4 Modules	760001669
PM-GS3-3U	PATCHMAX GS3-3U Panel Kit (Modules not Included)	8 Modules	760001677

PATCHMAX GS3 Modules

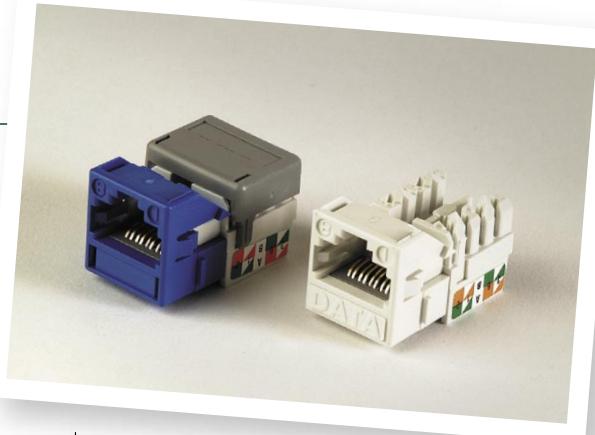
Product Number	Detailed Description	Modules/Ports	Material ID
PM-DM-GS3-RJ45	PATCHMAX GS3 Copper Module	6 RJ45	700173776
PM-DM-GS3-LS-SC/SC	PATCHMAX GS3 LazrSPEED SC Module	6 SC	760001685
PM-DM-GS3-LS-ST/ST	PATCHMAX GS3 LazrSPEED ST Module	6 ST	760001693
PM-DM-GS3-LS-LC/LC	PATCHMAX GS3 LazrSPEED LC Module	12 LC	760001701
PM-DM-GS3-MM-SC/SC	PATCHMAX GS3 OptiSPEED SC Module	6 SC	760001719
PM-DM-GS3-MM-ST/ST	PATCHMAX GS3 OptiSPEED ST Module	6 ST	760001727
PM-DM-GS3-MM-LC/LC	PATCHMAX GS3 OptiSPEED LC Module	12 LC	760001735
PM-DM-GS3-SM-SC/SC	PATCHMAX GS3 TeraSPEED SC Module	6 SC	760001743
PM-DM-GS3-SM-ST/ST	PATCHMAX GS3 TeraSPEED ST Module	6 ST	760001750
PM-DM-GS3-SM-LC/LC	PATCHMAX GS3 TeraSPEED LC Module	12 LC	760001768



GigaSPEED
XL

MGS400 Series GigaSPEED® XL Information Outlet

The MGS400 Information Outlet features proprietary crosstalk cancellation techniques for superior Near End Crosstalk (NEXT & PSNEXT) performance that provides unmatched throughput performance when installed as part of a complete GigaSPEED XL channel. The solution is guaranteed to exceed the Category 6/Class E channel specifications for ISO/IEC and TIA, even under the worst case channel configuration.



Features and Benefits:

- Snaps into any M-Series modular faceplate, frame, or surface-mount box
- Can be mounted either at 90 degrees (straight) or 45 degrees (angled)
Angled feature eliminates the need for special faceplates
- Multicolored identification labels assure fast, accurate installation
- Low-profile wire cap protects against contamination and secures connections
- The MGS400 outlet uses either the TIA/EIA T568A or TIA/EIA T568B wiring

Physical Specifications:

Dimensions: HxWxD: 0.8 in x 0.8 in x 1.2 in (2.0 cm x 2.0 cm x 3.1 cm)
Universal A/B labeling

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel underplate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm) (26 to 22 AWG)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm) (24 to 22 AWG)

Insulation Size: 0.030 in to 0.046 in (0.76 mm to 1.17 mm)

Insulation Type: All plastic insulates, including: Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug

Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 6

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

UL and cUL Listed

Product Number	Color	Qty/Pkg	Material ID
MGS400-003	Black	1	700206667
MGS400-112	Orange	1	700206683
MGS400-123	Yellow	1	700206691
MGS400-226	Green	1	700206709
MGS400-246	Ivory	1	700206717
MGS400-262	White	1	700206725
MGS400-270	Gray	1	700206733
MGS400-317	Red	1	700206741
MGS400-318	Blue	1	700206758
MGS400-361	Violet	1	700206675
MGS400-003	Black	100	760041962
MGS400-246	Ivory	100	760041970
MGS400-262	White	100	760041988
MGS400-318	Blue	100	760041996
Handheld Termination Tool			760034215

GS8E GigaSPEED® XL Modular Patch Cord

The GS8E Modular Patch Cord family of high bandwidth cords form parts of the GigaSPEED XL cabling solution. Electrical performance exceeds TIA/EIA and ISO/IEC Category 6/Class E specifications and is fully backward compatible with Category 5e, and 5 connectors.

The GS8H Low Smoke Zero Halogen (LSZH) is a stranded GigaSPEED XL Solution cord.

The GS8L is a 3071 Low Smoke Zero Halogen solid conductor cable which is terminated with the new GS 8-pin connectorized plugs.

The GS3 solid conductor cords consist of solid conductor cable, factory terminated with an GS8E plug(s).

Patented plug design, improved 24 gauge cordage and a unique manufacturing process assures excellent electrical performance and low variability. Improved anti-snag feature provides maximum protection from snagging during moves and rearrangements.

Patch cords are orderable using a 14-character feature configuration coding scheme which replaces the familiar 9-character Material ID. This allows maximum flexibility for ordering many different combinations of plug ends, cordage types, colors and lengths. Please use SYSTIMAX Copper Patch Cord Product Identifier (in Copper Reference Section) for ordering information or contact your SYSTIMAX BusinessPartner.

Physical Specifications:

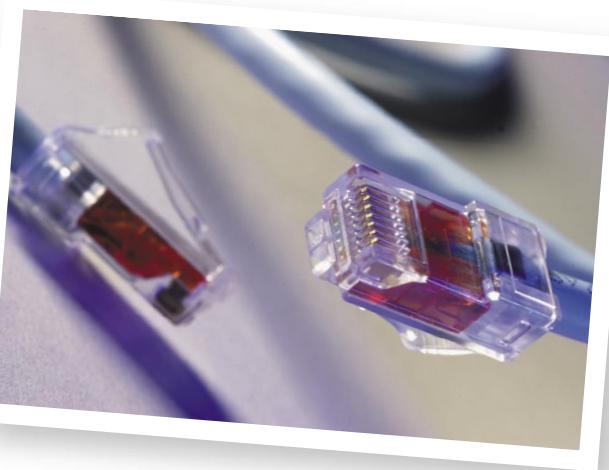
Contact Material: Phosphor Bronze

Contact Plating: Gold 50 micro-inch (1.27 microns)
Nickel 100 micro-inch (2.54 microns)

Insertion Life: 750 minimum

Plug Material: Polycarbonate UL-rated 94 V-O

Operating Temperature: 14°F to 140°F (-10°C to 60°C)



Electrical Specifications:

TIA/EIA: Category 6

UL and cUL: CM (cordage)

Product Number	Detailed Description	CPC Code
GS8E	GS3 Stranded Double Ended Cord	CPC3312
GS8MGS-81B	GS3 RJ45 to MGS Outlet with 81 Series Cable	CPC32A2
GS88	Solid Conductor Cord with 81 Series Cables	CPC33A2
G8C1-SE	Single Ended Cord with 81 Series Cable	CPC34A2
Keyed GS8E	Modular Cord	CPC9912
GS8H	LSZH Stranded Cord Double Ended	CPC3392
GS8L-DE	GS8E Double Ended with Solid Conductor LSZH Cordage	CPC3322
GS8E-SPD	GS3 Solid Plenum Double Ended	CPC3372
GS8E-SND	GS3 Solid Non Plenum Double Ended	CPC3382
GS8E-SP	GS3 Solid Plenum Single Ended	CPC3472
GS8E-SN	GS3 Solid Non Plenum Single Ended	CPC3482

VisiPatch™ System

The VisiPatch System uses state-of-the-art IDC technology for optimum patch cord organization and management. The system provides superior GigaSPEED XL performance which is a clear advantage in data center applications. The unique "reverse direction" design provides a neat, cordless appearance that dramatically improves patch cord management and "avoids the clutter" that is inherent with other patch cord systems. The modular approach in the design maximizes the overall flexibility of the system. The system is lightweight, stackable and the components snap together for ease of installation.

Features and Benefits:

- Proven SYSTIMAX SCS performance
- Supports GigaSPEED XL channels
- 4-pair Patch Cord certified GigaSPEED XL component
- Fast, easy installation with low operating costs
- Innovative reverse patch cord design
- Neat, cordless appearance
 - Seven 4-pair cables per row
 - Up to 252 4-pair cables per vertical
- Unique plastic construction
- Snap-together components
- 28-port (112-pair) and 84-port (336-pair) stackable field terminated kits
- Superior patch cord routing and management
- Higher useable density

Back Panel The back panel is the backbone of the VisiPatch System. Using space-age plastic structural foam technology, this patented wall mounting hardware consists of two identical "L"-shaped halves that snap together to form a strong "U"-shaped panel. The lightweight panel can be easily mounted to support multiple mounting options. The back panel holds 4 or 12 wiring blocks to conform to any size installation.

Wiring Block The wiring block snaps into the back panel and accepts up to seven 4-pair cables (28 conductor pairs). It also accepts 25-pair count cables using 5-pair connecting blocks (25 conductor pairs). The wiring block entrance slot and grooves provide versatile cable management. This support feed system allows up to seven 4-pair cables for each wiring block.

Designation Strip/Cover Plate The cover plate snaps directly on to the wiring block and provides protection for the terminated cables. The two piece, clear plastic design provides easy access to the cables and enables visual verification of cable termination quality without moving any components. The pivoted plastic label holder also serves as a designation strip for circuit identification, and facilitates the latching of the patch cord.

Physical Specifications:

Height: 110UB1-112FT: 7.2 in (18.29 cm)
110UB1-336FT: 21.6 in (54.86 cm)

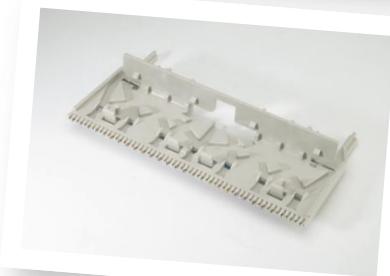
Width: 8.5 in (21.59 cm)

Depth: 7.5 in (19.05 cm)

Pairs per row: 28

Pairs per back panel: 110UB1-112FT: 112
110UB1-336FT: 336

Patch cords per row: 7 (4-pair cords)





Product Number	Detailed Description	Contents	Qty	Material ID
110UB1-112FT	VisiPatch System, 112-pair			108836792
		100PR Base, Back Panel Half	2	
		110UW-28, Wiring Block	4	
		110UC-28, Designation Covers	4	
		110C4W, Connecting Block	30	
		110UPHLDR, Label Holder	4	
		110WG3-2688L, White Label	12	
		Instruction Sheet	1	
110UB1-336FT	VisiPatch System, 336-pair			108561143
		300PR Base, Back Panel Half	2	
		110UW-28, Wiring Block	12	
		110UC-28, Designation Covers	12	
		110C4W, Connecting Block	84	
		110UPHLDR, Label Holder	12	
		110WG3-2688L, White Label	12	
		Instruction Sheet	1	
110U2R	Distribution Ring			108523937
110UTC	Trough Cover			108593203
110U19M	Bracket			108634429
110UHD-S8	Horizontal Duct			108637737
110UP-WB	Wall Mount Bracket			108688946
110UHS20	Installation Spacer			108637612
110UHPT-Uni. Horz. Trough	Universal Horizontal Trough			108836834
110UPT-Kit-Trough	Trough, U Channel to mount below VisiPatch components on wall			700012990
110UGND	Ground Bar			108561135
110UHWSD	Spacer Duct			700032766
110YG3-2688L	Yellow Label			108528407
110WG3-2688L	White Label			108528415
110SG3-2688L	Slate Label			108528423
110RG3-2688L	Red Label			108528431
110PG3-2688L	Purple Label			108528449
110GG3-2688L	Green Label			108528456
110CG3-2688L	Orange Label			108528597
110BG3-2688L	Blue Label			108528464
110KG3-2688L	Brown Label			108528472
HLDR-110FDLH	Label Holder, Clear Plastic Cover			108738113
110C4W	Connecting Block			108538612

VisiPatch™ Patch Cords

The VisiPatch Patch Cords utilize a patented connector design that allows the cordage to be neatly routed back toward the VisiPatch panel rather than to project forward. The connector snaps on with an audible click and features an anti-snag device, which allows the cord to be easily removed from the panel. The 1-, 2-, and 4-pair patch cords provide complete flexibility for all circuit types to accommodate IP, ISDN, digital voice, analog/voice/fax/modem applications. The 2- and 4-pair cords support GigaSPEED XL performance for higher bandwidth data applications. The 1-pair cord supports voice, fax and modem applications. The 119 cords use the VisiPatch connector design terminated to a GigaSPEED RJ45 connector.



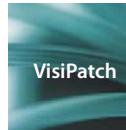
Patch cords are orderable using a 14-character feature configuration coding scheme which replaces the familiar 9-character Material ID. This allows maximum flexibility for ordering many different combinations of plug ends, cordage types, colors and lengths. Please use SYSTIMAX Copper Patch Cord Product Identifier (in Copper Reference Section) for ordering information or contact your SYSTIMAX BusinessPartner.

Physical Specifications:

Contact Material: Phosphor Bronze
Contact Plating: Gold 2 to 5 micro-inch (0.051 to 0.128 microns)
Nickel 75 micro-inch (1.91 microns)
Insertion Life: 200 minimum
Plug Material: Polycarbonate Blend UL-rated 94 V-O
Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Electrical Specifications:

TIA/EIA: Category 6
UL and cUL: CM (cordage)



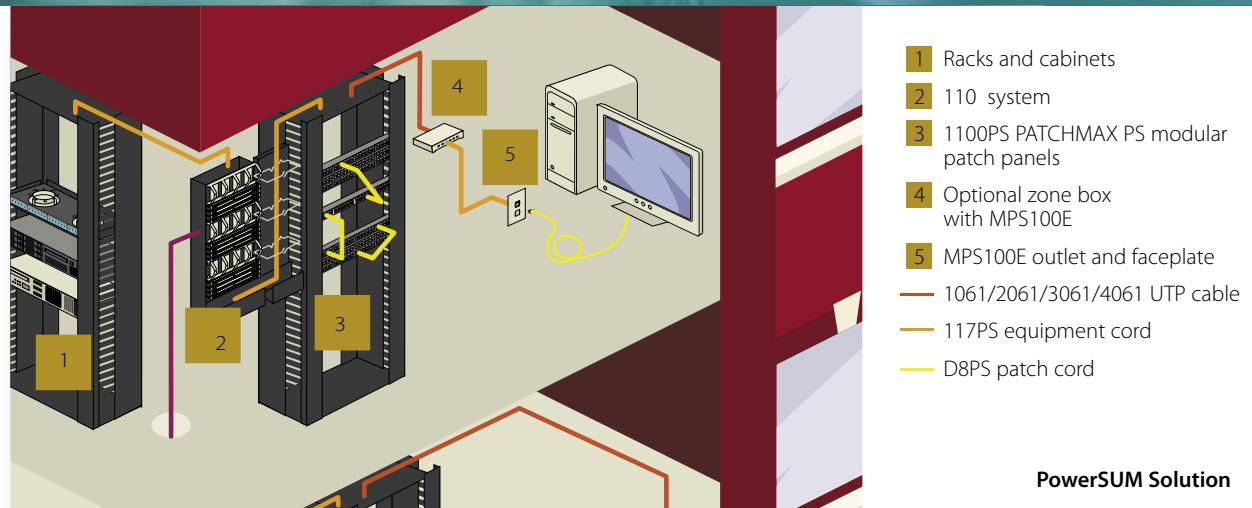
Product Number	Detailed Description	CPC Code
110VP2	VisiPatch to VisiPatch 1-Pair Cord	CPC5562
110VP4	VisiPatch to VisiPatch 2-Pair Cord	CPC5552
110VP8-GS3-B	VisiPatch to VisiPatch 4-Pair B Wired Cord	CPC5512
119VP8-GS3-B	VisiPatch to RJ45 4-Pair B Wired Cord	CPC5312





VisiPatch

PowerSUM Solution Exceeding Category 5/5e



Features and Benefits:

- Performance Extended to 155.5 MHz for Channels
- Performance certified to exceed the Category 5e specifications for enhanced channels
- Supports IEEE 802.3 1000BASE-T plus other legacy LANs and applications

PowerSUM channel performance specifications exceed not only the TIA 568B.2 and ISO 11801 Edition 2 for Category 5e/Class D cabling systems but are also capable of providing stable and continual performance up to and beyond 100 MHz.

SYSTIMAX SCS channels that are comprised exclusively of PowerSUM passive products end-to-end are capable of delivering 1.0 Gbps to the workstation in accordance with application standards and are eligible for the SYSTIMAX SCS 20-Year Extended Product Warranty and Applications Assurance.



PowerSUM products include:

- 4-pair 1061, 2061, 3061 UTP Cables
- 110 VisiPatch System and 110 Connector System
- PATCHMAX and 1100 PS CAT5E Modular Patch Panels
- MPS100E Information Outlets
- D8PS Patch and Workstation Cords
- 110, 117, 119 Patch Cords

PowerSUM Specifications

SYSTIMAX PowerSUM Category 5e Guaranteed Channel Performance

Guaranteed Performance Specifications for PowerSUM Solution

Electrical Parameter (1 – 155.5 MHz)	Guaranteed Channel Margins to Category 5E/Class D TIA 568B.2 and ISO 11801 Edition 2.0
Insertion Loss	5.0 %
NEXT	3.0 dB
PSNEXT	5.5 dB
ELFEXT	4.5 dB
PSELFEXT	5.5 dB
Return Loss	1.0 dB

Frequency (MHz)	Insertion								Return Loss (dB)	Phase Delay (ns)	Delay Skew (ns)
	Loss (dB)	NEXT (dB)	ACR (dB)	PSNEXT (dB)	PSACR (dB)	ELFEXT (dB)	PSELFEXT (dB)				
1.0	2.1	63.0	60.9	62.5	60.4	61.8	59.8	18.0	580	30	
4.0	4.2	56.6	52.4	56.2	52.0	49.8	47.8	18.0	562	30	
8.0	6.0	51.6	45.6	51.2	45.2	43.8	41.8	18.0	557	30	
10.0	6.7	50.0	43.3	49.6	42.9	41.8	39.8	18.0	555	30	
16.0	8.6	46.6	38.0	46.2	37.6	37.8	35.7	18.0	553	30	
20.0	9.7	45.0	35.4	44.6	34.9	35.8	33.8	18.0	552	30	
25.0	10.9	43.4	32.5	42.9	32.1	33.9	31.9	17.0	551	30	
31.3	12.2	41.8	29.5	41.3	29.1	31.9	29.9	16.0	550	30	
62.5	17.7	36.6	19.0	36.1	18.4	25.9	23.9	13.1	549	30	
100.0	22.8	33.1	10.3	32.6	9.8	21.8	19.8	11.0	548	30	
125.0	25.8	31.5	5.7	30.9	5.1	19.9	17.9	10.1	547	30	
155.5	29.1	29.8	0.7	29.2	0.1	18.0	16.0	9.1	547	30	

PowerSUM

Category 5e, PowerSUM Cable

Non Plenum 1061

The 1061 4-pair cable meets or exceeds Category 5e/Class D attenuation and NEXT requirements in ISO/IEC 11801, CENELEC EN50173, and TIA/EIA 568B.1. Further, these cables are UL verified as Category 5e.

The 4-pair 1061C cable is composed of 24 AWG solid copper conductors, insulated with high-density polyolefin. The insulated conductors are twisted into pairs and jacketed with our specially formulated material. 1061C is rated CM.

The 4-pair 1061B cable is CMR rated and also UL approved. The 4-pair 1061B cable is composed of 24 AWG solid copper conductors with high-density polyolefin insulation and jacketed with low-smoke polyvinyl chloride (PVC).

Physical Specifications:

Weight: 20.8 lbs/1,000 ft (9.43 kg/304.8 m)

Nominal Jacket Thickness: 0.021 in (0.53 mm)

Nominal Outside Diameter: 0.21 in (5.33 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 24 AWG

Electrical Specifications:

NVP (fastest pair @10 MHz): 70%

Maximum DC Resistance: 9.38 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Maximum Mutual Capacitance at 1 kHz: 5.6 nF/100 m

Standards: ANSI/TIA/EIA 568B.1 and ANSI/TIA/EIA 568B.2 Category 5e

ISO/IEC 11801: 2002 (Edition 2) Class D

CENELEC EN50173: 2002 (Edition 2) Category 5e

UL and cUL: CMR (for 1061B)

CM (for 1061C)



UL CMR Rated

Product Number	Pair Count	Color	Length	Package	Material ID
1061004BBL W1000	4	Blue	1,000 ft (305 m)	We Tote	107251696
1061004BBL R1000	4	Blue	1,000 ft (305 m)	Reel	107323636
1061004BSL W1000	4	Slate	1,000 ft (305 m)	We Tote	107091936
1061004BWH W1000	4	White	1,000 ft (305 m)	We Tote	107819575
1061004BOR W1000	4	Orange	1,000 ft (305 m)	We Tote	108173840
1061004BRD W1000	4	Red	1,000 ft (305 m)	We Tote	700022643

UL CM Rated

Product Number	Pair Count	Color	Length	Package	Material ID
1061004CSL R1000	4	Slate	1,000 ft (305 m)	Reel	106836943
1061004CSL W1000	4	Slate	1,000 ft (305 m)	We Tote	106836950
1061004CWH R1000	4	White	1,000 ft (305 m)	Reel	107849283
1061004CWH W1000	4	White	1,000 ft (305 m)	We Tote	107147787
1061004CIV W1000	4	Ivory	1,000 ft (305 m)	We Tote	106871817
1061004CIV R1000	4	Ivory	1,000 ft (305 m)	Reel	107076192
1061004CYL W1000	4	Yellow	1,000 ft (305 m)	We Tote	107001687
1061004CYL R1000	4	Yellow	1,000 ft (305 m)	Reel	106999071
1061004CLB W1000	4	Light Blue	1,000 ft (305 m)	We Tote	106871809
1061004CLB R1000	4	Light Blue	1,000 ft (305 m)	Reel	107057853
1061004CBL R1000	4	Blue	1,000 ft (305 m)	Reel	760004705
1061004CBL W1000	4	Blue	1,000 ft (305 m)	We Tote	760004671
1061004COR R1000	4	Orange	1,000 ft (305 m)	Reel	107193435
1061004COR W1000	4	Orange	1,000 ft (305 m)	We Tote	700156177



Product Number	Pair Count	Color	Length	Package	Material ID
1061004CRD W1000	4	Red	1,000 ft (305 m)	We Tote	106926363
1061004CRD R1000	4	Red	1,000 ft (305 m)	Reel	107244055
1061004CGN W1000	4	Spring Green	1,000 ft (305 m)	We Tote	107244030
1061004CGN R1000	4	Spring Green	1,000 ft (305 m)	Reel	107244048
1061004CLL W1000	4	Lilac	1,000 ft (305 m)	We Tote	107244022
1061004CBK W1000	4	Black	1,000 ft (305 m)	We Tote	107509051
1061004C1SL R1000*	4	Slate	1,000 ft (305 m)	Reel	700207897
1061004C1SL W1000*	4	Slate	1,000 ft (305 m)	We Tote	700207871
1061004C1LB W1000*	4	Light Blue	1,000 ft (305 m)	We Tote	700207889

*Austel

Plenum 2061

The 2061B Plenum 4-pair cable meets or exceeds Category 5e/Class D attenuation and NEXT requirements in ISO/IEC 11801, CENELEC EN50173 and TIA/EIA 568B. Further, these cables are UL verified as Category 5e. The 2061B cable is composed of 24 AWG (0.5 mm) bare solid copper conductors insulated with Fluorinated-Ethylene-Propylene (FEP). The core of twisted pairs is jacketed with a low smoke PVC. It conforms to the low flame, low smoke requirements of the NEC.

Physical Specifications:

Weight: 21.9 lbs/1,000 ft (9.93 kg/304.8 m)

Nominal Jacket Thickness: 0.016 in (0.406 mm)

Nominal Outside Diameter: 0.192 in (4.877 mm)

Maximum Pulling Tension: 25 lbs (11.34 kg)

Operating Temperature: -4°F to 140°F (-20°C to 60°C)

Gauge: 24 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 73%

Maximum DC Resistance: 9.38 Ohms/100 m

Maximum DC Resistance Unbalance: 3%

Maximum Mutual Capacitance at 1 kHz: 5.6 nF/100 m

Standards: ANSI/TIA/EIA 568B.1 and ANSI/TIA/EIA 568B.2 Category 5e

ISO/IEC 11801: 2002 (Edition 2) Class D

CENELEC EN 50173: 2002 (Edition 2) Category 5e

UL and cUL: CMP

Product Number	Pair Count	Color	Length	Package	Material ID
2061004BSL W1000	4	Slate	1,000 ft (305 m)	We Tote	108606815
2061004BSL R1000	4	Slate	1,000 ft (305 m)	Reel	107193468
2061004BWH R1000	4	White	1,000 ft (305 m)	Reel	106939317
2061004BWH W1000	4	White	1,000 ft (305 m)	We Tote	106939325
2061004BWH W1000	4	White	1,000 ft (305 m)	We Tote	760003236
2061004BYL R1000	4	Yellow	1,000 ft (305 m)	Reel	106965387
2061004BYL W1000	4	Yellow	1,000 ft (305 m)	We Tote	106965379
2061004BBL R1000	4	Blue	1,000 ft (305 m)	Reel	106946809
2061004BBL W1000	4	Blue	1,000 ft (305 m)	We Tote	106946825
2061004BOR R1000	4	Orange	1,000 ft (305 m)	Reel	106974348
2061004BOR W1000	4	Orange	1,000 ft (305 m)	We Tote	108052879
2061004BGN R1000	4	Spring Green	1,000 ft (305 m)	Reel	107272841
2061004BGN W1000	4	Spring Green	1,000 ft (305 m)	We Tote	107272809
2061004BLL R1000	4	Lilac	1,000 ft (305 m)	Reel	107273286
2061004BLL W1000	4	Lilac	1,000 ft (305 m)	We Tote	107273278
2061004BBK R1000	4	Black	1,000 ft (305 m)	Reel	107383705
2061004BBK W1000	4	Black	1,000 ft (305 m)	We Tote	107509036
2061004BRD R1000	4	Red	1,000 ft (305 m)	Reel	108924838
2061004BRD W1000	4	Red	1,000 ft (305 m)	We Tote	700013667
2061004BBR R1000	4	Brown	1,000 ft (305 m)	Reel	760027326
2061004BPK W1000	4	Pink	1,000 ft (305 m)	We Tote	760006593



Low Smoke Zero Halogen (LSZH) 3061

The 3061A LSZH 4-pair cable meets or exceeds Category 5e/Class D attenuation and NEXT requirements in ISO/IEC 11801, CENELEC EN50173 and TIA/EIA 568B. Further, these cables are UL verified as Category 5e. The 3061A LSZH cable is composed of 0.511 mm (24 AWG) bare solid copper conductors insulated with high density polyolefin. The insulated conductors are tightly twisted into pairs and jacketed with the low smoke non-halogen compound.

Physical Specifications:

Weight: 22 lbs/1,000 ft (9.98 kg/304.8 m)
Nominal Jacket Thickness: 0.021 in (0.533 mm)
Nominal Outside Diameter: 0.205 in (5.207 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 24 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 70%
Maximum DC Resistance: 9.38 Ohms/100 m
Maximum DC Resistance Unbalance: 3%
Maximum Mutual Capacitance at 1 kHz: 5.6 nF/100 m
Standards: ANSI/TIA/EIA 568B.1 and ANSI/TIA/EIA 568B.2 Category 5e
ISO/IEC 11801: 2002 (Edition 2) Class D
CENELEC EN50173: 2002 (Edition 2) Category 5e
IEC 754 part 2, Non-halogen based on pH and conductivity measurements
IEC 1034 part 2, Smoke emission
IEC 332 part 3, Flammability and flame retardant
NES 713: Toxicity index

Product Number	Pair Count	Color	Length	Package	Material ID
3061004AWH W1000	4	White	1,000 ft (305 m)	We Tote	107573545
3061004AWH R1000	4	White	1,000 ft (305 m)	Reel	107573537
3061004AWH R4400	4	White	4,400 ft (1,341 m)	Reel	107860538
3061004AWH CUSTL	4	White	Custom Length	Reel	107573560



Limited Combustible 4061

The 4061 cable is UL verified Category 5e and UL listed type CMP 50 for use in air return handling spaces and compliant with the UL limited combustible requirement. The cable is made with an all FEP construction which is not subject to performance changes due to environmental conditions.

Physical Specifications:

Weight: 25.3 lbs/1,000 ft (11.48 kg/304.8 m)
Insulation Thickness: 0.0065 in (0.17 mm)
Nominal Jacket Thickness: 0.010 in (0.25 mm)
Nominal Outside Diameter: 0.18 in (4.58 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 23 AWG

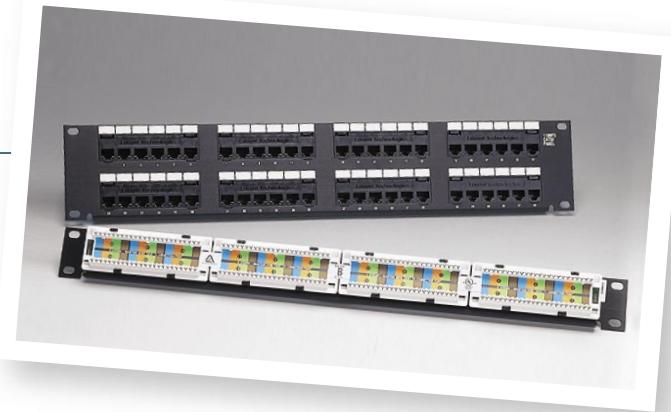
Electrical Specifications:

NVP (fastest pair @ 10 MHz): 71%
Maximum DC Resistance: 7.61 Ohms/100 m
Maximum DC Resistance Unbalance: 3%
Mutual Capacitance at 1 kHz: 5.6 nF/100 m
Standards: ANSI/TIA/EIA 568B.1 and ANSI/TIA/EIA 568B.2 Category 5e
ISO/IEC 11801: 2002 (Edition 2) Class D
CENELEC EN50173: 2002 (Edition 2) Category 5e
UL and cUL: CMP-50

Product Number	Pair Count	Color	Length	Package	Material ID
4061004ABL R1000	4	Blue	1,000 ft (305 m)	Reel	108671272
4061004AWH R1000	4	White	1,000 ft (305 m)	Reel	108671280

1100 Category 5E PowerSUM Modular Patch Panel

The 1100 PowerSUM Modular Panel is a member of the PowerSUM Solution. It exceeds the Category 5 and Category 5e requirements in ISO/IEC 11801 CENELEC EN50173 and TIA/EIA 568B. The 1100PSE Category 5e Modular Patch Panel is a 19 in (48.3 cm) wide modular patch panel and is available with 24 or 48 jacks, and is capable of handling either T568A or T568B wiring.



The minimum insertion life is 750 cycles, which allows for hundreds of moves and additions.

Label strips for both the front and back of the panel allow for easy identification of circuits.

Physical Specifications:

Height: 24-Port: 1.75 in (4.38 cm)
48-Port: 3.50 in (8.83 cm)

Width: 19.0 in (48.3 cm)

Depth: 1.60 in (4.96 cm)

Wire Termination Type:

Insulation displacement (ID), gas tight

Wire Size:

Conductor Type: Solid or stranded (7 strands)
Size: 26/24/22 AWG (0.40/0.51/0.64 mm)

Insulation Type: All plastic insulates, including: PVC, irradiated PVC, Nylon, Polyethylene, Polypropylene, PTFE, Polyurethane, Teflon®

Mechanical Data:

Plug Insertion Life: 750 minimum
Wire Insertion Force: 24 AWG=13-28 lbs (58-125 N)
Wire Retention: 24 AWG-typical pull out force
X-axis=10.6 lbs (47.3 N)
Y-axis=10.6 lbs (47.3 N)
Z-axis=2.4 lbs (10.7 N)

Environmental Conditions:

Temperature Range:
Storage: -40°F to 158°F (-40°C to 70°C)
Operational: 14°F to 140°F (-10°C to 60°C)
Relative Humidity: (operational) maximum, non-condensing 93%

Materials:

Plastic Components: Polycarbonate, self-extinguishing
Flammability Rating: UL-rated 94 V-O
Oxygen Index: 28.5% minimum
Contact Material: Phosphor Bronze

Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 5e

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

UL and cUL Listed

PowerSUM

Product Number	Wiring	Number of Ports	Material ID
1100PSCAT5E-24	T568A, T568B	24	108208919
1100PSCAT5E-48	T568A, T568B	48	108208935
1100PS ICON Label - White			760001412
1100PS ICON Label - Blue			760001420

PATCHMAX® PowerSUM Distribution Hardware

PATCHMAX Distribution Hardware is a copper and fiber modular connecting hardware system. PATCHMAX components can be purchased individually or as a complete kit. It is designed to be mounted on EIA 310 Standard 19 inch (48.3 cm) rack/frame or 1100C type wall mount brackets.

The Category 5e copper kit PM2150 PowerSUM includes a 24-(48) port panel, 4 (8) DM21xx modules, a cable fastener kit, 1 (2) front retainers, 5 (10) rear retainers, 16 white/blue labels, straps, tape and installation instructions for the 24- and 48- port kits, respectively.

The P2040 and P2080 are individual, empty panels that hold 4 and 8 snap-in distribution modules, respectively. The P2040 or P2080 panels allow fiber and copper to be terminated in the same panel. A slack storage tray in the rear of the module maintains the correct buffered fiber bend radius.

Physical Specifications:

Height: 24-Port: 3.53 in (8.9 cm)
48-Port: 7.06 in (17.8 cm)

Width: 24-Port: 19 in (48.3 cm)
48-Port: 19 in (48.3 cm)

Depth: 24-Port: 8.13 in (20.5 cm)
48-Port: 8.13 in (20.5 cm)

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel underplate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm) (26 to 22 AWG)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm) (24 to 22 AWG)

Insulation Size: 0.030 in to 0.046 in (0.76 mm to 1.17 mm)

Insulation Types: All plastic insulates, including: PVC, irradiated PVC, Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon, and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug



Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 5e

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface.

UL and cUL Listed



PATCHMAX PowerSUM Panels

Product Number	Detailed Description	Material ID
PM2150PSE-24	PowerSUM Patch Panel, 24-Port	108320029
PM2150PSE-48	PowerSUM Patch Panel, 48-Port	108320045
P2040	Panel for 4 Distribution Modules	107428591
P2080	Panel for 8 Distribution Modules	107428609

PATCHMAX PowerSUM Modules

Product Number	Detailed Description	Material ID
DM2150PSE	PowerSUM Distribution Module, 6-Port	108320011
DM2302 SC/SC	OptiSPEED Multimode SC Module, 6 Connection	108116484
DM2302 SC/ST	OptiSPEED Multimode SC Front Module, 6 Connection	108116500
DM2302 ST/ST	OptiSPEED Multimode ST Module, 6 Connection	108116526
DM2302 ST/SC	OptiSPEED Multimode ST Front Module, 6 Connection	108116542
DM2302 LC/LC	OptiSPEED Multimode LC Module, 12 Connection	108267634
DM2303 SC/SC	TeraSPEED Singlemode SC Module, 6 Connection	108116492
DM2303 SC/ST	TeraSPEED Singlemode SC Front Module, 6 Connection	108116518
DM2303 ST/ST	TeraSPEED Singlemode ST Module, 6 Connection	108116534
DM2303 ST/SC	TeraSPEED Singlemode ST Front Module, 6 Connection	108116559
DM2303 LC/LC	TeraSPEED Singlemode LC Module, 12 Connection	108267642
DM2304 LC/LC	LazrSPEED Multimode LC Module, 12 Connection	108662131

PATCHMAX PowerSUM Accessories

Product Number	Detailed Description	Material ID
L2300-BL	Icons (4 strips, 6 icons per strip), blue	107536773
L2300-YL	Icons (4 strips, 6 icons per strip), yellow	107536799
L2300-RD	Icons (4 strips, 6 icons per strip), red	107536815
L2300-PL	Icons (4 strips, 6 icons per strip), purple	107536849
R2100	Front Cord Retainer (Kit of 5)	108036690
R2200	Rear Cable Retainer	107638934
R2300	Velcro Fastener Kit	107670952
BP2100	Blank Plate	108028457

PowerSUM

MPS100E Modular PowerSUM Information Outlets

The MPS100E Modular Information Outlets are 8-position/8-conductor high-density modular information jacks designed for high speed networking applications using data transmission rates.



Features and Benefits:

- Snaps into any M-Series modular faceplate, frame, or surface-mount box
- Can be mounted either at 90 degrees (straight) or 45 degrees (angled)
Angled feature eliminates the need for special faceplates
- Multicolored identification labels assure fast, accurate installation
- Low-profile wire cap protects against contamination and secures connections
- Pair splitters and wider channel for enhanced conductor placement and termination
- The MPS100E outlet uses either the TIA/EIA T568A or TIA/EIA T568B wiring
- The MPS100E outlet is Category 5e compliant

Physical Specifications:

Dimensions: HxWxD: 0.8 in x 0.8 in x 1.2 in (2.0 cm x 2.0 cm x 3.1 cm)

Universal A/B labeling

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel underplate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm) (26 to 22 AWG)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm) (24 to 22 AWG)

Insulation Size: 0.030 in to 0.046 in (0.76 mm to 1.17 mm)

Insulation Type: All plastics insulates, including:

Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug

Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 5e

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

UL and cUL Listed



Product Number	Wiring	Color	Qty/Pkg	Material ID
MPS100E-003	T568A, T568B	Black	1	108232695
MPS100E-112	T568A, T568B	Orange	1	108232703
MPS100E-123	T568A, T568B	Yellow	1	108232711
MPS100E-226	T568A, T568B	Green	1	108232729
MPS100E-246	T568A, T568B	Electrical Ivory	1	108232737
MPS100E-262	T568A, T568B	Electrical White	1	108232745
MPS100E-270	T568A, T568B	Electrical Gray	1	108232752
MPS100E-317	T568A, T568B	Red	1	108232760
MPS100E-318	T568A, T568B	Blue	1	108232778
MPS100E-361	T568A, T568B	Violet	1	108337726

D8PS PowerSUM Modular Patch Cord

The D8PS Modular Patch Cord meets or exceeds Attenuation and NEXT Category 5 and Category 5e specifications for patch cords as specified in ISO/IEC 11801, CENELEC EN50173 and TIA/EIA 568B. Available in a variety of colors and lengths, the D8PS cords are ideal for high activity environments that require reliable data transmission.



Patch cords are orderable using a 14-character feature configuration coding scheme which replaces the familiar 9-character Material ID. This allows maximum flexibility for ordering many different combinations of plug ends, cordage types, colors and lengths. Please use SYSTIMAX Copper Patch Cord Product Identifier (in Copper Reference Section) for ordering information or contact your SYSTIMAX BusinessPartner.

Physical Specifications:

Contact Material:

Phosphor bronze

Contact Plating:

Gold 50 micro-inch (1.27 microns)

Nickel 100 micro-inch (2.54 microns)

Insertion Life:

750 minimum

Plug Material:

Polycarbonate UL-rated 94 V-O

Operating Temperature:

14°F to 140°F (-10°C to 60°C)

Electrical Specifications:

TIA/EIA Category:

5e

UL and cUL:

CM (cordage)

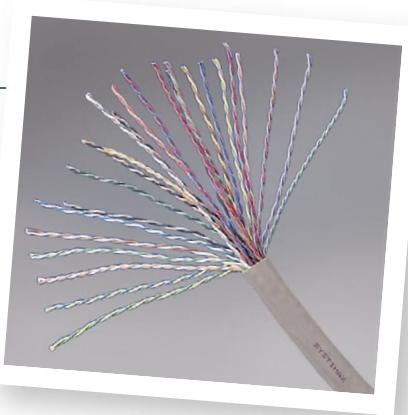
Product Number	Detailed Description	CPC Code
D8PS	PowerSUM Double Ended Cord	CPC6642
D8PS-SE	PowerSUM Single Ended 117 Cord	CPC6442
D8PS-A Wired	PowerSUM T568A Wired Cord	CPC6641

PowerSUM

25-Pair Category 5 UTP, 61 Series Cable

Non Plenum 1061

The 25-pair 1061 cable is composed of 24 AWG bare solid copper conductors insulated with high density polyolefin. The insulated conductors are tightly twisted into pairs, stranded into mini-units and jacketed with a SYSTIMAX SCS specially formulated PVC jacket. User-friendly standard 25-pair PIC color coding minimizes confusion when terminating on SYSTIMAX SCS distribution hardware and Category 5, 25-pair, telco-type, 525 connectors.



Physical Specifications:

Weight: 113 lbs/1,000 ft (51.26 kg/304.8 m)
Nominal Jacket Thickness: 0.027 in (0.69 mm)
Nominal Outside Diameter: 0.52 in (13.2 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Outside Diameter: 0.520 in (13.2 mm)
Gauge: 24 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 70%
Maximum DC Resistance: 9.38 Ohms/100 m
Maximum DC Resistance Unbalance: 5%
Maximum Mutual Capacitance at 1 kHz: 14 nF/100 m
Standards: TIA/EIA 568A Category 5
UL and cUL: CMR

Product Number	Pair Count	Color	Length	Package	Material ID
1061025CSL R1000	25	Slate	1,000 ft (305 m)	Reel	107287484
1061025CSL RVAR	25	Slate	Variable Length	Reel	107222762
1061025C1SL R4000*	25	Slate	4,000 ft (1,220 m)	Reel	760003210
1061025FSL 25/24 RVAR**	25	Slate	Variable Length	Reel	760026500
1061025FSL 25/24 CUSTL**	25	Slate	Custom Length	Reel	760026492
1061025FSL 25/24 R1000**	25	Slate	1,000 ft (305 m)	Reel	760026518
1061025FSL 25/24 R4000**	25	Slate	4,000 ft (1,220 m)	Reel	760026526

*Austel

**Asia Pacific



Plenum 2061

The 25-pair 2061A cable is UL verified Category 5 and UL listed type CMP for use in air return handling spaces. The cable has a user-friendly standard 25-pair PIC color coding scheme, which minimizes confusion when terminating on SYSTIMAX SCS distribution hardware and the Category 5, 25-pair telco-type 525 Connector. The cable conductors are insulated with Fluorinated-Ethylene-Propylene (FEP), twisted into pairs, stranded into mini-units and jacketed with Plenum rated material.

Physical Specifications:

Weight: 104 lbs/1,000 ft (47.2 kg/304.8 m)
Nominal Jacket Thickness: 0.012 in (0.31 mm)
Nominal Outside Diameter: 0.46 in (11.7 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 24 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 75%
Maximum DC Resistance: 9.38 Ohms/100 m
Maximum DC Resistance Unbalance: 5%
Maximum Mutual Capacitance at 1 kHz: 4.6 nF/100 m
Standards: TIA/EIA 568A Category 5
UL and cUL: CMP

Product Number	Pair Count	Color	Length	Package	Material ID
2061025AWH R1000	25	White	1,000 ft (305 m)	Reel	107369845
2061025AWH R4000	25	White	4,000 ft (1,220 m)	Reel	107995011
2061025ABL R1000	25	Blue	1,000 ft (305 m)	Reel	107871477

Low Smoke Zero Halogen 3061

The 25-pair 3061A Low Smoke Zero Halogen (LSZH) cable is composed of 0.511 mm (24 AWG) bare solid copper conductors insulated with high density polyolefin. The 3061A cable has a user-friendly standard 25-pair PIC color coding scheme, which minimizes confusion when terminating on SYSTIMAX SCS distribution hardware and the Category 5, 25-pair telco type 525 connector.

Physical Specifications:

Weight: 116 lbs/1,000 ft (52.6 kg/304.8 m)
Nominal Jacket Thickness: 0.027 in (0.61 mm)
Nominal Outside Diameter: 0.54 in (12 mm)
Maximum Pulling Tension: 25 lbs (11.34 kg)
Operating Temperature: -4°F to 140°F (-20°C to 60°C)
Gauge: 24 AWG

Electrical Specifications:

NVP (fastest pair @ 10 MHz): 75%
Maximum DC Resistance: 9.38 Ohms/100 m
Maximum DC Resistance Unbalance: 5%
Maximum Mutual Capacitance at 1 kHz: 4.6 nF/100 m
Standards: TIA/EIA 568A Category 5
IEC 754 part 2, Non-halogen based on pH and conductivity measurements
IEC 1034 part 2, Smoke emission
IEC 332 part 3, Flammability and flame retardant
NES 713: Toxicity index

Product Number	Pair Count	Color	Length	Package	Material ID
3061025AWH R1000	25	White	1,000 ft (305 m)	Reel	107754350
3061025AWH R4000	25	White	4,000 ft (1,220 m)	Reel	107754368
3061025AWH RVAR	25	White	Variable Length	Reel	107754343

PowerSUM

2500 and 2512 Modular Patch Panel

The 2500 Category 5, PowerSUM Modular Patch Panel provides 8-pin modular patch on the front of the panel and female, 50-pin connections (patch) on the back.

The 2512 Category 5, PowerSUM Modular Patch Panel provides two pairs to each 8-pin modular patch. Pair one is terminated on pins 1 and 2 and pair two is terminated on pins 3 and 6. Therefore, one 50-pin connector serves 12 jacks.

The 2512CAT5PS is wired to the IEEE 802.3, Ethernet 100BASE-TX and 100BASE-T2 standard.

Physical Specifications:

Height: 24-Port: 1.75 in (4.38 cm)
48-Port: 3.50 in (8.83 cm)

Width: 19.0 in (48.26 cm)

Depth: 1.60 in (4.06 cm)

Wire Termination Type: Insulation displacement (ID), gas tight

Wire Size:

Conductor Type: Solid or stranded (7 strands)

Size: 26/24/22 AWG (0.40/0.51/0.64 mm)

Insulation Type: All plastic insulates, including: PVC, irradiated PVC, Nylon, Polyethylene, Polypropylene, PTFE, Polyurethane, Teflon®

Mechanical Data:

Plug Insertion Life: 750 minimum

Wire Insertion Force: 24 AWG=13-28 lbs (58-125 N)

Wire Retention: 24 AWG-typical pull out force

X-axis=10.6 lbs (47.3 N)

Y-axis=10.6 lbs (47.3 N)

Z-axis=2.4 lbs (10.7 N)

Environmental Conditions:

Temperature Range:

Storage: -40°F to 158°F (-40°C to 70°C)

Operational: 14°F to 140°F (-10°C to 60°C)

Relative Humidity: (operational) maximum, non-condensing 93%

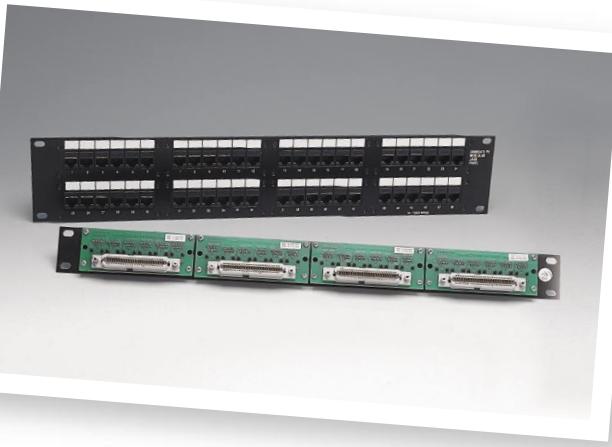
Materials:

Plastic components: Polycarbonate, self-extinguishing

Flammability Rating: UL-rated 94 V-O

Oxygen Index: 28.5% minimum

Contact Material: Phosphor Bronze



Electrical Specifications:

Insulation Resistance: 500 megaohms minimum

Current Rating: 1.5 A at 68°F (20°C)

TIA/EIA Category: 5

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

UL and cUL Listed



Product Number	Wiring	Number of Ports	Material ID
2500CAT5PS2-24B	T568B	24	108236142
2500CAT5PS2-48B	T568B	48	108236159
2500CAT5PS2-24A	T568A	24	108236126
2500CAT5PS2-48A	T568A	48	108236134
2512CAT5PS2-48	100BASE-TX, 100BASE-T	48	108236167

25-Pair Category 5, Connectors and Cable Assemblies

The 525 Connectors are used to terminate 25-pair cables. The available configurations are: 90 degree, in-line, angled and jack.

- The 525 cables consist of Category 5, 25-pair cable, connectorized with either one or two 525 connectors. These plug ended cables are available in single-ended (SE) and double-ended (DE) configurations.
- The 525 connector is compatible with industry standard 25-pair connectors while also providing keyed Category 5 connections with equipment using this feature. In addition, their unique design using crosstalk reduction techniques providing a 6 dB margin assures Category 5 performance throughout systems that use multiple connectors.
- The 525 assemblies with an angled (110 degree) end were specifically designed for connection to electronics equipment requiring a 50-pin telco type connector. The 50-pin assembly is downward compatible and can be used to support 10BASET electronics or 100BASET or 155 Mbps ATM applications. The right and left versions of the angle-mount connectorized cable assembly allow for flexibility in routing the cords as they exit the equipment.
- The in-line (180 degree) end of the 50-pin cable assembly was specifically designed for connection to our 100BASET (50-pin Category 5) modular patch panel.
- The raw end of the cable assembly is designed for termination directly onto the back of a modular patch panel.
- For cable assemblies, refer to the SYSTIMAX online catalog or your local SYSTIMAX representative.



Physical Specifications:

Contact Plating: Gold 30 micro-inch (0.76 microns)
Nickel 50 micro-inch (1.27 microns)
Contact Force: 100 grams minimum
Insertion Life: 200 minimum
Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Electrical Specifications:

TIA/EIA Category: 5
Maximum DC Resistance: 0.30 Ohms/100 m

Product Number	Type	Qty/Pkg	Material ID
525-PA-003	90 Degree Plug	100	107487514
525-JA-003	90 Degree Jack	100	107487498
525-AP-003	Angled Plug	100	108036732
525-CP-003	In-line Plug	100	107958233

Ruggedized Connectivity Solution for Harsh Environments

The SYSTIMAX Ruggedized Connectivity Solution is designed to support applications such as military telecommunications equipment, utility instrumentation panels, pharmaceutical laboratories and equipment, industrial ethernet sensors and factory floor automation. The SYSTIMAX ruggedized product family includes a ruggedized connector housing for Category 5e and Category 6, the respective configurable patch cords, protective caps and faceplates.

The SYSTIMAX ruggedized connectors meet IP65 & IP67 environmental testing for use in industrial applications, where potential exposure to liquid and dust is expected. The connector consists of a jack assembly and a plug assembly, that form an IP65 & IP67 rated seal. The jack assembly accepts a standard SYSTIMAX M-Series PowerSUM or GigaSPEED XL outlet, and mounts in a corrosion resistant faceplate that can be mounted to a standard single or double wall outlet box. The plug assembly is pre-assembled to a SYSTIMAX GS8E patch cord. The plug assembly also provides an IP67 rated seal with the cord, as well as strain, flex and impact relief.



Features and Benefits:

- Audible, tactile and visual confirmation of engagement
- Avoids accidental disconnects
- Resistant to water and dust exposure and humidity
- Mechanical cable strain, flex and impact relief
- Robust keying of jack housing to faceplate

Physical Specifications:

Faceplate Width: 2.75 in (single gang) (7 cm)
4.56 in (double gang) (11.6 cm)

Faceplate Height: 4.5 in (11.4 cm)

Size of Opening to Accept Receptacle: approx 1.1 in (2.8 cm)

Plug Diameter: 1.15 in (2.9 cm)

Material: High impact plastic

Temperature: -13°F to 185°F (-25°C to 85°C)

Standards:

IP65 & IP67
UL and cUL Listed

Additional Copper Connectivity

Product Number	Detailed Description	Material ID
MIR-RJ45	M-Series Ruggedized Receptacle	760042960
MIR-CAP	Ruggedized Receptacle - Cap	760042978
IR11SP	Faceplate—Single Gang—1-Port—Stainless Plate	760042994
IR12SP	Faceplate—Single Gang—2-Port—Stainless Plate	760043000
IR22SP	Faceplate—Double Gang—2-Port—Stainless Plate	760043026
IR24SP	Faceplate—Double Gang—4-Port—Stainless Plate	760043018

Detailed Description	CPC Code
GS8E-IP Ruggedized Plug to GS8E, Coiled Strain Relief	CPCC312
GS8E-IP Ruggedized Plug to Un-terminated, Coiled Strain Relief	CPCC412
GS8E-IP Ruggedized Plug to Ruggedized Plug, Coiled Strain Relief	CPCCC12
GS8E-IP Ruggedized Plug to GS8E, Domed Strain Relief	CPCD312
GS8E-IP Ruggedized Plug to Un-terminated, Domed Strain Relief	CPCD412
GS8E-IP Ruggedized Plug to Ruggedized Plug, Domed Strain Relief	CPCDD12

Universal Modular Patch Panel



SYSTIMAX Universal Modular Patch Panel is an 19 inch rack mounted panel. It accepts up to 36 (24 for GigaSPEED X10D) M-Series information outlets and other M-Series outlets for patching and interconnection in the telecommunications closet or equipment room.

This modular concept allows termination of outlets in the field, coupled with high density and the ability to integrate InstaPATCH pre-terminated fiber modules in the same footprint, it is an ideal data center solution. It consists of a rack mounted base unit, three slide-in modules with interchangeable front bezels cable management brackets and a flip-down removable front cover for close-out. The universal modular panel accepts GigaSPEED X10D/XL, PowerSUM and LazrSPEED apparatus.

The panel's 1U height maximizes office space. Color coding is possible by use of colored outlets.

Features and Benefits:

- Accommodates up to 36 (24 for GigaSPEED X10D) M-Series information outlets for easy termination of 4-pair copper cables, in addition to coaxial outlets and S-Video and RCA adapters
- 1U design maximizes rack space
- Integrated cable management enables enhanced cable routing
- Modularity will support up to three multimedia modules
- Three methods of labeling are provided: on the inside of the front cover, on the rear of the base, and on the front of each of the bezels

Physical Specifications:

Height: 1.72 in (4.4 cm)

Width: 19 in (48.3 cm)

Depth: 4.17 in (10.6 cm)

Detailed Description	Material ID
UMP 24-Port Panel Kit (Panel, Brackets, Tie Wraps Screws, Cover and three 8-Port Bezel Kits)	760026682
UMP 36-Port Panel Kit (Panel, Brackets, Tie Wraps Screws, Cover and three 12-Port Bezel Kits)	760026690
UMP Blank Panel Kit (Bezel Kits not included)	760026740
UMP 36-Port Panel without cover	760034736
UMP 24-Port Panel without cover	760034710
UMP Cover Kit	760035501
UMP 8-Port Bezel Kit	760026716
UMP 12-Port Bezel Kit	760026724
Label Kit for UMP 24-Port Panel	760036079
Label Kit for UMP 36-Port Panel	760036087

FlexiMAX Patch Panel

The SYSTIMAX FlexiMAX panel is an alternative modular panel that allows for patching and interconnection in the telecommunications closet or equipment room. The FlexiMAX 24-port panel can hold up to 24 MGS500, MGS400 or MPS100E high density modules (HDMs) (not included). The front appearance of the panel comprises two rows of square punchouts, which allows ease of installation and access to the HDMs.



Physical Specifications

Height: 1.72 in (4.4 cm)

Width: 19 in (48.3 cm)

Depth: 4.17 in (10.6 cm)

Detailed Description	Material ID
FlexiMAX High-Density Panel	108356312
FlexiMAX Residential Panel (10 inch)	760026799

M1000P5 MultiMAX Panel

Designed for premises data and voice networks employing copper and/or fiber terminations, the M1000P5 MultiMAX Panel is an aluminum panel that provides for patching or interconnect in the telecommunications closet or equipment room. Mounting options for the 3.5 in (8.9 cm) high M1000P5 panel include a standard EIA 19 in (48.3 cm) rack or a hinged wall mount bracket. Packaged with the panel are mounting collars for up to 24 modular outlets or fiber connections, and two wire guides for cord management. For copper terminations, the mounting clips provide a fixture for holding the M-series modular information outlets when terminating conductors and also provide strain relief for the cable when snapped into the panel. Mounting clips also accommodate the M81LC, M81ST and M81SC for fiber terminations.



Additional Copper Connectivity

In addition to the above and ordered separately are the M1000FSSK (Fiber Spool Storage Kit); the M1000FMK (Fiber Mounting Kit), for fiber terminations; and the M1000WG (Wire Guides) for cord management. The M1000FSSK mounts on the rear of the M1000P5, provides fiber storage and manages the slack in the fiber, while maintaining the necessary minimum bending radius.

Physical Specifications:

Height: 3.5 in (8.9 cm)

Width: 19 in (48.3 cm)

Depth: 7 in (17.8 cm)

Product Number	Detailed Description	Material ID
M1000P5	24-Port Panel w/ 25 Mounting Clips, 4 Screws and 2 Wire Guides	108006198
M1000FSSK	Fiber Storage Spool Kit w/ 6 Singlemode Fiber Guides and 3 Wire Guides	107535080
M1000FMK	Duplex SC Fiber Mounting Kit w/ 1 Collar Lock	107535072
M1000WG	Wire Guide	107382525
M1000PMC-B	Mounting Collars (pack of 25)	108006206

Category 3, UTP Cable

Category 3 cable is used in SYSTIMAX SCS voice and low speed data applications. Consists of 24 AWG solid copper conductors insulated with color coded PVC. UL and cUL compliant.

Non Plenum 1010

Physical Specifications:

Weight: 4-Pair: 18.2 lbs/kf (27.2 kg/km)

25-Pair: 95.8 lbs/kf (142.7 kg/km)

50-Pair: 189.9 lbs/kf (283.0 kg/km)

100-Pair: 361.8 lbs/kf (539.1 kg/km)

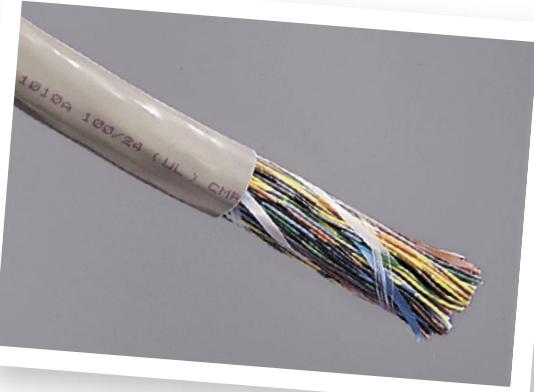
Outside Diameter: 4-Pair: 0.17 in (4.6 mm)

25-Pair: 0.40 in (10.2 mm)

50-Pair: 0.54 in (13.7 mm)

100-Pair: 0.73 in (18.5 mm)

Gauge: 24 AWG



Product Number	Pair Count	Color	Length	Package	Material ID
1010004AGY W1000	4	Gray	1,000 ft (305 m)	We Tote	106062524
1010004ABL W1000	4	Blue	1,000 ft (305 m)	We Tote	106300098
1010004ABE W1000	4	Beige	1,000 ft (305 m)	We Tote	106300106
1010004AWH W1000	4	White	1,000 ft (305 m)	We Tote	108689134
1010025AGY R1000	25	Gray	1,000 ft (305 m)	Reel	106824329
1010050AGY R1000	50	Gray	1,000 ft (305 m)	Reel	106824378
1010100AGY R1000	100	Gray	1,000 ft (305 m)	Reel	106824469

Plenum 2010

Physical Specifications:

Weight: 4-Pair: 18.0 lbs/kf (26.8 kg/km)

25-Pair: 116.2 lbs/kf (173.1 kg/km)

50-Pair: 215.6 lbs/kf (321.2 kg/km)

100-Pair: 410.8 lbs/kf (612.1 kg/km)

Outside Diameter: 4-Pair: 0.18 in (4.6 mm)

25-Pair: 0.47 in (12.0 mm)

50-Pair: 0.63 in (16.0 mm)

100-Pair: 0.84 in (21.4 mm)

Gauge: 24 AWG

Product Number	Pair Count	Color	Length	Package	Material ID
2010004BWH R1000	4	White	1,000 ft (305 m)	Reel	107078396
2010004BWH W1000	4	White	1,000 ft (305 m)	We Tote	107078388
2010004BGY R1000	4	Gray	1,000 ft (305 m)	Reel	107256745
2010004BGY W1000	4	Gray	1,000 ft (305 m)	We Tote	107256737
2010004BYL R1000	4	Yellow	1,000 ft (305 m)	Reel	107256786
2010004BYL W1000	4	Yellow	1,000 ft (305 m)	We Tote	107078412
2010004BBL W1000	4	Blue	1,000 ft (305 m)	We Tote	107078404
2010004BBL R1000	4	Blue	1,000 ft (305 m)	Reel	107819146
2010025BWH R500	25	White	500 ft (152 m)	Reel	700211394
2010025BWH R1000	25	White	1,000 ft (305 m)	Reel	107765992
2010050BWH R1000	50	White	1,000 ft (305 m)	Reel	107766040
2010100BWH R1000	100	White	1,000 ft (305 m)	Reel	107766057

Low Smoke Zero Halogen 3010

Physical Specifications:

Weight: 25-Pair: 251.5 lbs/mi (184 kg/km)

100-Pair: 862.5 lbs/mi (631 kg/km)

Outside Diameter: 25-Pair: 0.49 in (12.5 mm)

100-Pair: 0.89 in (22.5 mm)

Gauge: 24 AWG

Product Number	Pair Count	Color	Length	Package	Material ID
3010025BSL 25/24 RVAR	25	White	3,281 ft (1000 m)	Reels	760010900
3010100BSL 100/24 RVAR	100	White	1,000 ft (305 m)	Reels	760010918

ARMM Riser Cable

ARMM Category 3 Riser Cable is used in riser shafts where a flame retardant sheath is necessary to meet NEC low flame requirements. It can be used without conduit. The cable consists of a core of solid copper conductors insulated with polyethylene covered by a PVC skin. The core is covered by polypropylene film and overlaid with a corrugated aluminum shield, which is adhesively bonded to an outer jacket of PVC plastic to form an ALVYN sheath.

Physical Specifications:

Gauge: 24 AWG



Product Number	Pair Count	Color	Cable Length per Reel	Outside Diameter	Weight	Package	Material ID
ARMM-0025	25	Dark Gray	12,600 ft (3.8 km)	0.53 in (1.36 cm)	130 lbs/1,000 ft (19.35 kg/100 m)	Reel	107526873
ARMM-0050	50	Dark Gray	12,600 ft (3.8 km)	0.65 in (1.67 cm)	220 lbs/1,000 ft (32.74 kg/100 m)	Reel	107527111
ARMM-0100	100	Dark Gray	12,600 ft (3.8 km)	0.89 in (2.28 cm)	390 lbs/1,000 ft (58.04 kg/100 m)	Reel	107527129
ARMM-0200	200	Dark Gray	8,400 ft (2.6 km)	1.09 in (2.79 cm)	730 lbs/1,000 ft (108.64 kg/100 m)	Reel	107527285
ARMM-0300	300	Dark Gray	5,040 ft (1.5 km)	1.30 in (3.33 cm)	1,060 lbs/1,000 ft (157.75 kg/100 m)	Reel	107527293
ARMM-0400	400	Dark Gray	4,200 ft (1.3 km)	1.48 in (3.79 cm)	1,390 lbs/1,000 ft (206.86 kg/100 m)	Reel	107527301
ARMM-0600	600	Dark Gray	2,590 ft (0.8 km)	1.80 in (4.62 cm)	2,070 lbs/1,000 ft (308.06 kg/100 m)	Reel	107527319
ARMM-0900	900	Dark Gray	2,160 ft (0.6 km)	2.15 in (5.51 cm)	3,040 lbs/1,000 ft (452.41 kg/100 m)	Reel	107527327
ARMM-1200	1,200	Dark Gray	1,430 ft (0.4 km)	2.42 in (6.21 cm)	4,050 lbs/1,000 ft (602.72 kg/100 m)	Reel	107527335
ARMM-1500	1,500	Dark Gray	1,220 ft (0.4 km)	2.75 in 7.05 cm)	5,090 lbs/1,000 ft (757.49 kg/100 m)	Reel	107527343
ARMM-1800	1,800	Dark Gray	1,070 ft (0.3 km)	2.94 in (7.54 cm)	6,000 lbs/1,000 ft (892.92 kg/100 m)	Reel	107527350

M1 Category 3, Information Outlets

The M1BH Modular Telecommunications Outlets are designed for voice, low speed networks, and Integrated Services Digital Network (ISDN) applications requiring an 8-position/8-conductor outlet. The M1BH outlets are designed to snap into any M-Series modular faceplate, frame or surface-mount box. A special lubrication process provides for a minimum of 750 plug insertions.

The M1BH outlet uses the universal wiring labels which display both the TIA/EIA T568A and TIA/EIA T568B wiring.

The M1AH modular telecommunications outlets are designed for voice and other applications requiring a 6-position/6-conductor USOC wired outlet. The M1AH outlets are designed to snap into any M-series modular faceplate, frame or surface-mount box.



Physical Specifications:

Dimensions: HxWxD: 0.8 in x 0.8 in x 1.2 in (2.0 cm x 2.0 cm x 3.1 cm)
Universal A/B labeling

Plastic Material: High-impact, flame retardant, thermoplastic

Flammability Rating: UL-rated 94 V-0

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Humidity: 95% (non-condensing)

Contact Material & Plating: Copper alloy, 100 micro-inch (2.54 microns) bright solder over 100 micro-inch (2.54 microns) nickel underplate. Insulation displacement connectors accept solid or stranded wire

Nominal Solid Conductor Diameter: 0.016 in to 0.025 in (0.40 mm to 0.64 mm)

Nominal Stranded Conductor Diameter: 0.020 in to 0.025 in (0.51 mm to 0.64 mm)

Insulation Size: 0.030 in to 0.046 in (0.76 mm to 1.17 mm)

Insulation Type: All plastics insulates, including: Polyethylene, Polypropylene, PTFE, Polyurethane, Nylon and FEP

Outlet Wires: Copper alloy, 50 micro-inch (1.27 microns) hard gold plating over 100 micro-inch (2.54 microns) nickel underplate

Plug Retention Force: 30 lbs (133 N) minimum between modular plug and jack

Plug Insertion Life: 750 minimum insertions of an 8-position IEC 60603-7 compliant plug

Plug/Jack Contact Force: 100 grams minimum per contact using FCC approved plug

Electrical Specifications:

TIA/EIA Category: 3

Data Rate: Compatible with 10 Mbps Institute of Electrical and Electronics Engineers Inc. (IEEE) 802.3 10BASE-T applications. Compatible with 16 Mbps IEEE 802.5 token ring applications.

Insulation Resistance: 500 megaohms minimum

Dielectric Withstand Voltage: 1,000 VAC RMS, 60 Hz minimum, contact-to-contact and 1,500 VAC RMS, 60 Hz minimum to exposed conductive surface

Current Rating: 1.5 A at 68°F (20°C)

UL and cUL Listed

Additional
Copper
Connectivity

Product Number	Color	Qty/Pkg	Wiring	Material ID
M1BH-H-003	Electrical Black	1	T568A/T568B	107321697
M1BH-H-112	Electrical Orange	1	T568A/T568B	107346744
M1BH-H-123	Yellow	1	T568A/T568B	107321705
M1BH-H-226	Green	1	T568A/T568B	107321713
M1BH-H-246	Electrical Ivory	1	T568A/T568B	107321721
M1BH-H-262	Electrical White	1	T568A/T568B	107321739
M1BH-H-270	Electrical Gray	1	T568A/T568B	107321747
M1BH-H-317	Red	1	T568A/T568B	107321754
M1BH-H-318	Blue	1	T568A/T568B	107321762
M1BH-H-215	Misty Cream	1	T568A/T568B	108480575

Miscellaneous Outlets

Product Number	Color	Qty/Pkg	Wiring	Material ID
M1AH-003 Module	Black	1	6-Pin Jack	107322133
M1AH-112 Module	Orange	1	6-Pin Jack	107322141
M1AH-246 Module	Ivory	1	6-Pin Jack	107322158
M1AH-262 Module	White	1	6-Pin Jack	107322166
M1AH-270 Module	Gray	1	6-Pin Jack	107322174
M1AH-215 Module	Misty Cream	1	6-Pin Jack	108480609
M1BHU-246 Module	Ivory	1	USOC	107322224
M1BHU-262 Module	White	1	USOC	107322240
M1BHU-112 Module	Orange	1	USOC	107346801
Hand Held Terminating Device	Black	1	N/A	760034215

The outlets listed in this product table are not covered by the SYSTIMAX 20-Year Extended Product Warranty and Application Assurance.



110 Wiring Blocks

The 110 Wiring Block is used to terminate cable pairs and permits a neat, organized arrangement of cables behind the block.

It is a flame retardant molded plastic block with horizontal strips, each of which secures and organizes 25 cable pairs. The index strips are marked with five tip colors to help the installer locate pairs quickly.

The blocks accommodate 22 through 26 AWG conductors and can be mounted directly on wall surfaces without backboards.



There are two types of 110 Wiring Blocks: "A" wiring blocks and "D" wiring blocks. The 110A Wiring Block is equipped with legs to provide space behind the block; also, the space on the sides can be used as a vertical jumper trough. The 110D Wiring Block is built without legs and is used where depth is restrictive. These blocks are used in conjunction with the 110C Connecting Blocks, which are ordered separately.

The 110RA 12/38 Rivet Kits may be used to secure the 110 blocks without legs on to the 110 Patch Panel System backboards.

The 88A2 is a molded plastic clip-on part that attaches to the legs of the 110AW2 wiring block.

Physical Specifications:

Height: 25/50-Pair: 1.75 in (4.45 cm)
100-Pair: 3.59 in (9.12 cm)
300-Pair: 10.79 in (27.41 cm)

Width: "A" block, 10.72 in (27.23 cm); "D" block, 8.5 in (21.6 cm)

Depth: "A" block, 3.25 in (8.25 cm); "D" block, 1.4 in (3.6 cm)

Electrical Specifications:

UL and cUL Listed

110 Wiring Blocks (Without 110C Connecting Blocks)

Product Number	Pair Count	Block Type	Material ID
110AW2-100	100	A	107059891
110AW2-300	300	A	107059917
110DW1-25	25	D	107256653
110DW1-50	50	D	107256661
110DW2-100	100	D	107059909
110DW2-300	300	D	107059925

110 Field Terminated Cross-Connect System Terminal Blocks

Product Number	Pair Count	Block Type	Material ID
110AA2-100FT	100	A	107058901
110AB2-100FT	100	A	107058919
110AC2-100FT	100	A	107058927
110AA2-300FT	300	A	107058935
110AB2-300FT	300	A	107058943
110AC2-300FT	300	A	107058950

Rivet Kits

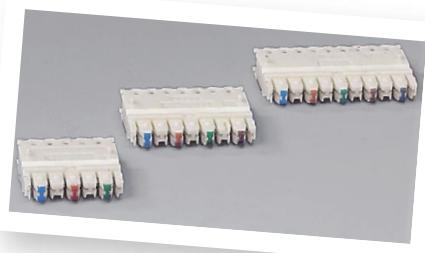
Product Number	Count	Block Type	Material ID
110RA-12 KIT	12	A	107611626
110RA-38 KIT	38	A	107611634

Retainer

Product Number	Detailed Description	Material ID
88A2	Retainer (Retains cross-connect wires and clips onto 110AW2 blocks)	107267452

110C Connecting Blocks

The 3-Pair (110C-3), 4-Pair (110C-4) and 5-Pair (110C-5) Connecting Blocks consist of a 1-piece, flame retardant, molded plastic housing containing solder-plated quick clips that cut through the insulation on 22 through 26 AWG conductors as they are seated onto the wiring block.



The front of the connecting block is color-coded, allowing rapid pair identification and termination. The connecting blocks seat on the 110 Wiring Block and provide an electrically gas tight connection between cable conductors terminated on the wiring block and Cross-connect Wire or 110 Patch Cords.

Physical Specifications:

Height: 0.25 in (0.64 cm)

Width: 3-Pair: 0.9 in (2.3 cm)

4-Pair: 1.2 in (3.05 cm)

5-Pair: 1.5 in (3.8 cm)

Depth: 0.93 in (2.36 cm)

Product Number	Pair Count	Qty/Pkg	Material ID
110C-3	3	10	103801239
110C-4	4	10	103801247
110C-5	5	10	103801254

110 Labels and Holders

The 110 Label assembly consists of a clear label holder (188UT1-50) and colored label inserts (available in green, purple, yellow, blue, gray, brown, white and orange).

The insert labels contain vertical lines spaced on the basis of circuit size (3-, 4-, 5 pair).

The transparent label holder snaps onto the wiring block to clearly identify wiring functions, provide circuit information and conceal and protect the cable conductor terminations.

The labels will not interfere with placing, tracing or removing jumper wires.



Additional
Copper
Connectivity

Product Number	Detailed Description	Color	Pair Count	Qty/Pkg	Material ID
188UT1-50	Label Holder	Transparent		6	103895504
110YB2-4500L	Label	Yellow	4	90	106657232
110YA2-4500L	Label	Yellow	5	90	106657158
110WB2-4500L	Label	White	4	90	106657216
110WA2-4500L	Label	White	5	90	106657133
110SA2-4500L	Label	Gray	5	90	106657166
110PB2-4500L	Label	Purple	4	90	106657190
110PA2-4500L	Label	Purple	5	90	106657117
110GB2-4500L	Label	Green	4	90	106657182
110GA2-4500L	Label	Green	5	90	106657109
110BB2-4500L	Label	Blue	4	90	106657174
110BA2-4500L	Label	Blue	5	90	106657091
188BB1-100	Designation Strips	Blue		2	102579810
188BG1-100	Designation Strips	Blue		1	103103701

110 Patch Panel System Terminal Blocks

The 110 Patch Panel System Terminal Blocks are used to terminate connectorized or raw-ended cable pairs.

Connecting blocks in 3-, 4-, or 5-pair sizes may be specified to match the pairs per circuit of the system in use. Transparent label holders allow you to insert circuit identification labels.

Field terminated terminal blocks, which allow direct termination of building cables, are also available in 300- and 900-pair sizes.



Physical Specifications:

Height: See Product List Table

Width: 8.5 in (21.60 cm)

Depth: 8.05 in (20.45 cm)

Electrical Specifications:

UL and cUL Listed

Product Number	Height	Termination	Pair	Pair Count	Material ID
110PA2-300FT	24.68 in (62.69 cm)	Field Terminated	5	300	107058802
110PB2-300FT	24.68 in (62.69 cm)	Field Terminated	4	300	107058810
110PC2-300FT	24.68 in (62.69 cm)	Field Terminated	3	300	107058828
110PA2-900FT	61.70 in (156.72 cm)	Field Terminated	5	900	107058851
110PB2-900FT	61.70 in (156.72 cm)	Field Terminated	4	900	107058869
110PC2-900FT	61.70 in (156.72 cm)	Field Terminated	3	900	107058877

Additional
Copper
Connectivity

110 Connector System Mounting Brackets

The 110 Mounting Brackets are used for mounting the 110 Connector System hardware on a 19 in (48.3 cm) wide frame rack or a data cabinet. On the rear of the brackets are cable support rings to secure cable that is routed through openings in the mounting bracket to the wiring blocks. Cross-connect wire or patch cords are routed from the wiring blocks through the troughs to the side of the frame to facilitate wire management. These mounting brackets can be mounted one on top of the other to support pair requirements.

The 110RD2-100-19 Mounting Bracket is designed to mount two 110DW1-25 or 110DW1-50 Wiring Blocks and two 110B3 Troughs on an EIA 310C 19 in wide frame.

The 110RD2-200-19 Mounting Bracket is designed to mount two 110DW2-100 Wiring Blocks and two 110B3 Troughs on an EIA 310C 19 in wide frame.

The 110RP2-600-19 Mounting Bracket has a set of three 1 in bars that attach to the 19 in frame to support two 110 pre-connectorized patch panels or patch panel and 188 Backboard and connector bracket.

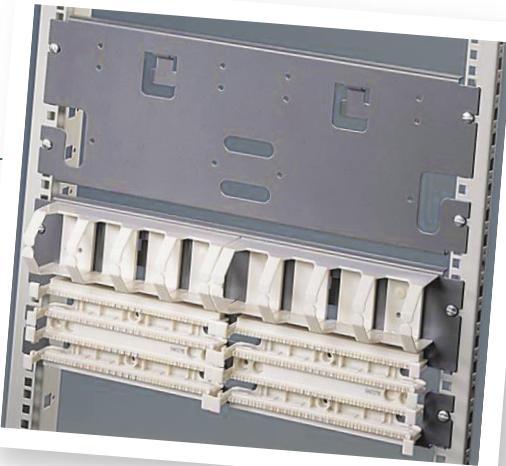
Physical Specifications:

Height: 110RD2-100-19: 5.13 in (13.0 cm)

110RD2-200-19: 7 in (17.78 cm)

110RP2-600-19: 1 in (2.54 cm)

Width: 19 in (48.3 cm)



Product Number	Qty/Pkg	Material ID
110RD2-100-19	1	107535593
110RD2-200-19	1	107535585
110RP2-600-19	3	107098816

Additional
Copper
Connectivity

110 Patch Panel System Backboard

The 188C3 and 188D3 110 Patch Panel System Backboards are metal panels equipped with distributing rings that provide the vertical paths for running patch cords or jumpers between 110 Patch Panel System Terminal Blocks.

Physical Specifications:

Width: 8.5 in (21.60 cm)

Depth: 8 in (20 cm)



Product Number	Detailed Description	Height	Material ID
188C3	Used with 900-Pair Terminal Blocks	61.8 in (157 cm)	107151185
188D3	Used with 300-Pair Terminal Blocks	24.0 in (61 cm)	107151193

188B Backboard

The 188B1 or 188B2 Backboard is made of metal and has two closed, formed, plastic distribution rings. It is used with 110A Wiring Blocks to arrange jumper wires running between columns of wiring blocks. The backboard is placed between fields, where it serves as a horizontal trough for the wires and provides space to change the direction of jumpers. One backboard is used for each vertical column of 110A Wiring Blocks. The 188B2 Backboard is the same as the 188B1 Backboard except it has legs to allow space for routing the cable behind the backboard.

Physical Specifications:

Height: 188B1: 6.50 in (16.50 cm)

188B2: 6.50 in (16.50 cm)

Width: 188B1: 10.72 in (27.23 cm)

188B2: 10.75 in (27.31 cm)

Depth: 188B1: 3.50 in (8.90 cm)

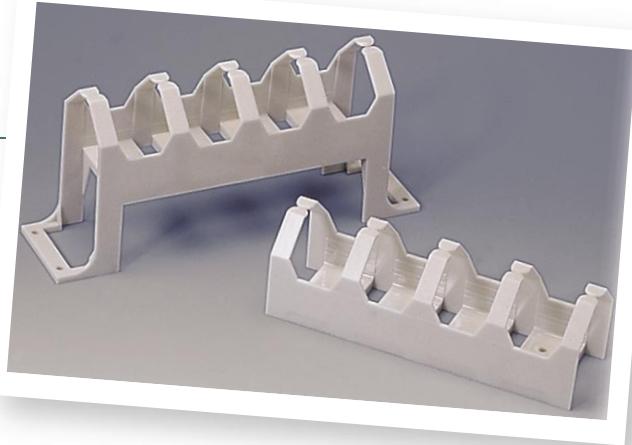
188B2: 4.82 in (11.45 cm)



Product Number	Detailed Description	Material ID
188B1	Without Legs	102689569
188B2	With Legs	104405113

110 Jumper Troughs

The 110 Jumper Trough is a white, flame retardant, molded, plastic frame that accommodates patch cords or cross-connect wire. It is placed between each 100-pair wiring block and at the top of each column, where it serves as a horizontal trough for routing patch cords and cross-connect wire. The trough is available with legs (110A3 Trough) for use with the 110A Wiring Block or without legs (110B3 Trough) for use with the 110D Wiring Block or Patch Panel Terminal Block. The 110A2 Distribution Ring is used to route cross-connect wire or patch cords alongside the wiring blocks.



Physical Specifications:

Height: 2.64 in (6.7 cm)

Width: 110A3: 10.72 in (27.30 cm)

110B3: 8.44 in (21.60 cm)

110A2: 0.58 in (1.5 cm)

Depth: 110A3: 5.25 in (11.91 cm)

110B3: 3.50 in (6.83 cm)

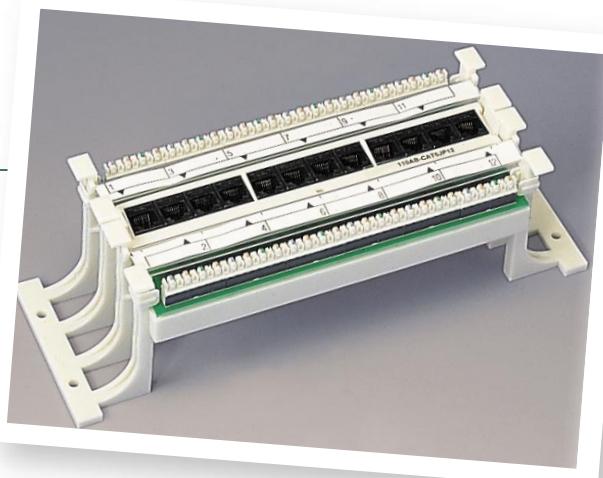
110A2: 3.25 in (8.26 cm)

Product Number	Detailed Description	Material ID
110A3	With Legs	107831133
110B3	Without Legs	107831141
110A2	Distribution Ring	107214405

110 Jack Panel System

The 110 Jack Panel System consists of 8-pin modular jacks, mounted in a metallic holder and wired to a standard 110-Type Wiring Block.

The 110AB-CAT5 and 110PB-CAT5 Modular Jack Panels with T-568A and T-568B wiring are connecting hardware apparatus products used for the termination and inter-connection of voice and/or data circuits in premises wiring systems. These jack panels consist of a 110 insulation displacement connector (IDC) field and an 8-pin modular jack through the printed wiring board (PWB). This product is TIA/EIA Category 5 compliant.



Additional
Copper
Connectivity

Product Number	Detailed Description	Wiring	Material ID
110AB-CAT5PS-JP12B	12 Modular Jacks on a 100-Pair Wiring Block (With Mounting Legs)	T568B	107920704
110AB-CAT5PS-JP12A	12 Modular Jacks on a 100-Pair Wiring Block	T568A	107920753
110BB-CAT5PS-JP12FTB	12 Modular Jacks on a 110DW2 100-Pair Wiring Block (Without Mounting Legs)	T568B	107920738
110AB-CAT5PS-JP36B	36 Modular Jacks on a 300-Pair Wiring Block (With Mounting Legs)	T568B	107920712
110AB-CAT5PS-JP36A	36 Modular Jacks on a 300-Pair Wiring Block	T568A	107920761
110PB-CAT5PS-JP108B	108 Modular Jacks on a 900-Pair Patch Panel Terminal Block	T568B	107920746

110 Patch Cords and Adapter Cords

The 110 cord family provides for the administration and interconnection of data and voice circuits. All cords are manufactured with 1074 cordage. The round cordage consists of 24 AWG tinned copper, stranded conductors insulated with high density polyethylene. The insulated conductors are tightly twisted into individual pairs and jacketed with flame retardant PVC.

Patch cords are orderable using a 14-character feature configuration coding scheme which replaces the familiar 9-character Material ID. This allows maximum flexibility for ordering many different combinations of plug ends, cordage types, colors and lengths. Please use SYSTIMAX Copper Patch Cord Product Identifier (in Copper Reference Section) for ordering information or contact your SYSTIMAX BusinessPartner.



Physical Specifications:

Plastic Material: Polycarbonate Blend

Flammability Rating: UL-rated 94 V-O

Contact Material: Phosphor Bronze

Contact Plating: Gold 2 to 5 micro-inch (0.051 to 0.128 microns)
Nickel 75 micro-inch (1.91 microns)

Plug Insertion Life: 200 minimum

Operating Temperature: 14°F to 140°F (-10°C to 60°C)

Electrical Specifications:

UL and cUL: CM (cordage)

Detailed Description	Pair Count	CPC Code
110GS to 110GS	4	CPC8842
110GS to 110GS	2	CPC8852
110GS to 110GS	1	CPC8862
110GS to D8PS	2	CPC8652
A Wired 110GS to D8PS PowerSUM	4	CPC8641
B Wired 110GS to D8PS PowerSUM	4	CPC8642
A Wired 110GS to GS8E GigaSPEED (Cat 6)	4	CPC8341
B Wired 110GS to GS8E GigaSPEED (Cat 6)	4	CPC8342

110 Tools

The 788H1 Impact Tool is used for insertion only, or to insert and trim up to five wires at a time on the wiring block and to seat the 110C Connecting Block. The handle is fitted with a rubber grip for better gripping and comfort. The 788M2 aluminum frame replacement head for the tool can be ordered separately.

The 788E (Electrical) Tool is a multi-impact, electrically operated, hand held tool. Like the 788H1, it terminates 5 wires at a time with the same combination of seat only or seat and cut wires with a minimum change of the head as well as seating the 3-, 4-, and 5-pair connecting blocks. The trigger-activated electric solenoid action eliminates the physical exertion required with other push-down impact tools while ensuring proper termination with uniform punch force. The flexible head rotates in 90 degree increments and can easily be replaced. A safety slide lock on the trigger prevents accidental operation. The tool requires a standard 120v current and features a locking retainer to keep the extension cord from being detached from the tool cord.

The 788P Pressing Head Assembly is a plastic stuffer required with the 788E Electric Tool and can be used with the 788H1 Tool Kit.

The 788 Kit and 788P Pressing Head Assembly provide a direct replacement for the 788M1 tool.

The 788 Kit is a kit of 2 blades and is a direct replacement for the 788 Tool Kit (106 981 848).

The 788K1 Wire Retention Tool is used as an aid in holding down cable conductors when removing 110-Type Connecting Block.

The Spudger is a small pencil-shaped plastic tool with a sharp, pointed L-shaped metal pick that is used to lift and remove small pieces of conductor insulation caught in the 110-Type Wiring Block or between the plastic teeth of the 110-type Connecting Block.



Additional
Copper
Connectivity

Product Number	Detailed Description	Material ID
788H1	Impact Tool	108062043
788M2	Replacement Head	107975864
788E	Impact Tool	407732577
788 Kit	Replacement Blades	407732585
788P	Pressing Head Assembly	407742741
788K1	Wire Retention Tool	102655495
KS-22035-L2	Spudger	405423260

384A Video Adapter

The 384A Video Adapter is a broadband Community Access Television (CATV) video device that performs common mode filtering, balancing and impedance matching to provide connectivity to SYSTIMAX SCS. It permits connectivity between broadband CATV video distribution equipment.

The 384A is equipped with an F-type male connector plug on one end, and a 12 ft (3.7 m) section of 2-pair cordage with an RJ45 on the other. The RJ45 should be connected to the work area information outlet, or the modular RJ45 jack panel in the telecommunications closet or equipment room. The F-type plug is used to connect to the broadband video distribution equipment.

Physical Specifications:

Length: Housing: 2.3 in (5.8 cm)
Cable: 12 ft (3.7 m)



Electrical Specifications:

Bandwidth: 55 MHz - 550 MHz
Input Impedance (Source): 75 Ohms Unbalanced
Output Impedance (Twisted Pair): 100 Ohms Balanced
Common Mode Rejection: >40 dB
Signal To Noise Ratio: >60 dB

Product Number	Detailed Description	Material ID
384A	Broadband Video Adapter	107213605

385DP CATV Distribution Panel

The 385DP Broadband CATV Distribution Panel allows analog broadband video distribution over enhanced PowerSUM and GigaSPEED Solution.



The 19 inch wide rack mountable 385DP Broadband CATV Distribution Panel is a passive self-terminating 1 by 16 coax-to-UTP CATV distribution solution that provides connectivity over LAN cables.

The 385DP is equipped with an F-type coaxial input connector (female) and 16 8-pin output modular jacks (female). A single 385DP distributes CATV signals for up to 16 locations.

The 385DP is typically installed in a telecommunications closet or equipment room and transmits CATV signals in the horizontal subsystem to 384A adapters located in the work location.

Electrical Specifications:

Operation Distances: 60 meters - 77 channels for a minimum received signal level of 0 dBmV
100 meters - 28 channels for a minimum received signal level of 0 dBmV
100 meters - 50 channels for a minimum received signal level of -10 dBmV
Bandwidth: 5 MHz - 550 MHz
Emission: Tested to FCC Part 76 and CISPR PUB 22 Class B
Safety: UL, CSA and IEC 950

Product Number	Detailed Description	Material ID
385DP	Broadband CATV Distribution Panel	108120460

M81 Series Coaxial Adapter

The M81BNC-B is an M-Series Modular BNC Coupler (50 Ohm) Module, designed for data applications. It can be mounted in any of the M-Series modular faceplates, surface mount boxes or mounting collars.

The M81C is an M-Series F-81 Coaxial Coupler (75 Ohms) Module, designed for video applications. It can be mounted in any of the M-Series modular faceplates, surface mount boxes or mounting collars.

The M81 is an M-Series modular blank with rear snap-in and used to fill empty ports in M-Series modular faceplates, surface mount boxes or mounting collars.



Physical Specifications:

M81BNC-B:

Height: 0.69 in (17 mm)
Width: 0.73 in (18 mm)
Depth: 0.60 in (15 mm)

M81C:

Height: 0.69 in (17 mm)
Width: 0.73 in (18 mm)
Depth: 0.50 in (13 mm)

Product Number	Detailed Description	Material ID
M81BNC-B COUPLER	BNC Coupler	108009424
M81C-COUPлер	F-81 Coaxial Coupler	108009432
M81-246 BLANK	Blank, Ivory	106837222
M81-262 BLANK	Blank, White	106837230

Additional
Copper
Connectivity

Audio/Video Adapter

The S-Video Outlet uses a 110 IDC (Insulation Displacement Contact) block to directly terminate to 4-pair building wiring. Each S-Video module connects to one UTP 4-pair cable. The S-Video Modular Outlets are compatible with M-Series modular faceplates, surface mount boxes, modular furniture faceplates and modular patch panels.

The S-Video or Super VHS (SVHS) Modular Outlets provide base band video connectivity to 24 AWG UTP SYSTIMAX wiring. Each S-Video outlet will connect to two pairs of the UTP cables. These outlets provide point-to-point transmission of analog baseband National Television System Committee (NTSC)/Phase-Alteration Line (PAL)/SECAM S-Video signals.

The RCA Outlets use a 110 IDC block to directly terminate the 4-pair building wiring. RCA outlets are used for connecting audio and video appliances to 24 AWG UTP SYSTIMAX wiring. Each RCA Outlet will connect to one pair of a UTP cable. The RCA modular adapters are compatible with M-Series modular faceplates, surface mount boxes, modular furniture faceplates and modular patch panels. They are offered with Red, White, Black or Yellow inserts. The RCA Outlet Modules housings are offered in white, ivory, gray or black.

Electrical Specifications:

Attenuation DC 5.5. MHz: 1.5 dB max

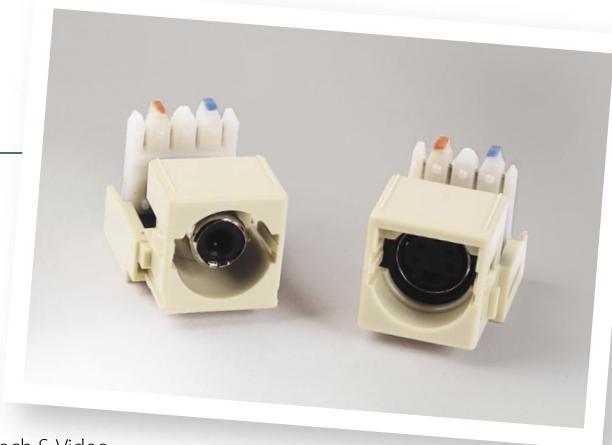
Cross Talk: -60 dB at 5.5 MHz

Impedance S-Video and RCA Female Connector: 75 Ohms

UTP 110 Terminal Block: 110 Ohms

Typical Frequency Bandwidth: 4.2 MHz

Luminance Signal: (Y): 1 Vp-p (with 75 Ohms termination)



Chrominance Signal: (C): 0.29 Vp-p (with 75 Ohms termination)

Wire Type Standard UTP: Category 5, 5e or 6 #24 AWG 4-pair

Insulation Resistance: Minimum of 50 megaohms

Meet IEC Specifications: 933-5

Signal Strength: 1 Vp-p (with 75 Ohms termination)

Product Number	RCA Color	Outlet Color	Material ID
M81-SVHS-110-003	-	Black	760005256
M81-SVHS-110-246	-	Ivory	760005264
M81-SVHS-110-262	-	White	760005272
M81-SVHS-110-270	-	Gray	760005280
M81-RCA-110-003-W	White	Black	760005298
M81-RCA-110-246-W	White	Ivory	760005306
M81-RCA-110-262-W	White	White	760005314
M81-RCA-110-270-W	White	Gray	760005322
M81-RCA-110-003-Y	Yellow	Black	760005330
M81-RCA-110-246-Y	Yellow	Ivory	760005348
M81-RCA-110-262-Y	Yellow	White	760005355
M81-RCA-110-270-Y	Yellow	Gray	760005363
M81-RCA-110-003-R	Red	Black	760005371
M81-RCA-110-246-R	Red	Ivory	760005389
M81-RCA-110-262-R	Red	White	760005397
M81-RCA-110-270-R	Red	Gray	760005405
M81-RCA-110-003-B	Black	Black	760005413
M81-RCA-110-246-B	Black	Ivory	760005421
M81-RCA-110-262-B	Black	White	760005439
M81-RCA-110-270-B	Black	Gray	760005447
M81-RCA-PT	-	White	760005454
M81-RCA-PT	-	Yellow	760005462
M81-RCA-PT	-	Red	760005470
M81-RCA-PT	-	Black	760005488

Category 6 and 5e, OSP Protector Units

SYSTIMAX Category 6 Protector is designed to give protection for data circuits entering a building. This solid state device protects sensitive network equipment from damage caused by transient voltage surges by diverting them to the ground in 2-5 nanoseconds.

Protection is provided for 4-pair LAN applications with 16V clamping voltage or 4-pair analog voice applications with a 235V clamping voltage. Grounding requires a field installed solid copper wire, 10 AWG for Primary and 14 AWG for Isolated Loop. Used with high performance 4-pair Category 6 Outside Plant Cables as well as Category 6 UTP cables to create a 100% solid-state protection for fast and reliable response to surge events. It meets the electrical specifications of TIA/EIA 568B.2-1 for Category 6 channel performance.



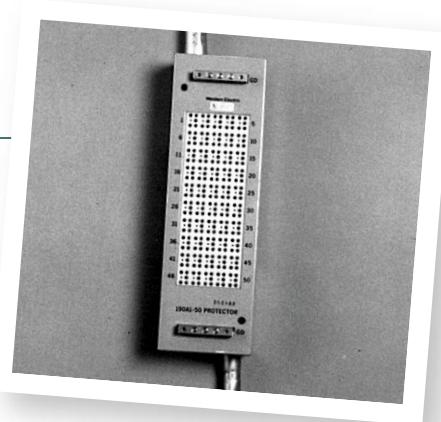
Product Number	Clamping Voltage	Applications	Material ID
Cat 6 235V	235 Volt	Analog Voice	760031708
Cat 6 16V	16 Volt	Data	760028373
Cat 6 16V w/POE	16 Volt	POE	760033951
Cat 5e 16V	16 Volt	Data	108224874

Additional
Copper
Connectivity

Multipair Protector Panel 190 Type

The 190 Type Multipair Protector Panel provides indoor station protection for exposed lines, where the cross-connect field is separated from the protector panels, at building entrance terminals. The protector panel consists of a metal housing containing mountings for 3B-, 3C-, 4B-, or 4C-Series Protector Units (sold separately). It also includes a 25 ft (7.62 m), 26 AWG stub cable that serves as a fusible link, a 24 AWG terminating cable and two connectors for external ground connections.

The internal wiring design prevents protector bypass. A cable pass-through feature allows for side-by-side and top-to-bottom installation.



Physical Specifications:

Height: 50-pair: 13 in (33.0 cm)

100-pair: 24 in (61.0 cm)

Width: 4 in (10.2 cm)

Depth: 2.75 in (6.99 cm)

Product Number	Pair Count	Material ID
190A1-50	50	102995073
190A1-100	100	102995099

Station Protector (110ANA Type) with 110 IDC for Both Input and Output

The 110ANA1 Multipair Protector Panel provides indoor station protection for small pair count applications using the 3B-, 3C-, 4B-, or 4C-Series Protector Units. The unique internal wiring design prevents protector bypass. Designed with 110-Type connecting blocks for input and output terminations, the 110ANA1 Multipair Protector Panel provides a modular, space efficient package with quiet front and simplified installation directly on the wall.

The individual protector modules should be ordered separately.

The 110ANA1 multipair protector panel is UL listed.



Product Number	Detailed Description	Pair Count	Dimensions	Material ID
110ANA1-06	Station Protector, with 110 terminations, 6 5-pin protectors not included	6	4.1in (10.4 cm) W x 3.5 in (8.9 cm) H x 2.6in (6.6 cm) D	105736482
110ANA1-10	Station Protector, with 110 terminations, 10 5-pin protectors not included	10	3.9 in (9.9 cm) W x 4.5 in (11.4 cm) H x 2.6 in (6.6 cm) D	107408551
110ANA1-25	Station Protector, with 110 terminations, 25 5-pin protectors not included	25	3.9 in (9.9 cm) W x 10 in (25.4 cm) H x 2.6 in (6.6 cm) D	105736490

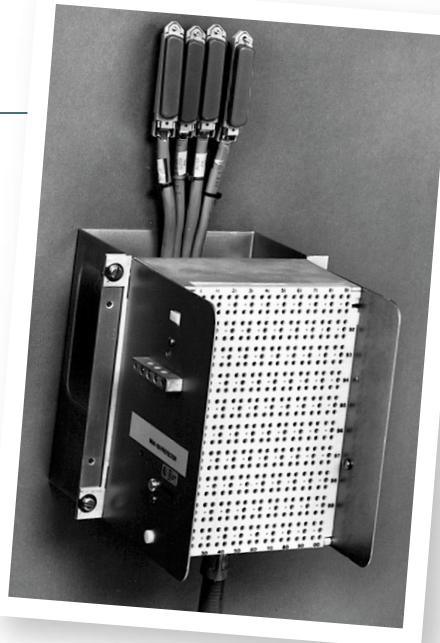
Building Entrance Terminal (195 Type)

The unit is equipped with a metal housing containing a 100-pair protector panel that accepts a wide range of interchangeable plug-in protector units. The input is either a 100 ft (30.48 m), a 25 ft (7.62 m) or 50 ft (15.24 m) long 26-gauge stub cable that serves as a fusible link. The output is a 1 ft (0.30 m) 24-gauge cable with either male or female RJ21 type connectors. The internal wiring design separates the input wires from the output wires, so in the event of a power cross and the input wire fuses open, they will not be connected to the output wires causing a bypass.

The 195A type has a wall mount bracket that acts as both a mounting bracket and a cable guide. The 195B type is a frame mounting version.

Features and Benefits:

- Very high density design saves space
- The protector panel terminals are gold plated for superior electrical connections
- Accepts a wide range of interchangeable plug-in protector units
- Two built-in 3 wire ground connectors facilitate termination of a No. 6 ground wire and strapping adjacent units together provides common positive grounding
- The units are available both male and female output RJ21 connectors
- The input stub cables are 25 ft (7.62 m) or 50 ft (15.24 m) long



Product Number	Pair Count	Input	Output	Material ID
195A1-100-25	100	25 ft Stub Cable	1 ft Cable with Female RJ21 Connector	105404776
195A1-100-025M	100	25 ft Stub Cable	1 ft Cable with Male RJ21 Connector	105564025
195A1-100-050	100	50 ft Stub Cable	1 ft Cable with Female RJ21 Connector	105564033
195A1-100-050M	100	50 ft Stub Cable	1 ft Cable with Male RJ21 Connector	105564041
195B1-100-25	100	25 ft Stub Cable	1 ft Cable with Female RJ21 Connector	105501050
195B1-100-025M	100	25 ft Stub Cable	1 ft Cable with Male RJ21 Connector	105564058
195B1-100-050	100	50 ft Stub Cable	1 ft Cable with Female RJ21 Connector	105564066
195B1-100-050M	100	50 ft Stub Cable	1 ft Cable with Male RJ21 Connector	105564074
195B1-100-100	100	100 ft Stub Cable	1 ft Cable with Female RJ21 Connector	105564082
195B1-100-100M	100	100 ft Stub Cable	1 ft Cable with Male RJ21 Connector	105564090

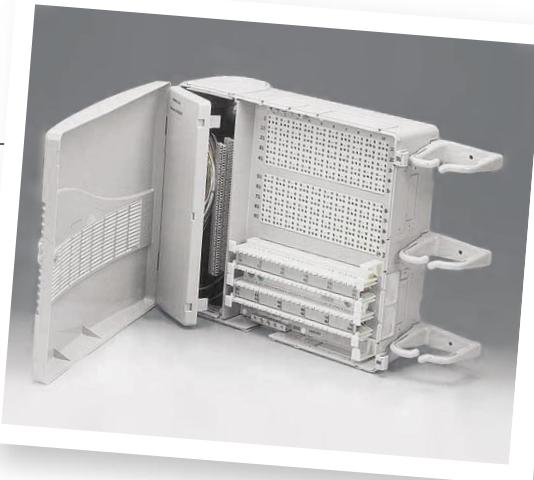
Additional
Copper
Connectivity

Building Entrance Terminal (489A Type)

Reliable electrical protection is essential for securing sensitive equipment at the building entrance terminal. The lightweight and high density 489A protector provides this protection. Designed for use wherever exposed outside plant (OSP) cables enter the building, the unit provides electrical protection between the cable and sensitive devices.

Features and Benefits:

- The 489 units are lightweight (30 percent lighter than comparable models) with an attractive appearance
- High density design saves wall space (all units, even 200-pair, are only 12 in high by 14 in wide)
- Reliable 110-type IDC output connector for fast, easy connections
- The protector panel terminals are gold plated for superior electrical connections
- Accepts a wide range of interchangeable plug-in protector units
- Hinged, lockable covers provide additional mechanical protection and security
- An optional security kit (108314360) allows a padlock to be mounted on the cover
- A generous splice chamber with removable grommets allows easy OSP cable entry and splicing
- The splice chamber walls are insulated for better fuse coordination
- A velcro strap is used for wire management
- The 489 units are stacked to minimize wall space and simplify installation
- Two built-in 3-wire ground connectors facilitate termination of a number 6 ground wire, and strapping adjacent units together provides common positive grounding
- Additional side exits and common wire guides facilitate dressing and tracing of customer wire
- The units are available in 25, 50 and 100
- Dimensions are 12 in (30.5 cm) high by 14 in (35.5 cm) wide by 5.5 (14 cm) in thick except for 200-pair units which are 12 in (30.5 cm) high by 14 in (35.5 cm) wide by 8.5 in (21.5 cm) thick



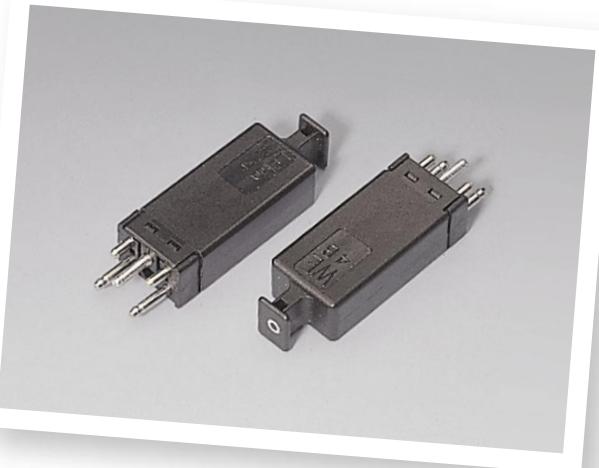
Additional
Copper
Connectivity

Product Number	Pair Count	Input	Material ID
489ACA1-025	25	110 IDC	107894909
489ACA1-050	50	110 IDC	107894917
489ACA1-100	100	110 IDC	107894925
489ACC1-025	25	25 ft Stub Cable	107894941
489ACC1-050	50	25 ft Stub Cable	107894958
489ACC1-100	100	25 ft Stub Cable	107894966

Building Entrance Protectors

Building Entrance Protectors protects sensitive equipment and personnel from power surges, AC coupling, AC power cross and lightning strikes. Power surge can travel through buried or exposed OSP cable back to equipment within the premise. Plug in protectors (PIPs) in building entrance protectors (BEPs) act like a circuit breaker.

The 5-pin plug in protection units provide overvoltage protection with either a gas discharge tube or a solid state module.



Gas Discharge Tube

- Handles larger surges
- Possess a higher holding current
- Used when high surge currents are common
- Used in extreme environments
- DSL friendly
- Used in low pair count applications

Solid State Module

- Tight breakdown voltage which provides a higher level of protection
- Longer life threshold (if surges are lower than rating)
- Fast response

Product Number	PIP Type	Breakdown	Over Current @ 25c	Circuit Application	Color	Material ID
3B1EW	GDT	265 – 465 V	N/A	Standard	Black	104410147
4B1EW	GDT w/ HC	265 – 465 V	<210 sec @ 0.54 A >3 hrs @ 0.35 A	Standard	Black	104401865
3C1S	BSS	220 – 300 V	N/A	Standard	Black	105514756
4C1S	BSS w/ HC	220 – 300 V	<210 sec @ 0.54 A >3 hrs @ 0.35 A	Standard	Black	104386545
4C3S-75	BSS w/ HC	60 – 90 V	<210 sec @ 0.54 A >3 hrs @ 0.35 A	Data Circuits	Red	105581086

Note: GDT – gas discharge tube
HC – heat coils
BSS – balanced solid state

Additional
Copper
Connectivity

Additional
Copper
Connectivity

Fiber Solutions

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LazrSPEED® Cables and Cords – 50 micron Laser Optimized Multimode	91
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Fiber Optic Solutions Reference

Fiber Optic Cable

Cable and Fiber Color Identification

Standard Jacket Color (according to fiber type):

Indoor:	50 micron (LazrSPEED)	AQ for Aqua	Outdoor and Indoor/Outdoor:	All fiber types are BK for Black
	62.5 micron (OptiSPEED)	OR for Orange or SL for Slate		
	Singlemode (TeraSPEED)	YL for Yellow		

Standard Color Coding:

1 - Blue	5 - Slate	9 - Yellow
2 - Orange	6 - White	10 - Violet
3 - Green	7 - Red	11 - Rose
4 - Brown	8 - Black	12 - Aqua

For indoor and indoor/outdoor, fibers are identified with standard color code.

For 18 and 24 fiber single unit cables, fibers 13 through 24 repeat the sequence with tracer stripe (i.e. fiber 13 is blue with tracer stripe).

For central tube cables, fiber bundles and fibers are identified with standard color code.

For stranded loose tube cables, buffer tubes and fibers are identified with standard color code.

Cable Sizing and Specification

When sizing and selecting cable the following rules of thumb are useful. Please note, they are only guidelines. Since each site has its own unique characteristics, a detailed data collection and design process is required.

- A growth factor of between 50% and 100% is often applied after sizing current needs
- Factors affecting backbone cable sizing include:
 - Campus layout
 - Campus size (number of buildings)
 - Level of automation (amount of computer connectivity)
 - Amount of point-to-point traffic vs. LAN traffic
 - Level of redundancy
- Cable type selection is based on environment and cost
- Use a mixture of singlemode and multimode fiber optic cables (recommended 30:70 split minimum respectively)

Install both Multimode and Singlemode

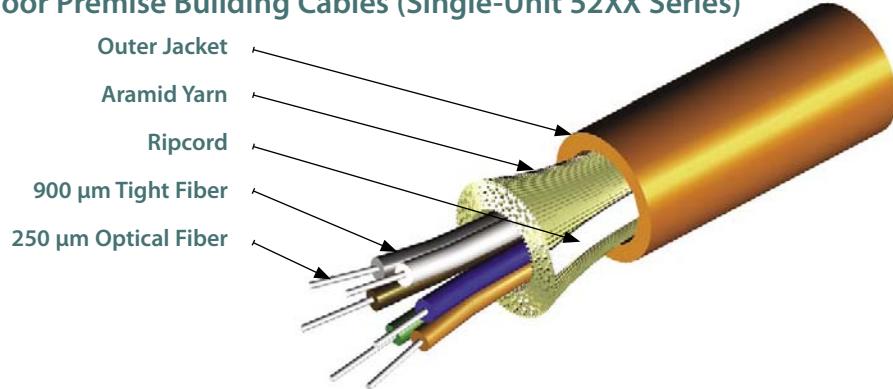
SYSTIMAX SCS recommends deploying multimode and singlemode fiber in the backbone segments of both buildings and campuses in the industrial and office environment. This combination will most cost-effectively support present day applications as well as provide future proofing for tomorrow's higher speed LANs and broadband video. Of course these recommendations must be weighed against the application and planning horizons of each customer. The optimal ratio of singlemode to multimode depends on the predicted need to support applications that exceed the capability of multimode. SYSTIMAX SCS generally recommends 30% singlemode to those customers forecasting gigabit applications in their future. If such applications are in the immediate or near future, then consider higher ratios.

Install Enough Fiber

It is important to install enough fiber to support the present and future applications that will simultaneously share the cable segment. Take into account the type and number of fibers that each application requires and add in spare capacity for future proofing. Generally, LAN applications each require two fibers, while video applications will require one or two fibers depending on whether they are unidirectional or bi-directional. (Video links that use bi-directional communications include those that return video, audio, camera control or data signals.) Add in at least 50% spare capacity and round the fiber-count upward to the next standard size.

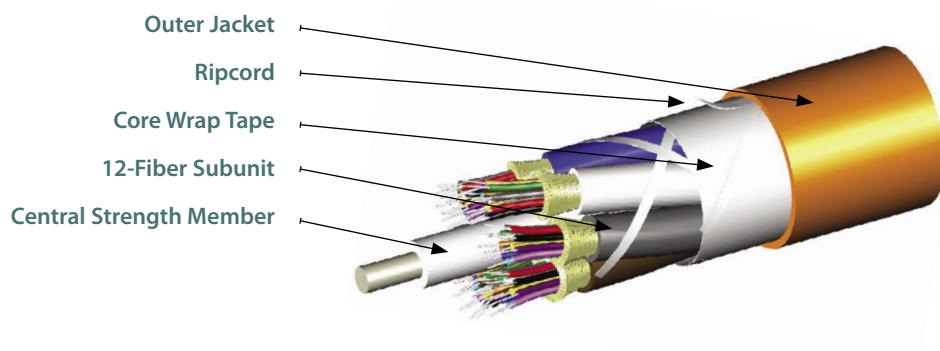
Cable Constructions

Indoor Premise Building Cables (Single-Unit 52XX Series)

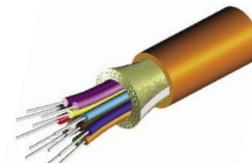


Fiber Reference

Indoor Premise Building Cables (Multi-Unit 53XX Series)



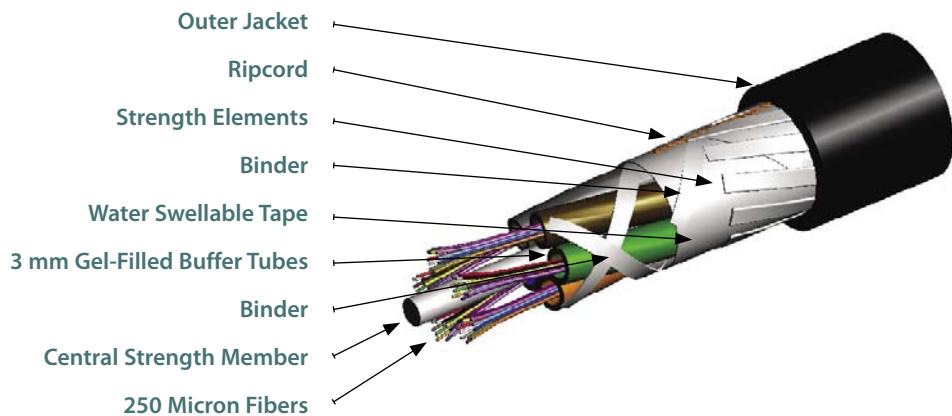
12-Fiber Subunit
Outer Diameter = 6.0 mm (0.24 in)



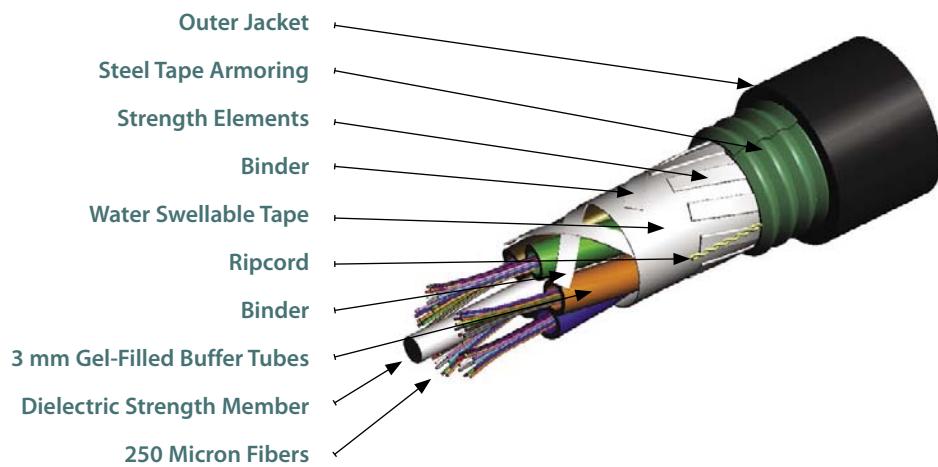
6-Fiber Subunit
Outer Diameter = 5.2 mm (0.20 in)



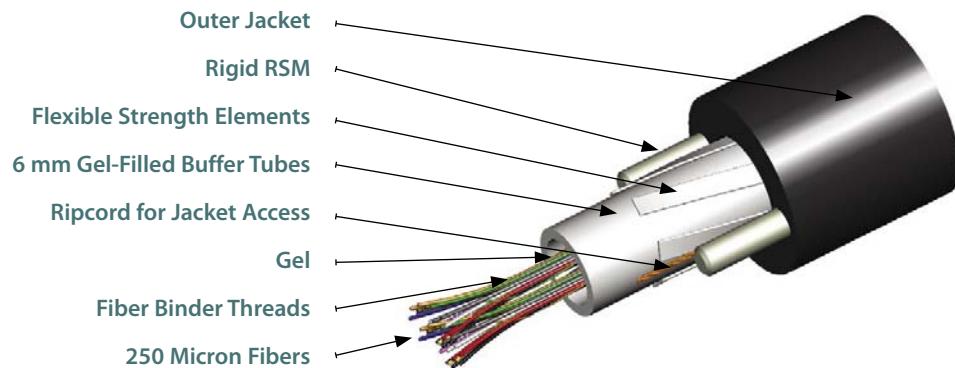
Outdoor Stranded Loose Tube Cables (Dielectric 5024 Series)



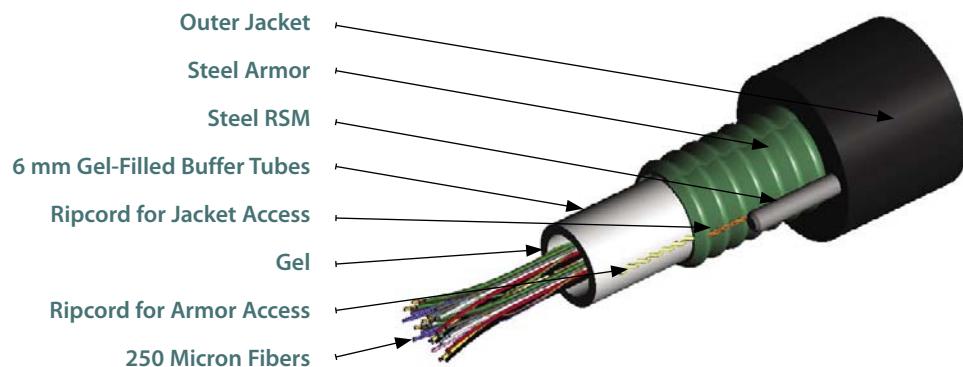
Outdoor Stranded Loose Tube Cables (Metallic 5023 Series)



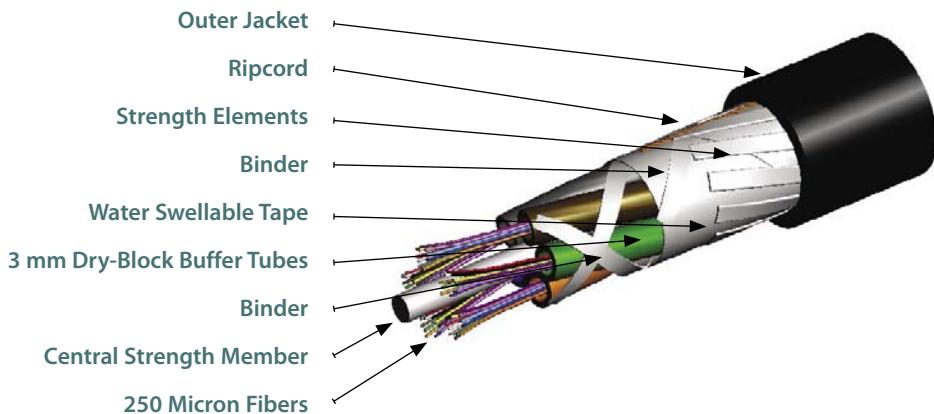
Outdoor Central Tube Cables (Dielectric 5022 Series)



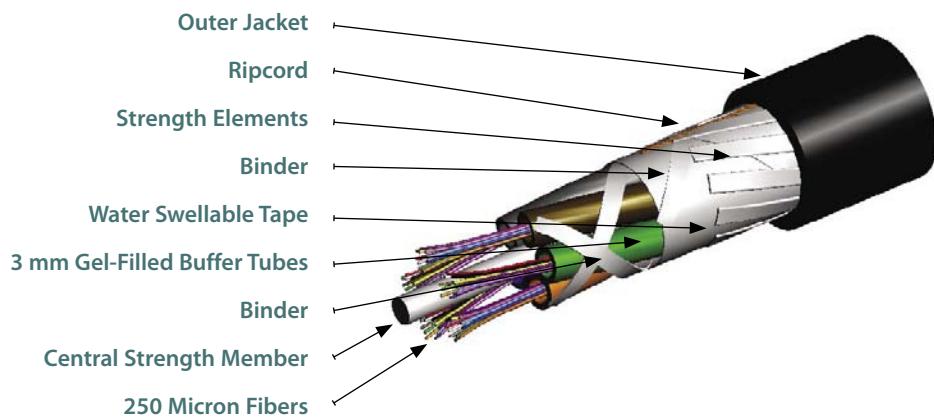
Outdoor Central Tube Cables (Metallic 5021 Series)



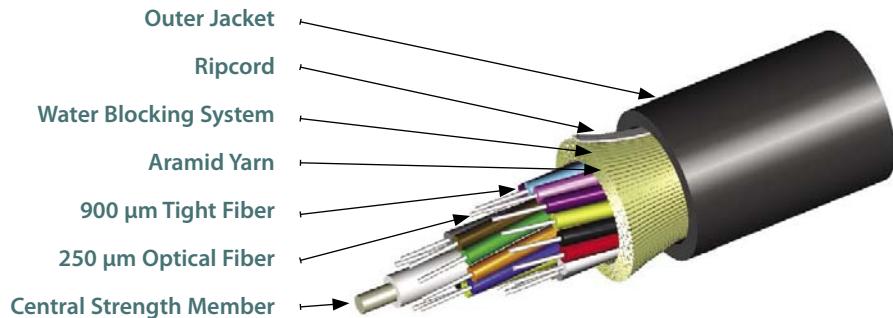
Indoor/Outdoor Stranded Loose Tube Cables (Plenum 5125 Series)



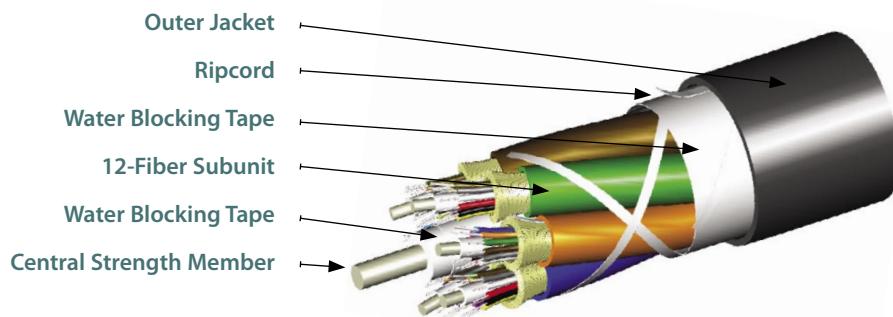
Indoor/Outdoor Stranded Loose Tube Cables (Riser 5124 Series)



Indoor/Outdoor Tight Buffered Cables (Single Unit 5100, 5101, 5102 Series)



Indoor/Outdoor Tight Buffered Cables (Multi-Unit 5103, 5104, 5105 Series)



12-Fiber Subunit
Outer Diameter = 7.2 mm (0.28 in)

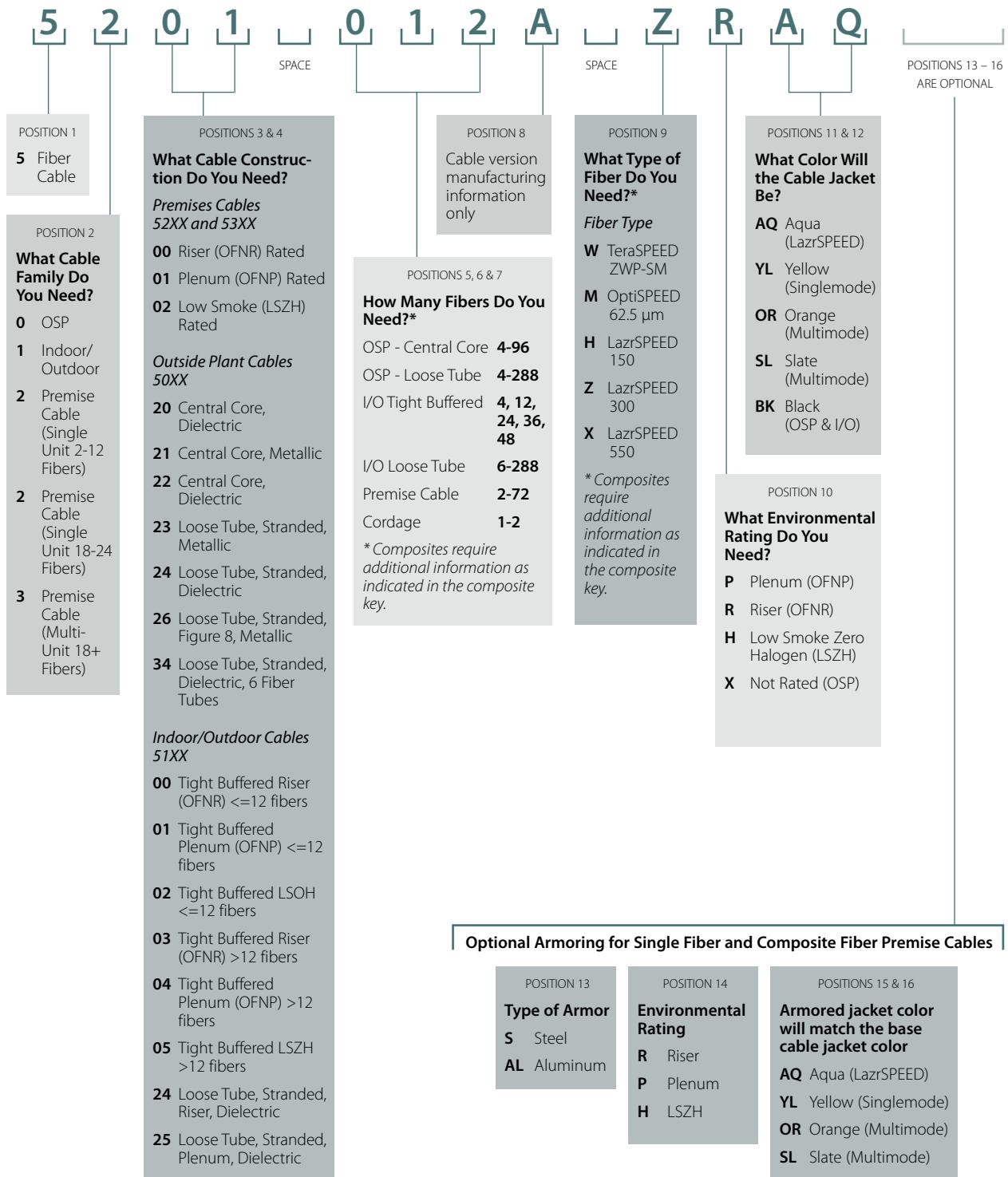


6-Fiber Subunit
Outer Diameter = 5.5 mm (0.22 in)

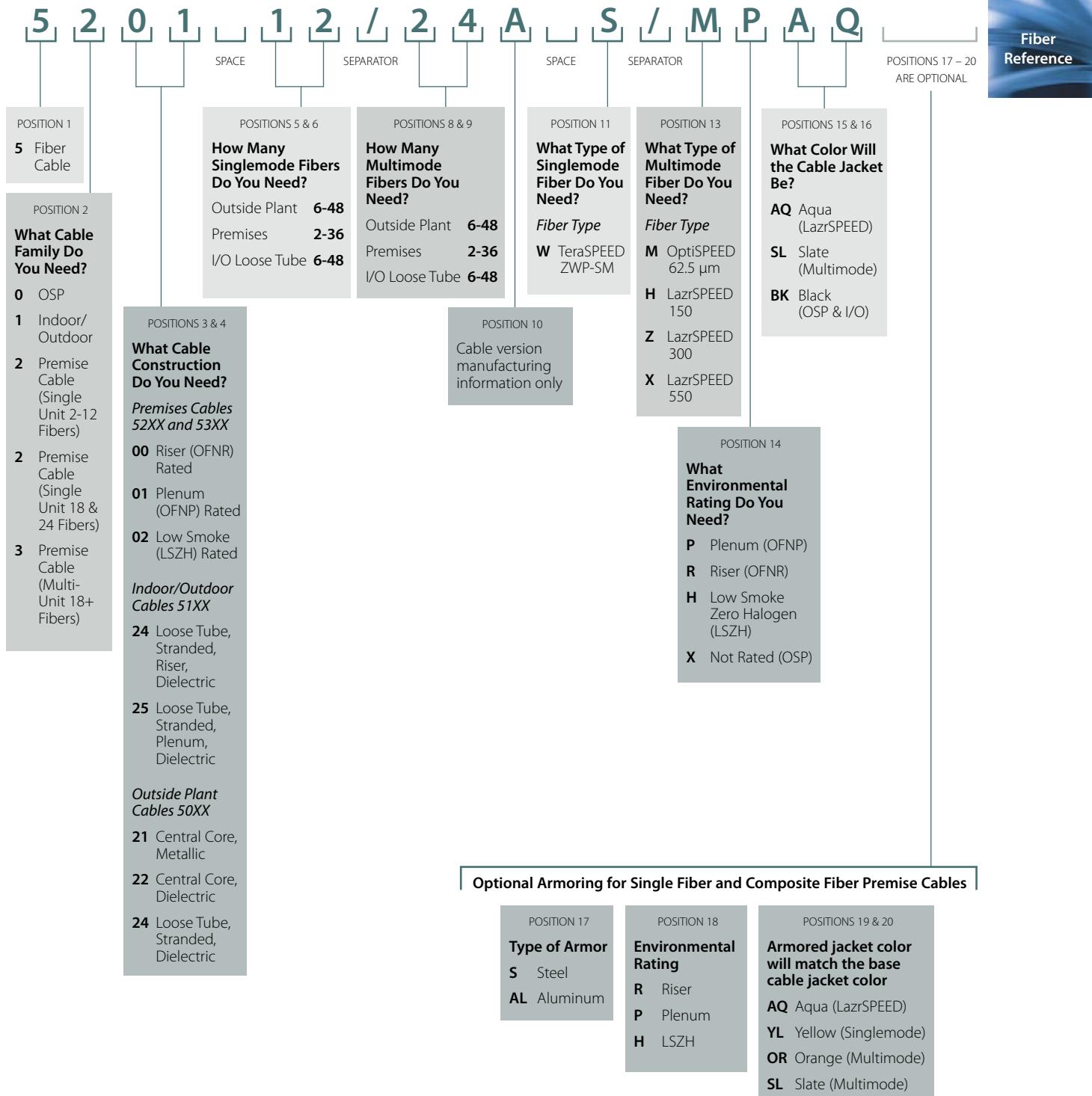


Cable Order Process

Single Unit and Multi-Unit Fiber Optic Cables



Composite Cables



Optional Armoring for Single Fiber and Composite Fiber Premise Cables

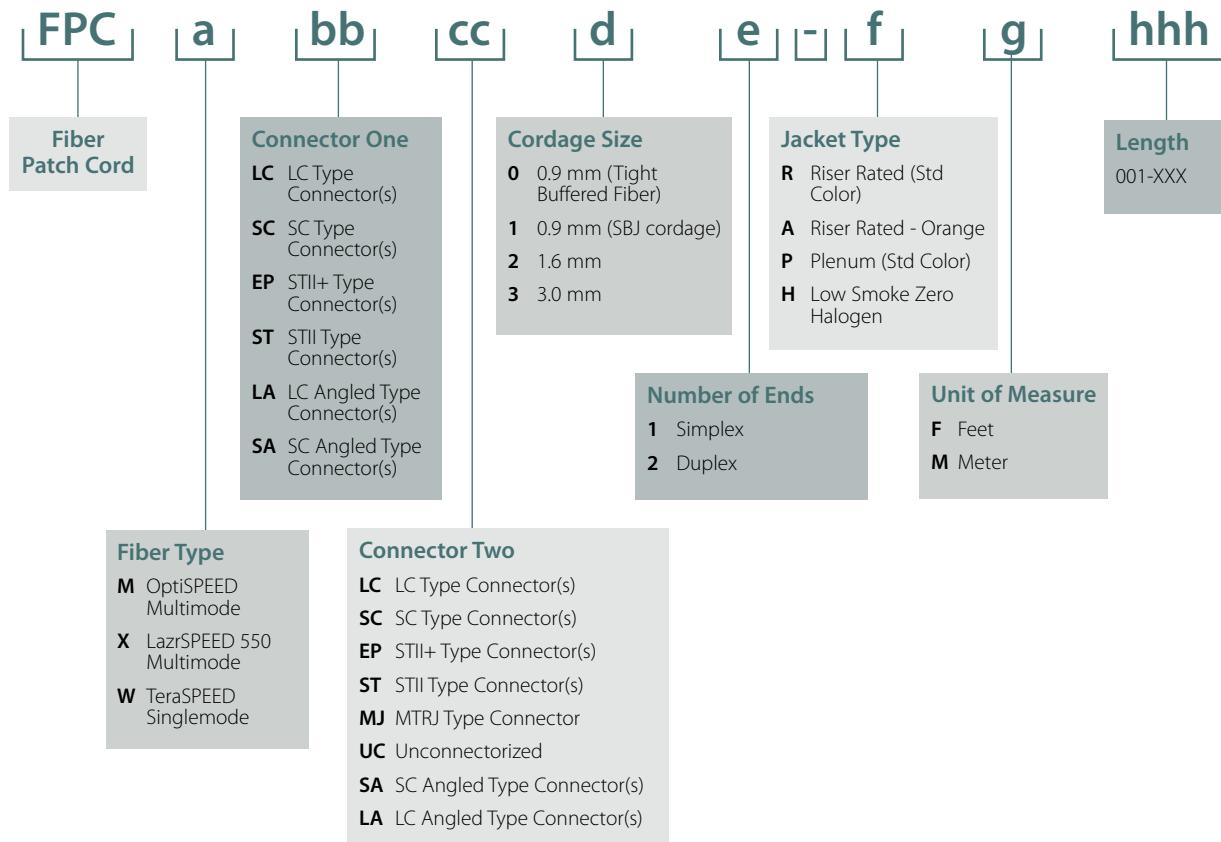
POSITION 17:	Type of Armor	POSITION 18:	POSITIONS 19 & 20:
	S Steel	Environmental Rating	Armored jacket color will match the base cable jacket color
	AL Aluminum	R Riser	AQ Aqua (LazrSPEED)
		P Plenum	YL Yellow (Singlemode)
		H LSZH	OR Orange (Multimode)
			SL Slate (Multimode)

Fiber Patch Cord Product Identifier

Simplex and Duplex Fiber Patch Cords

Cord Order Process

The **Fiber Patch Cord Product Identifier** provides for a flexible ordering system. The various patch cords are orderable with a 16-character feature configuration coding system. It allows for many different combinations of plug ends, cordage types, colors and lengths. However, as this product guide is global, regional portfolios differ. To confirm your region's offering, please contact your account representative or BusinessPartner.

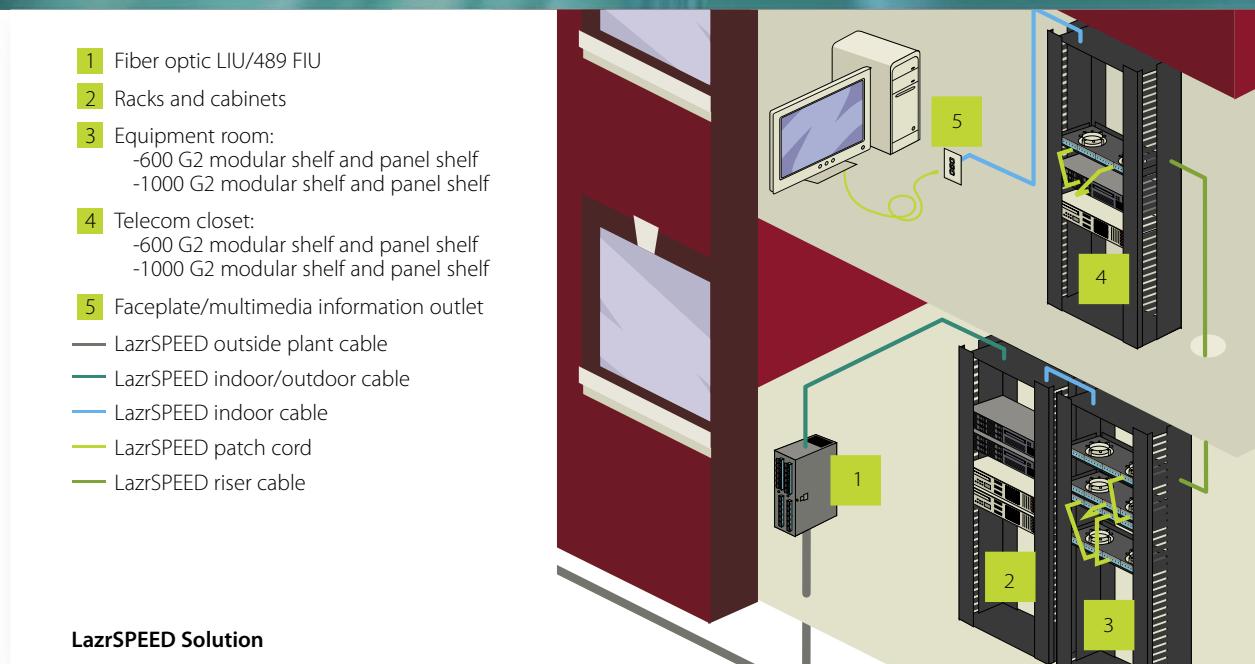


Example:

The FPC Code for LazrSPEED LC to LC Duplex Plenum 7-foot Patch Cord is: FPCXLCLC22-PF007

LazrSPEED® Solution

Laser Optimized Multimode



LazrSPEED fiber is the perfect choice for new installations because it has been designed to support 10 Gbps up to 550 meter distances. This fully supports the vast majority of in-building distance requirements. LazrSPEED Solution is flexible and supports all the current LANs from 10 Mbps to 1 Gbps. Gigabit ethernet is supported up to over 1 kilometer for 1000BASE-SX. A future upgrade to 10 Gbps can be easily accomplished by simply plugging in short wavelength (850 nm) 10 Gbps electronics in to the existing LazrSPEED channels up to 550 meters depending on LazrSPEED fiber type. LazrSPEED Solution also enables dual speed 1 Gbps/10 Gbps ports, which allow less disruptive incremental upgrades of switches and servers. LazrSPEED Solution supports very high speed data transmission by controlling differential mode delay (DMD) that results when light rays travelling along the various pathways (modes) arrive at the detector at different times. DMD can cause an optical signal to be detected as several different signals.

With the lowest multimode optical channel loss available and the breakthrough bandwidth performance, a LazrSPEED LC solution easily meets the gigabit ethernet standard and sets the pace for 10 Gbps support. This channel loss performance (0.17dB average loss for LC connections, 3.0 dB/km loss for cables at 850 nm) and bandwidth performance enables cost-effective 10 Gbps networks as well as increased network reliability for gigabit applications. It is available in three versions:

LazrSPEED 550

- Meets and exceeds the next generation multimode fiber (OM3) specifications in standards
- Over 4,700 MHz-km laser bandwidth at 850 nm
- Designed to support low complexity 10 Gbps serial transmission to 550 meters
- Supports all serial and CWDM options for 10 Gbps ethernet
- Support 1 Gbps ethernet up to 1.1 km
- Laser optimized
- Suitable for LANs from 10 Mbps to 10 Gbps

LazrSPEED 300

- Meets and exceeds the next generation multimode fiber (OM3) specifications in standards
- Over 2,000 MHz-km laser bandwidth at 850 nm
- Designed to support low complexity 10 Gbps serial transmission to 300 meters
- Supports all serial and CWDM options for 10 Gbps ethernet
- Support 1 Gbps ethernet up to 1 km
- Laser optimized
- Suitable for LANs from 10 Mbps to 10 Gbps

LazrSPEED 150

- Meets and exceeds the multimode fiber (OM2) specifications in standards
- Over 950 MHz-km laser bandwidth at 850 nm
- Designed to support low complexity 10 Gbps serial transmission to 150 meters
- Supports all serial and CWDM options for 10 Gbps ethernet
- Supports 1 Gbps ethernet up to 800 meters
- Laser optimized
- Suitable for LANs from 10 Mbps to 10 Gbps

LazrSPEED products include:

- Building Cable
- Indoor/Outdoor Cable
- Outside Plant Cable (where appropriate for the enterprise market)
- LC Connectors (SC or ST II+ Connectors available for limited applications and connections)
- Splice and Termination Shelves
- Multimedia Outlets and Boxes
- Connectorized Patch Cords

LazrSPEED

LazrSPEED® Specifications

LazrSPEED 550/300/150

Laser Optimized 50 Micron Multimode Fiber

Physical Characteristics

Core Diameter	50.0 ± 2.5 µm
Cladding Diameter	125.0 ± 1.0 µm
Core/Clad Offset	≤ 1.5 µm
Coating Diameter (Uncolored)	245 ± 10 µm
Coating Diameter (Colored)	254 ± 7 µm
Coating/Cladding Concentricity Error, max.	6 µm
Clad Non-Circularity	≤ 1%

Mechanical Characteristics

Proof Test	100 kpsi (0.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter (nd)	≥ 18
Macrobending, max. (100 turns @ 75 mm mandrel)	0.50 dB max. @ 850 nm and 1300 nm



Optical Characteristics, Wavelength Specific

	850 nm	1300 nm
Max. Attenuation, Loose Tube Cable	3.0 dB/km	1.0 dB/km
Max. Attenuation, Tight Buffer Cable	3.0 dB/km	1.0 dB/km
Bandwidth, OFL	550: 3,500 MHz-km 300: 1,500 MHz-km 150: 700 MHz-km	500 MHz-km 500 MHz-km 500 MHz-km
Bandwidth, Laser	550: 4,700 MHz-km 300: 2,000 MHz-km 150: 950 MHz-km	500 MHz-km 500 MHz-km 500 MHz-km
Differential Mode Delay	550: Exceeds TIA-492AAC-A (IEC-60793-2-10ed2) 300: Exceeds TIA-492AAC-A (IEC-60793-2-10ed2) 150: 0.70 ps/m	0.88 ps/m 0.88 ps/m 0.88 ps/m
1 Gbps Ethernet Distance	550: 1,100 m 300: 1,000 m 150: 800 m	600 m 600 m 600 m
10 Gbps Ethernet Distance	550: 550 m 300: 300 m 150: 150 m	

Optical Characteristics, General

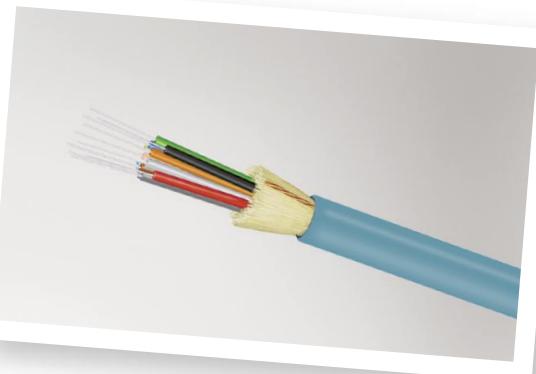
Numerical Aperature	0.200 ± 0.015
Point Defects, Max.	0.15 dB
Zero Dispersion Wavelength	1297-1316 nm
Zero Dispersion Slope	0.105 ps/[km-nm-nm]

Environmental Characteristics

Temperature Dependence -76°F to 185°F (-60°C to 85°C)	≤ 0.10 dB
Temperature Humidity Cycling 14°F to 185°F (-10°C to 85°C) up to 95% RH	≤ 0.10 dB
Water Immersion, 73.4°F (23°C)	≤ 0.20 dB
Heat Aging, 185°F (85°C)	≤ 0.20 dB

LazrSPEED® Multimode Building Cables

The LazrSPEED Building Cables consist of laser-optimized 50/125 µm optical fibers. All LazrSPEED fibers are Differential Mode Delay (DMD) tested. The SYSTIMAX Labs use a high-resolution DMD test bench that exceeds the FOTP-220 standards and is independently certified by UL.



The LazrSPEED building cable is constructed with tight buffer fibers, aramid strength yarn, and is available in PVC, Plenum and Low Smoke Zero Halogen outer jacket. These cables are designed for point-to-point applications as well as mid-span access, and provide a high-level of protection for fiber installed in the building environment.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 57.3 lbf/in (10 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 4.34 lbf-ft (5.8 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 50 micron

Fibers are identified with standard color coding.

LS 550 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 006A XPAQ	6	Single Unit	0.19 in (4.8 mm)	15.1 lbs/kft (22 kg/km)	760012138
5201 012A XPAQ	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	760006411
5201 024A XPAQ	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018697
5301 024A XPAQ	24	Multi-unit	0.52 in (13.1 mm)	108.1 lbs/kft (161 kg/km)	760012146
5301 036A XPAQ	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	760024547
5301 048A XPAQ	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760024554
5301 072A XPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760024562
5301 096A XPAQ	96	Multi-unit	0.90 in (23.0 mm)	360.8 lbs/kft (537 kg/km)	760021691
5301 144A XPAQ	144	Multi-unit	0.95 in (24.1 mm)	330.8 lbs/kft (492 kg/km)	760024869

LS 300 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A ZPAQ	2	Single Unit	0.15 in (3.9 mm)	8.8 lbs/kft (13.1 kg/km)	700009855
5201 004A ZPAQ	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	700009814
5201 006A ZPAQ	6	Single Unit	0.19 in (4.8 mm)	15.1 lbs/kft (22 kg/km)	700009772
5201 008A ZPAQ	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760008508
5201 012A ZPAQ	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	700009731
5201 024A ZPAQ	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018689
5301 024A ZPAQ	24	Multi-unit	0.52 in (13.1 mm)	108.1 lbs/kft (161 kg/km)	700009699
5301 036A ZPAQ	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	700009673
5301 048A ZPAQ	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	700211147
5301 072A ZPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	700211154
5301 096A ZPAQ	96	Multi-unit	0.90 in (23.0 mm)	360.8 lbs/kft (537 kg/km)	760010132
5301 144A ZPAQ	144	Multi-unit	0.95 in (24.1 mm)	330.8 lbs/kft (492 kg/km)	760018879

LS 150 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A HPAQ	2	Single Unit	0.15 in (3.9 mm)	8.8 lbs/kft (13.1 kg/km)	700009871
5201 004A HPAQ	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	700009830
5201 006A HPAQ	6	Single Unit	0.19 in (4.8 mm)	15.1 lbs/kft (22 kg/km)	700009798
5201 006A HPRD	6	Single Unit	0.19 in (4.8 mm)	15.1 lbs/kft (22 kg/km)	760036186
5201 008A HPAQ	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760008698
5201 012A HPAQ	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	700009756
5201 024A HPAQ	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018671
5301 024A HPAQ	24	Multi-unit	0.52 in (13.1 mm)	108.1 lbs/kft (161 kg/km)	700009715
5301 036A HPAQ	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	700205586
5301 048A HPAQ	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	700211105
5301 072A HPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	700211113
5301 096A HPAQ	96	Multi-unit	0.90 in (23.0 mm)	360.8 lbs/kft (537 kg/km)	760019620
5301 144A HPAQ	144	Multi-unit	0.95 in (24.1 mm)	330.8 lbs/kft (492 kg/km)	760024836



LS 550 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A XRAQ	2	Single Unit	0.16 in (4.1 mm)	8.6 lbs/kft (12.9 kg/km)	760028753
5200 006A XRAQ	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	760012104
5200 012A XRAQ	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	760012112
5200 024A XRAQ	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	760018564
5300 024A XRAQ	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	760012120
5300 036A XRAQ	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	760026831
5300 048A XRAQ	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	760026849
5300 072A XRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	760026856
5300 096A XRAQ	96	Multi-unit	0.93 in (23.7 mm)	337.2 lbs/kft (502 kg/km)	760026864
5300 144A XRAQ	144	Multi-unit	1.03 in (26.1 mm)	350.5 lbs/kft (522 kg/km)	760026872

LS 300 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A ZRAQ	2	Single Unit	0.16 in (4.1 mm)	10.6 lbs/kft (15.8 kg/km)	700208127
5200 004A ZRAQ	4	Single Unit	0.19 in (4.8 mm)	15 lbs/kft (22.3 kg/km)	700208135
5200 006A ZRAQ	6	Single Unit	0.20 in (5.1 mm)	16 lbs/kft (23.8 kg/km)	700208143
5200 008A ZRAQ	8	Single Unit	0.22 in (5.5 mm)	17 lbs/kft (26 kg/km)	760008516
5200 012A ZRAQ	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	700208150
5200 024A ZRAQ	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	760018556
5300 024A ZRAQ	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	700208168
5300 036A ZRAQ	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	700208176
5300 048A ZRAQ	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	700208218
5300 072A ZRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	700208226
5300 144A ZRAQ	144	Multi-unit	1.03 in (26.1 mm)	350.5 lbs/kft (522 kg/km)	760018861

LS 150 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A HRAQ	2	Single Unit	0.16 in (4.1 mm)	8.6 lbs/kft (12.9 kg/km)	700203052
5200 004A HRAQ	4	Single Unit	0.19 in (4.8 mm)	13.1 lbs/kft (19 kg/km)	700203060
5200 006A HRAQ	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	700203078
5200 008A HRAQ	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	760008706
5200 012A HRAQ	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	700203086
5200 024A HRAQ	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	760018549
5300 024A HRAQ	24	Multi-unit	0.56 in (141 mm)	106.7 lbs/kft (159 kg/km)	700203094
5300 036A HRAQ	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	700203102
5300 048A HRAQ	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	700203110
5300 072A HRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	700203128
5300 096A HRAQ	96	Multi-unit	0.93 in (23.7 mm)	337.2 lbs/kft (502 kg/km)	760026310
5300 144A HRAQ	144	Multi-unit	1.03 in (26.1 mm)	350.5 lbs/kft (522 kg/km)	760024810

LS 550 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 006A XHAQ	6	Single Unit	0.20 in (5.2 mm)	16.4 lbs/kft (24 kg/km)	760012153
5202 012A XHAQ	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	760012161
5302 024A XHAQ	24	Multi-unit	0.56 in (14.2 mm)	116.6 lbs/kft (174 kg/km)	760012179

LS 300 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 002A ZHAQ	2	Single Unit	0.15 in (3.9 mm)	7.82 lbs/kft (11.6 kg/km)	700009863
5202 004A ZHAQ	4	Single Unit	0.19 in (4.8 mm)	14.3 lbs/kft (21 kg/km)	700009822
5202 006A ZHAQ	6	Single Unit	0.20 in (5.2 mm)	16.4 lbs/kft (24 kg/km)	700009780
5202 008A ZHAQ	8	Single Unit	0.22 in (5.5 mm)	19.1 lbs/kft (28 kg/km)	760026336
5202 012A ZHAQ	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	700009749
5302 024A ZHAQ	24	Multi-unit	0.56 in (14.2 mm)	116.6 lbs/kft (174 kg/km)	700009707
5302 036A ZHAQ	36	Multi-unit	0.59 in (14.9 mm)	118.5 lbs/kft (176 kg/km)	700009681
5302 048A ZHAQ	48	Multi-unit	0.65 in (16.4 mm)	150.3 lbs/kft (224 kg/km)	700211121
5302 072A ZHAQ	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	700211139

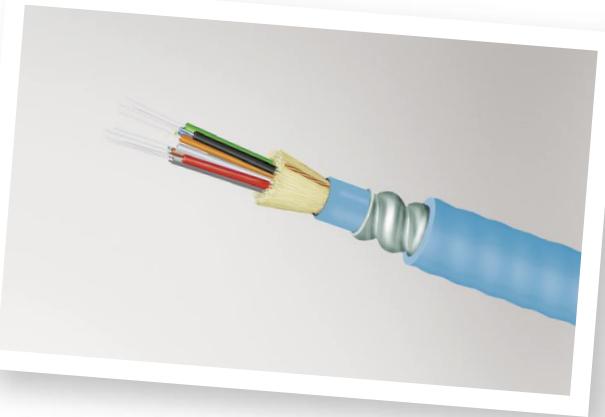
LS 150 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 002A HHAQ	2	Single Unit	0.15 in (3.9 mm)	7.82 lbs/kft (11.6 kg/km)	700009889
5202 004A HHAQ	4	Single Unit	0.19 in (4.8 mm)	14.3 lbs/kft (21 kg/km)	700009848
5202 006A HHAQ	6	Single Unit	0.20 in (5.2 mm)	16.4 lbs/kft (24 kg/km)	700009806
5202 012A HHAQ	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	700009764
5302 024A HHAQ	24	Multi-unit	0.56 in (14.2 mm)	116.6 lbs/kft (174 kg/km)	700009723
5302 036A HHAQ	36	Multi-unit	0.59 in (14.9 mm)	118.5 lbs/kft (176 kg/km)	700229511
5302 048A HHAQ	48	Multi-unit	0.65 in (16.4 mm)	150.3 lbs/kft (224 kg/km)	700211089
5302 072A HHAQ	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	700211097

LazrSPEED® Multimode Armored Cables

SYSTIMAX Interlocking Armored Fiber Optic Cable provides superior protection and space savings. It provides installation protection from bending and excessive pull tension, significant time and labor reductions versus conduit or interduct installations and increased installation and design flexibility.

SYSTIMAX Interlocking Armor can be used anywhere additional protection and security for the fiber cable is desired. Applications include building backbone, zone distribution, raised floor, data centers and storage area networks (SANs). Vertical markets include: industrial, manufacturing, airports, stadiums, military and any other vertical where increased protection and security for the fiber cable is desired. These include: financial, hospitals, educational facilities and many more.



The SYSTIMAX Interlocking Armor is applied spirally around any premise distribution cable, and is available in either steel or aluminum. The armored cable is then over-jacketed with a sheath. This sheath is color-coded to the fiber type contained within, and provides not only the ability to print the armor with all relevant information on the cable inside, but also allows for easier handling and pulling.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 486.8 lbf/in (85 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 25.8 lbf-ft (35 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 50 micron

Fibers are identified with standard color coding.

LS 550 Steel Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 006A XPAQ SPAQ	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	760012138-SPAQ
5201 012A XPAQ SPAQ	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	760006411-SPAQ
5301 024A XPAQ SPAQ	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	760012146-SPAQ
5301 036A XPAQ SPAQ	36	Multi-unit	0.86 in (21.7 mm)	384 lbs/kft (572 kg/km)	760024547-SPAQ
5301 048A XPAQ SPAQ	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	760024554-SPAQ
5301 072A XPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760024562-SPAQ
5301 144A XPAQ SPAQ	144	Multi-unit	1.26 in (31.9 mm)	700 lbs/kft (1,042 kg/km)	760024869-SPAQ

LS 300 Steel Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A ZPAQ SPAQ	2	Single Unit	0.56 in (14.1 mm)	100 lbs/kft (148 kg/km)	700009855-SPAQ
5201 004A ZPAQ SPAQ	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	700009814-SPAQ
5201 006A ZPAQ SPAQ	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	700009772-SPAQ
5201 008A ZPAQ SPAQ	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760008508-SPAQ
5201 012A ZPAQ SPAQ	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	700009731-SPAQ
5201 024A ZPAQ SPAQ	24	Single Unit	0.81 in (20.4 mm)	226 lbs/kft (336 kg/km)	760018689-SPAQ
5301 024A ZPAQ SPAQ	24	Multi-unit	0.81 in (20.4 mm)	226 lbs/kft (336 kg/km)	700009699-SPAQ
5301 036A ZPAQ SPAQ	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	700009673-SPAQ
5301 048A ZPAQ SPAQ	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	700211147-SPAQ
5301 072A ZPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	700211154-SPAQ
5301 096A ZPAQ SPAQ	96	Multi-unit	1.26 in (31.9 mm)	569 lbs/kft (847 kg/km)	760010132-SPAQ
5301 144A ZPAQ SPAQ	144	Multi-unit	1.26 in (31.9 mm)	539 lbs/kft (802 kg/km)	760018879-SPAQ

LS 150 Steel Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A HPAQ SPAQ	2	Single Unit	0.56 in (14.1 mm)	157 lbs/kft (233 kg/km)	700009871-SPAQ
5201 004A HPAQ SPAQ	4	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	700009830-SPAQ
5201 006A HPAQ SPAQ	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	700009798-SPAQ
5201 008A HPAQ SPAQ	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	760008698-SPAQ
5201 012A HPAQ SPAQ	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	700009756-SPAQ
5201 024A HPAQ SPAQ	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	760018671-SPAQ
5301 024A HPAQ SPAQ	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	700009715-SPAQ
5301 036A HPAQ SPAQ	36	Multi-unit	0.86 in (21.7 mm)	384 lbs/kft (572 kg/km)	700205586-SPAQ
5301 048A HPAQ SPAQ	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	700211105-SPAQ
5301 072A HPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	700211113-SPAQ
5301 096A HPAQ SPAQ	96	Multi-unit	1.26 in (31.9 mm)	730 lbs/kft (1,087 kg/km)	760019620-SPAQ
5301 144A HPAQ SPAQ	144	Multi-unit	1.26 in (31.9 mm)	700 lbs/kft (1,042 kg/km)	760024836-SPAQ

LS 550 Steel Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 006A XRAQ SRAQ	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	760012104-SRAQ
5200 012A XRAQ SRAQ	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	760012112-SRAQ
5300 024A XRAQ SRAQ	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	760012120-SRAQ
5300 036A XRAQ SRAQ	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	760026831-SRAQ
5300 048A XRAQ SRAQ	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	760026849-SRAQ
5300 072A XRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760026856-SRAQ
5300 096A XRAQ SRAQ	96	Multi-unit	1.26 in (31.9 mm)	689 lbs/kft (1,026 kg/km)	760026864-SRAQ
5300 144A XRAQ SRAQ	144	Multi-unit	1.36 in (34.4 mm)	734 lbs/kft (1,093 kg/km)	760026872-SRAQ

LS 300 Steel Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A ZRAQ SRAQ	2	Single Unit	0.56 in (14.1 mm)	149 lbs/kft (222 kg/km)	700208127-SRAQ
5200 004A ZRAQ SRAQ	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	700208135-SRAQ
5200 006A ZRAQ SRAQ	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	700208143-SRAQ
5200 008A ZRAQ SRAQ	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760008516-SRAQ
5200 012A ZRAQ SRAQ	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	700208150-SRAQ
5300 024A ZRAQ SRAQ	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	700208168-SRAQ
5300 036A ZRAQ SRAQ	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	700208176-SRAQ
5300 048A ZRAQ SRAQ	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	700208218-SRAQ
5300 072A ZRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	700208226-SRAQ



LS 150 Steel Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A HRAQ SRAQ	2	Single Unit	0.56 in (14.1 mm)	149 lbs/kft (222 kg/km)	700203052-SRAQ
5200 004A HRAQ SRAQ	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	700203060-SRAQ
5200 006A HRAQ SRAQ	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	700203078-SRAQ
5200 008A HRAQ SRAQ	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760008706-SRAQ
5200 012A HRAQ SRAQ	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	700203086-SRAQ
5200 024A HRAQ SRAQ	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760018549-SRAQ
5300 024A HRAQ SRAQ	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	700203094-SRAQ
5300 036A HRAQ SRAQ	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	700203102-SRAQ
5300 048A HRAQ SRAQ	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	700203110-SRAQ
5300 072A HRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	700203128-SRAQ
5300 096A HRAQ SRAQ	96	Multi-unit	1.26 in (31.9 mm)	689 lbs/kft (1,026 kg/km)	760026310-SRAQ
5300 144A HRAQ SRAQ	144	Multi-unit	1.36 in (34.4 mm)	734 lbs/kft (1,093 kg/km)	760024810-SRAQ

LS 550 Steel Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 006A XHAQ SHAQ	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760012153-SHAQ
5202 012A XHAQ SHAQ	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	760012161-SHAQ
5202 024A XHAQ SHAQ	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019117-SHAQ
5302 024A XHAQ SHAQ	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	760012179-SHAQ

LS 300 Steel Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 002A ZHAQ SHAQ	2	Single Unit	0.56 in (14.1 mm)	151 lbs/kft (225 kg/km)	700009863-SHAQ
5202 004A ZHAQ SHAQ	4	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	700009822-SHAQ
5202 006A ZHAQ SHAQ	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	700009780-SHAQ
5202 012A ZHAQ SHAQ	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	700009749-SHAQ
5302 024A ZHAQ SHAQ	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	700009707-SHAQ
5302 036A ZHAQ SHAQ	36	Multi-unit	0.91 in (23.0 mm)	385 lbs/kft (573 kg/km)	700009681-SHAQ
5302 048A ZHAQ SHAQ	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	700211121-SHAQ
5302 072A ZHAQ SHAQ	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	700211139-SHAQ

LS 150 Steel Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 002A HHAQ SHAQ	2	Single Unit	0.56 in (14.1 mm)	151 lbs/kft (225 kg/km)	700009889-SHAQ
5202 004A HHAQ SHAQ	4	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	700009848-SHAQ
5202 006A HHAQ SHAQ	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	700009806-SHAQ
5202 012A HHAQ SHAQ	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	700009764-SHAQ
5202 024A HHAQ SHAQ	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019091-SHAQ
5302 024A HHAQ SHAQ	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	700009723-SHAQ
5302 036A HHAQ SHAQ	36	Multi-unit	0.91 in (23.0 mm)	385 lbs/kft (573 kg/km)	700229511-SHAQ
5302 048A HHAQ SHAQ	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	700211089-SHAQ
5302 072A HHAQ SHAQ	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	700211097-SHAQ

LS 550 Aluminum Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 006A XPAQ APAQ	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	760012138-APAQ
5201 012A XPAQ APAQ	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	760006411-APAQ
5201 024A XPAQ APAQ	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018697-APAQ
5301 024A XPAQ APAQ	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	760012146-APAQ
5301 036A XPAQ APAQ	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	760024547-APAQ
5301 048A XPAQ APAQ	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	760024554-APAQ
5301 072A XPAQ APAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760024562-APAQ
5301 144A XPAQ APAQ	144	Multi-unit	1.26 in (31.9 mm)	539 lbs/kft (802 kg/km)	760024869-APAQ



LS 300 Aluminum Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A ZPAQ APAQ	2	Single Unit	0.56 in (14.1 mm)	100 lbs/kft (148 kg/km)	700009855-APAQ
5201 004A ZPAQ APAQ	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	700009814-APAQ
5201 006A ZPAQ APAQ	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	700009772-APAQ
5201 008A ZPAQ APAQ	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760008508-APAQ
5201 012A ZPAQ APAQ	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	700009731-APAQ
5201 024A ZPAQ APAQ	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018689-APAQ
5301 024A ZPAQ APAQ	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	700009699-APAQ
5301 036A ZPAQ APAQ	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	700009673-APAQ
5301 048A ZPAQ APAQ	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	700211147-APAQ
5301 072A ZPAQ APAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	700211154-APAQ
5301 096A ZPAQ APAQ	96	Multi-unit	1.26 in (31.9 mm)	569 lbs/kft (847 kg/km)	760010132-APAQ
5301 144A ZPAQ APAQ	144	Multi-unit	1.26 in (31.9 mm)	539 lbs/kft (802 kg/km)	760018879-APAQ

LS 150 Aluminum Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A HPAQ APAQ	2	Single Unit	0.56 in (14.1 mm)	100 lbs/kft (148 kg/km)	700009871-APAQ
5201 004A HPAQ APAQ	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	700009830-APAQ
5201 006A HPAQ APAQ	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	700009798-APAQ
5201 008A HPAQ APAQ	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760008698-APAQ
5201 012A HPAQ APAQ	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	700009756-APAQ
5201 024A HPAQ APAQ	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018671-APAQ
5301 024A HPAQ APAQ	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	700009715-APAQ
5301 036A HPAQ APAQ	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	700205586-APAQ
5301 048A HPAQ APAQ	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	700211105-APAQ
5301 072A HPAQ APAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	700211113-APAQ
5301 096A HPAQ APAQ	96	Multi-unit	1.26 in (31.9 mm)	569 lbs/kft (847 kg/km)	760019620-APAQ
5301 144A HPAQ APAQ	144	Multi-unit	1.26 in (31.9 mm)	539 lbs/kft (802 kg/km)	760024836-APAQ

LS 550 Aluminum Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 006A XRAQ ARAQ	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	760012104-ARAQ
5200 012A XRAQ ARAQ	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	760012112-ARAQ
5300 024A XRAQ ARAQ	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	760012120-ARAQ
5300 036A XRAQ ARAQ	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	760026831-ARAQ
5300 048A XRAQ ARAQ	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	760026849-ARAQ
5300 072A XRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760026856-ARAQ
5300 096A XRAQ ARAQ	96	Multi-unit	1.26 in (31.9 mm)	528 lbs/kft (786 kg/km)	760026864-ARAQ
5300 144A XRAQ ARAQ	144	Multi-unit	1.36 in (34.4 mm)	558 lbs/kft (830 kg/km)	760026872-ARAQ

LS 300 Aluminum Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A ZRAQ ARAQ	2	Single Unit	0.56 in (14.1 mm)	92 lbs/kft (137 kg/km)	700208127-ARAQ
5200 004A ZRAQ ARAQ	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	700208135-ARAQ
5200 006A ZRAQ ARAQ	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	700208143-ARAQ
5200 008A ZRAQ ARAQ	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760008516-ARAQ
5200 012A ZRAQ ARAQ	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	700208150-ARAQ
5300 024A ZRAQ ARAQ	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	700208168-ARAQ
5300 036A ZRAQ ARAQ	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	700208176-ARAQ
5300 048A ZRAQ ARAQ	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	700208218-ARAQ
5300 072A ZRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	700208226-ARAQ

LS 150 Aluminum Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A HRAQ ARAQ	2	Single Unit	0.56 in (14.1 mm)	92 lbs/kft (137 kg/km)	700203052-ARAQ
5200 004A HRAQ ARAQ	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	700203060-ARAQ
5200 006A HRAQ ARAQ	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	700203078-ARAQ
5200 008A HRAQ ARAQ	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760008706-ARAQ
5200 012A HRAQ ARAQ	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	700203086-ARAQ
5300 024A HRAQ ARAQ	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	700203094-ARAQ
5300 036A HRAQ ARAQ	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	700203102-ARAQ
5300 048A HRAQ ARAQ	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	700203110-ARAQ
5300 072A HRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	700203128-ARAQ
5300 144A HRAQ ARAQ	144	Multi-unit	1.36 in (34.4 mm)	558 lbs/kft (830 kg/km)	760024810-ARAQ

LS 550 Aluminum Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 006A XHAQ AHAQ	6	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	760012153-AHAQ
5202 012A XHAQ AHAQ	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	760012161-AHAQ
5302 024A XHAQ AHAQ	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	760012179-AHAQ

LS 300 Aluminum Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 002A ZHAQ AHAQ	2	Single Unit	0.56 in (14.1 mm)	94 lbs/kft (140 kg/km)	700009863-AHAQ
5202 004A ZHAQ AHAQ	4	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	700009822-AHAQ
5202 006A ZHAQ AHAQ	6	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	700009780-AHAQ
5202 008A ZHAQ AHAQ	8	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	760026336-AHAQ
5202 012A ZHAQ AHAQ	12	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (157 kg/km)	700009749-AHAQ
5202 024A ZHAQ AHAQ	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019109-AHAQ
5302 024A ZHAQ AHAQ	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	700009707-AHAQ
5302 036A ZHAQ AHAQ	36	Multi-unit	0.91 in (23.0 mm)	275 lbs/kft (409 kg/km)	700009681-AHAQ
5302 048A ZHAQ AHAQ	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	700211121-AHAQ
5302 072A ZHAQ AHAQ	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	700211139-AHAQ

LazrSPEED

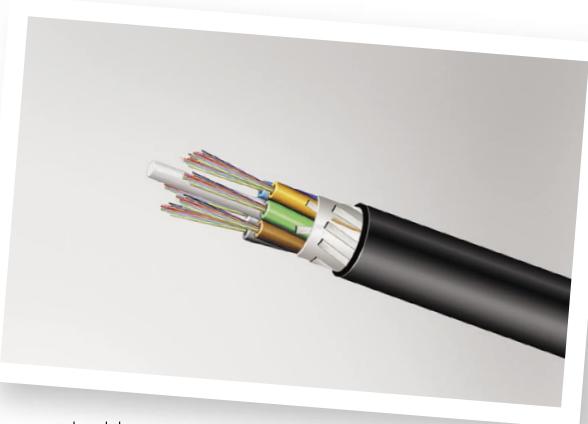
LS 150 Aluminum Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 002A HHAQ AHAQ	2	Single Unit	0.56 in (14.1 mm)	94 lbs/kft (140 kg/km)	700009889-AHAQ
5202 004A HHAQ AHAQ	4	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	700009848-AHAQ
5202 006A HHAQ AHAQ	6	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	700009806-AHAQ
5202 012A HHAQ AHAQ	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	700009764-AHAQ
5202 024A HHAQ AHAQ	24	Single Unit	0.66 in (16.6 mm)	151 lbs/kft (224 kg/km)	760019091-AHAQ
5302 024A HHAQ AHAQ	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	700009723-AHAQ
5302 036A HHAQ AHAQ	36	Multi-unit	0.91 in (23.0 mm)	275 lbs/kft (409 kg/km)	700229511-AHAQ
5302 048A HHAQ AHAQ	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	700211089-AHAQ
5302 072A HHAQ AHAQ	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	700211097-AHAQ

LazrSPEED® Multimode Outdoor Loose Tube Cables

The LazrSPEED Loose Tube Dielectric cable is constructed with industry standard 3 mm gel-filled, buffer tubes, stranded around a central strength member.

The LazrSPEED Loose Tube Metallic cable is armored with a corrugated polymer coated steel tape, and constructed with industry standard 3 mm gel-filled, buffer tubes, stranded around a central strength member. The armor layer provides added crush protection and meets the Telcordia requirements for superior armored cable.



The buffer tubes are compatible with standard hardware, cable routing and fan-out kits. The cable core is water blocked with dry water blocking materials, making access and handling of individual tubes easier and craft-friendly. These cables are designed for point-to-point applications as well as mid-span access, and provide a high-level of protection for fiber installed in the outside plant environment.

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)
Installation Temperature: -22°F to 140°F (-30°C to 60°C)
Storage Temperature: -40°F to 167°F (-40°C to 75°C)
Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)
Impact Resistance: Exceeds (Test Method: FOTP – 25)
Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)
Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 50 micron

Buffer tubes and fibers are identified with standard color coding.

LS 550 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 004A XXBK	4	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007351
5024 006A XXBK	6	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007369
5024 012A XXBK	12	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007377
5024 018A XXBK	18	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007385
5024 024A XXBK	24	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007393
5024 036A XXBK	36	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007401
5024 048A XXBK	48	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760007419
5024 072A XXBK	72	0.49 in (12.6 mm)	74 lbs/kft (110 kg/km)	760007427
5024 096A XXBK	96	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760007435
5024 144A XXBK	144	0.74 in (18.8 mm)	148 lbs/kft (220 kg/km)	760007443
5024 288A XXBK	288	0.86 in (21.8 mm)	192 lbs/kft (286 kg/km)	760007450

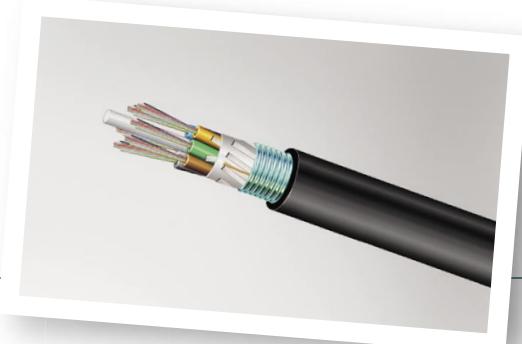
LS 300 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 004A ZXBK	4	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002782
5024 006A ZXBK	6	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002790
5024 012A ZXBK	12	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002808
5024 018A ZXBK	18	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002816
5024 024A ZXBK	24	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002824
5024 036A ZXBK	36	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002832
5024 048A ZXBK	48	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002840
5024 072A ZXBK	72	0.49 in (12.6 mm)	74 lbs/kft (110 kg/km)	760002857
5024 096A ZXBK	96	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760002865
5024 144A ZXBK	144	0.74 in (18.8 mm)	148 lbs/kft (220 kg/km)	760002873
5024 196A ZXBK	196	0.74 in (18.8 mm)	145 lbs/kft (216 kg/km)	760025494
5024 288A ZXBK	288	0.86 in (21.8mm)	192 lbs/kft (286 kg/km)	760002881



LS 150 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 192A HXBK	192	0.74 in (18.8 mm)	145 lbs/kft (216 kg/km)	760026229
5024 196A HXBK	196	0.74 in (18.8 mm)	145 lbs/kft (216 kg/km)	760027318



LS 550 Metallic

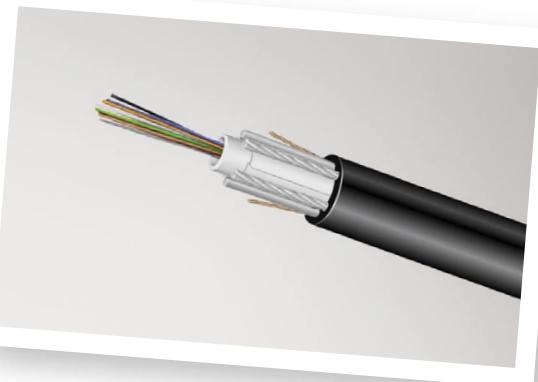
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 004A XXBK	4	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007245
5023 006A XXBK	6	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007252
5023 012A XXBK	12	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007260
5023 018A XXBK	18	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007278
5023 024A XXBK	24	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007286
5023 036A XXBK	36	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007294
5023 048A XXBK	48	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760007302
5023 072A XXBK	72	0.55 in (14.0 mm)	119 lbs/kft (177 kg/km)	760007310
5023 096A XXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760007328
5023 144A XXBK	144	0.80 in (20.3 mm)	214 lbs/kft (319 kg/km)	760007336
5023 288A XXBK	288	0.91 in (23.3 mm)	267 lbs/kft (398 kg/km)	760007344

LS 300 Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 004A ZXBK	4	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002469
5023 006A ZXBK	6	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002477
5023 012A ZXBK	12	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002485
5023 018A ZXBK	18	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002493
5023 024A ZXBK	24	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002501
5023 036A ZXBK	36	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002519
5023 048A ZXBK	48	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002527
5023 072A ZXBK	72	0.55 in (14.0 mm)	119 lbs/kft (177 kg/km)	760002535
5023 096A ZXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760002543
5023 144A ZXBK	144	0.80 in (20.3 mm)	214 lbs/kft (319 kg/km)	760002550
5023 288A ZXBK	288	0.91 in (23.3 mm)	267 lbs/kft (398 kg/km)	760002568

LazrSPEED® Multimode Outdoor Central Tube Cable

The LazrSPEED Dielectric and Metallic Sheath Cable can be used in underground conduit, direct buried or aerial applications. The cable is designed for easy mid-sheath entry. The fibers are separated into binder groups inside a central tube gel-filled with water-blocking compound. The steel armor provides rodent and lightning protection. The sheath jacket material is medium-density polyethylene for maximum environmental protection and is petrochemical stable.



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)
Installation Temperature: -22°F to 140°F (-30°C to 60°C)
Storage Temperature: -40°F to 167°F (-40°C to 75°C)
Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)
Impact Resistance: Exceeds (Test Method: FOTP – 25)
Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)
Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 50 micron

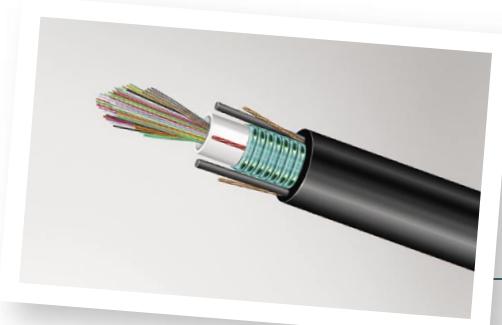
Buffer tubes and fibers are identified with standard color coding.

LS 300 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 006A ZXBK	6	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700012347
5022 012A ZXBK	12	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700012354
5022 024A ZXBK	24	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700012362
5022 036A ZXBK	36	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700219116
5022 048A ZXBK	48	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700012370
5022 096A ZXBK	96	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	700012388

LS 150 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 016A HXBK	16	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760027771

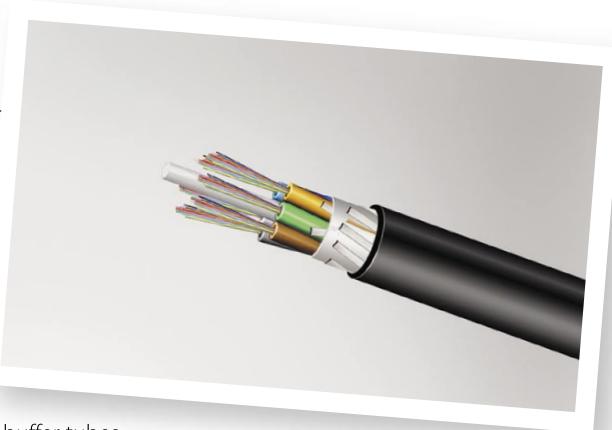


LS 150 Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5021 006A HXBK	6	0.43 in (11 mm)	92 lb/kft (137 kg/m)	760015800
5021 012A HXBK	12	0.43 in (11 mm)	92 lb/kft (137 kg/m)	760017202
5021 024A HXBK	24	0.43 in (11 mm)	92 lb/kft (137 kg/m)	760021758

LazrSPEED® Multimode Indoor/Outdoor Loose Tube Cable

The Plenum-Rated and Riser-Rated Indoor/Outdoor Stranded Loose Tube Dielectric Cable allows for connectivity ease and superior mid-span accessibility. The cable is designed to endure the rigors of outdoor use, but can also be run directly in plenum airspace or riser to eliminate a splice point at the building entrance. This cable provides seamless migration from the campus to the premises by bypassing termination requirements at the building entrance, thereby reducing the total cost of ownership. The basic construction utilizes standard 3.0 mm gel-filled (5124 series) or dry block (5125 series) buffer tubes which contain up to 12 optical fibers, buffer tubes are stranded around a rigid fiberglass central strength member for protection against thermal expansion and contraction at operational temperature extremes.



A fluoropolymer thermoplastic material is used for the outer jacket and buffer tubes to provide excellent petrochemical resistance, flame propagation and smoke generation properties that exceeds any similar cable design on the market today. These cables are designed for installation loads up to 600 lbs (2,700 N) and long term loads up to 180 lbs (800 N).

All cables meet the mechanical and environmental requirements of Telcordia GR-20-CORE Issue 2 Generic Requirements for Optical Fiber and Optical Fiber Cable and ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22° to 140°F (-30°C to 60°C)

Storage Temperature: -40° to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: 50 Micron

Buffer tubes and fibers are identified with standard color coding.

LS 550 Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 006A XPBK	6	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016873
5125 024A XPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016881
5125 036A XPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016899
5125 048A XPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016907
5125 072A XPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760016915
5125 012A XPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760014837

LS 300 Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 006A ZPBK	6	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016808
5125 012A ZPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016816
5125 024A ZPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016824
5125 036A ZPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016832
5125 048A ZPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760012385
5125 072A ZPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017020



LS 150 Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 006A HPBK	6	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016717
5125 012A HPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016725
5125 024A HPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016733
5125 036A HPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016741
5125 048A HPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016758
5125 072A HPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760016766

LS 300 Riser

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 144A ZRBK	144	0.78 in (19.8 mm)	239 lbs/kft (357 kg/km)	760027557
5124 288A ZRBK	288	0.92 in (23.4 mm)	298 lbs/kft (445 kg/km)	760025403

LS 150 Riser

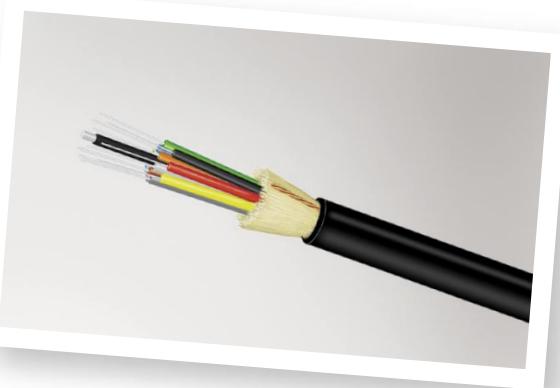
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 048A HRBK	48	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760015610
5124 096A HRBK	96	0.62 in (15.7 mm)	152 lbs/kft (226 kg/km)	760015628
5124 144A HRBK	144	0.78 in (19.8 mm)	239 lbs/kft (357 kg/km)	760015602
5124 288A HRBK	288	0.92 in (23.4 mm)	298 lbs/kft (445 kg/km)	760024851

LazrSPEED® Multimode Indoor/Outdoor Tight Buffered Cable

The indoor/outdoor distribution cable provides network performance for the applications of today and tomorrow that can be used in non-traditional building entrance facilities.

Features and Benefits:

- 900 micron tight buffered construction allows for direct termination eliminating the need for furcation which minimizes installation expense
- Utilizes water blocking technology which makes the cable suitable for the outside plant environment, with gel-free cable access
- Black, UV stabilized jacket is resistant to chemical, moisture, abrasion and sunlight and does not require additional protection in most installations
- All-dielectric construction eliminates the need for bonding and grounding
- Tested and qualified to GR-409 with GR-20, environmental limits and; ICEA-696 and ICEA-640 environmental limits. Meets requirements for tight buffered constructions and suitable of installation in true OSP environmental conditions
- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 158°F (-30°C to 70°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: Exceeds 126 lbf/in (22 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds 4.34 lb-ft (5.88 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 50 micron

Fibers are identified with standard color coding.

LS 550 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5101 002A XPBK	2	Single Unit	0.17 in (4.2 mm)	10.7 lbs/kft (16 kg/km)	760037408
5101 004A XPBK	4	Single Unit	0.19 in (4.8 mm)	15.3 lbs/kft (23 kg/km)	760037416
5101 006A XPBK	6	Single Unit	0.20 in (5.1 mm)	18.7 lbs/kft (28 kg/km)	760036426
5101 008A XPBK	8	Single Unit	0.23 in (5.8 mm)	25.0 lbs/kft (37 kg/km)	760037424
5101 012A XPBK	12	Single Unit	0.27 in (6.9 mm)	36.0 lbs/kft (54 kg/km)	760037432
5101 018A XPBK	18	Single Unit	0.28 in (7.1 mm)	32.2 lbs/kft (48 kg/km)	760037440
5101 024A XPBK	24	Single Unit	0.31 in (7.9 mm)	41.4 lbs/kft (62 kg/km)	760037457
5104 036A XPBK	36	Multi-unit	0.67 in (17.1 mm)	174 lbs/kft (259 kg/km)	760038133
5104 048A XPBK	48	Multi-unit	0.74 in (18.9 mm)	222 lbs/kft (330 kg/km)	760038141
5104 060A XPBK	60	Multi-unit	0.85 in (21.5 mm)	287 lbs/kft (427 kg/km)	760038158
5104 072A XPBK	72	Multi-unit	0.93 in (23.7 mm)	357 lbs/kft (532 kg/km)	760038166
5104 096A XPBK	96	Multi-unit	1.11 in (28.2 mm)	542 lbs/kft (806 kg/km)	760038174
5104 144A XPBK	144	Multi-unit	1.19 in (30.3 mm)	558 lbs/kft (831 kg/km)	760038182

LS 300 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5101 002A ZPBK	2	Single Unit	0.17 in (4.2 mm)	10.7 lbs/kft (16 kg/km)	760037341
5101 004A ZPBK	4	Single Unit	0.19 in (4.8 mm)	15.3 lbs/kft (23 kg/km)	760037358
5101 006A ZPBK	6	Single Unit	0.20 in (5.1 mm)	18.7 lbs/kft (28 kg/km)	760036418
5101 008A ZPBK	8	Single Unit	0.23 in (5.8 mm)	25.0 lbs/kft (37 kg/km)	760037366
5101 012A ZPBK	12	Single Unit	0.27 in (6.9 mm)	36.0 lbs/kft (54 kg/km)	760037374
5101 018A ZPBK	18	Single Unit	0.28 in (7.1 mm)	32.2 lbs/kft (48 kg/km)	760037382
5101 024A ZPBK	24	Single Unit	0.31 in (7.9 mm)	41.1 lbs/kft (62 kg/km)	760037390
5104 036A ZPBK	36	Multi-unit	0.67 in (17.1 mm)	174 lbs/kft (259 kg/km)	760038075
5104 048A ZPBK	48	Multi-unit	0.74 in (18.9 mm)	222 lbs/kft (330 kg/km)	760038083
5104 060A ZPBK	60	Multi-unit	0.85 in (21.5 mm)	287 lbs/kft (427 kg/km)	760038091
5104 072A ZPBK	72	Multi-unit	0.93 in (23.7 mm)	357 lbs/kft (532 kg/km)	760038109
5104 096A ZPBK	96	Multi-unit	1.11 in (28.2 mm)	542 lbs/kft (806 kg/km)	760038117
5104 144A ZPBK	144	Multi-unit	1.19 in (30.3 mm)	558 lbs/kft (831 kg/km)	760038125



LS 150 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5101 002A HPBK	2	Single Unit	0.17 in (4.2 mm)	10.7 lbs/kft (16 kg/km)	760037283
5101 004A HPBK	4	Single Unit	0.19 in (4.8 mm)	15.3 lbs/kft (23 kg/km)	760037291
5101 006A HPBK	6	Single Unit	0.20 in (5.1 mm)	18.7 lbs/kft (28 kg/km)	760036400
5101 008A HPBK	8	Single Unit	0.23 in (5.8 mm)	25.0 lbs/kft (37 kg/km)	760037309
5101 012A HPBK	12	Single Unit	0.27 in (6.9 mm)	36.0 lbs/kft (54 kg/km)	760037317
5101 018A HPBK	18	Single Unit	0.28 in (7.1 mm)	32.2 lbs/kft (48 kg/km)	760037325
5101 024A HPBK	24	Single Unit	0.31 in (7.9 mm)	41.4 lbs/kft (62 kg/km)	760037333
5104 036A HPBK	36	Multi-unit	0.67 in (17.1 mm)	174 lbs/kft (259 kg/km)	760038018
5104 048A HPBK	48	Multi-unit	0.74 in (18.9 mm)	222 lbs/kft (330 kg/km)	760038026
5104 060A HPBK	60	Multi-unit	0.85 in (21.5 mm)	287 lbs/kft (427 kg/km)	760038034
5104 072A HPBK	72	Multi-unit	0.93 in (23.7 mm)	357 lbs/kft (532 kg/km)	760038042
5104 096A HPBK	96	Multi-unit	1.11 in (28.2 mm)	542 lbs/kft (806 kg/km)	760038059
5104 144A HPBK	144	Multi-unit	1.19 in (30.3 mm)	558 lbs/kft (831 kg/km)	760038067

LS 550 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5100 006A XRBK	6	Single Unit	0.22 in (5.5 mm)	18 lbs/kft (26 kg/km)	760039974
5100 008A XRBK	8	Single Unit	0.25 in (6.3 mm)	24 lbs/kft (35 kg/km)	760039982
5100 012A XRBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	760006650
5103 024A XRBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760007476
5103 036A XRBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	760007484

LS 300 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5100 006A ZRBK	6	Single Unit	0.22 in (5.5 mm)	18 lbs/kft (26 kg/km)	760039966
5100 008A ZRBK	8	Single Unit	0.25 in (6.3 mm)	24 lbs/kft (35 kg/km)	760031666
5100 012A ZRBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	700210982
5103 024A ZRBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	700210990
5103 036A ZRBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	700211006
5103 048A ZRBK	48	Multi-unit	0.79 in (20.0 mm)	198 lbs/kft (295 kg/km)	760010371
5103 072A ZRBK	72	Multi-unit	0.94 in (23.9 mm)	309 lbs/kft (460 kg/km)	760019612

LS 150 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5100 012A HRBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	700211014
5103 024A HRBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	700211022
5103 036A HRBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	700211030

LS 550 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5102 012A XHBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	760007492
5105 024A XHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760007500
5105 036A XHBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	760007518
5105 072A XHBK	72	Multi-unit	0.94 in (23.9 mm)	309 lbs/kft (460 kg/km)	760032441

LS 300 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5102 004A ZHBK	4	Single Unit	0.20 in (5.1 mm)	14 lbs/kft (20 kg/km)	760012005
5102 006A ZHBK	6	Single Unit	0.22 in (5.5 mm)	18 lbs/kft (26 kg/km)	760015289
5102 008A ZHBK	8	Single Unit	0.25 in (6.3 mm)	24 lbs/kft (35 kg/km)	760031674
5102 012A ZHBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	700010119
5105 024A ZHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	700205560
5105 036A ZHBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	700205578
5105 048A ZHBK	48	Multi-unit	0.79 in (20.0 mm)	198 lbs/kft (295 kg/km)	760012013

LazrSPEED

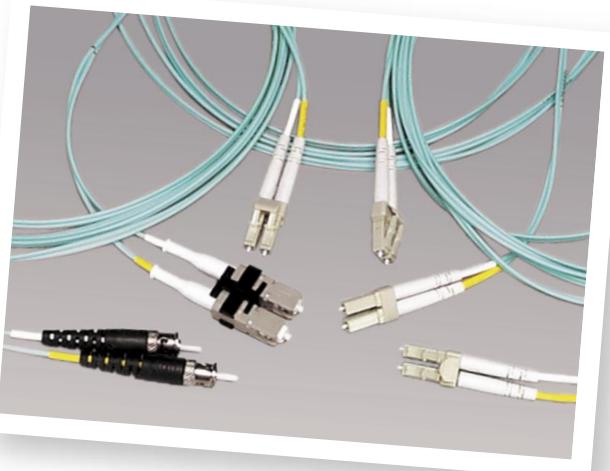
LS 150 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5102 004A HHBK	4	Single Unit	0.20 in (5.1 mm)	14 lbs/kft (20 kg/km)	760035782
5102 006A HHBK	6	Single Unit	0.22 in (5.5 mm)	18 lbs/kft (26 kg/km)	760035790
5102 012A HHBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	760002170
5105 024A HHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760002188
5105 036A HHBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	760002196

LazrSPEED® Multimode Fiber Optic Patch Cords and Pigtails

Fiber patch cords are used to connect fiber optic equipment to fiber optic cross-connects, interconnects and information outlets. The SYSTIMAX LazrSPEED fiber optic patch cord family is configurable with standard LC, SC, and ST terminations, and is available in either 1.6 mm or 3.0 mm simplex or duplex zipcord.

At just 1.6 mm diameter the LazrSPEED LC cords are ideal for high-density applications. Test results by SYSTIMAX Labs per TIA/EIA 455 procedures and IEC 794 methods also show that the 1.6 mm cordage exceeds the requirements for larger diameter cordage. This smaller cordage allows at least twice as many fibers to be installed in a cabinet.



LazrSPEED fiber optic patch cords are offered in riser, plenum and low smoke zero halogen (LSZH) options. Using the Fiber Patch Cord Identifier (in Fiber Reference section), fiber patch cord can be ordered with custom configured cordage size, jacket type and length in either feet or meters, providing the ultimate in flexibility to meet any cabling infrastructure design. LSZH fiber patch cords are available for international region only.

Physical Specifications:

1.6 mm and 3.0 mm Patch Cords

Outside Diameter (simplex):

1.6 mm: 1.6 mm

3.0 mm: 3.0 mm

Outside Diameter (zip cord):

1.6 mm: 1.6 mm x 3.3 mm

3.0 mm: 3.0 mm x 5.9 mm

Minimum Cable Retention Strength:

1.6 mm: 11.24 lbs (50 N)

3.0 mm: 11.24 lbs (50 N)

Minimum Bend Radius:

1.6 mm: Loaded: 2.0 in (5.1 cm)

Unloaded: 1.4 in (3.5 cm)

3.0 mm: Loaded: 2.3 in (5.8 cm)

Unloaded: 1.4 in (3.5 cm)

Maximum Cordage Tensile Load:

1.6 mm: Short Term: 70 lbs (311 N)

Long Term: 21 lbs (93 N)

3.0 mm: Short Term: 90 lbs (400 N)

Long Term: 27 lbs (120 N)

Optical Specifications:

Fiber Type: LOMM 50 micron LazrSPEED fiber

Minimum Bandwidth:

4,700 MHz-km (laser) @ 850 nm

3,500 MHz-km (OFL) @ 850 nm

500 MHz-km (laser) @ 1,300 nm

500 MHz-km (OFL) @ 1,300 nm

Max. Attenuation:

3.0 dB/km @ 850 nm

1.0 dB/km @ 1,300 nm

Pigtails

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
LazrSPEED 550 LC / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCXLUC11-R
LazrSPEED 550 SC / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCXSCUC11-R
LazrSPEED 550 STII+ / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCXEPUC11-R
LazrSPEED 550 LC / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCXLUC01-R
LazrSPEED 550 SC / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCXSCUC01-R
LazrSPEED 550 STII+ / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCXEPUC01-R

1.6 mm Patch Cords

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
LazrSPEED 550 LC / LC 1.6 mm Duplex	Riser	2	Configurable	FPCXLCLC22-R
LazrSPEED 550 LC / LC 1.6 mm Simplex	Riser	1	Configurable	FPCXLCLC21-R
LazrSPEED 550 LC / SC 1.6 mm Duplex	Riser	2	Configurable	FPCXLSC22-R
LazrSPEED 550 LC / STII+ 1.6 mm Duplex	Riser	2	Configurable	FPCXLCEP22-R
LazrSPEED 550 LC / STII+ 1.6 mm Simplex	Riser	1	Configurable	FPCXLCEP21-R
LazrSPEED 550 SC / SC 1.6 mm Duplex	Riser	2	Configurable	FPCXSCSC22-R
LazrSPEED 550 SC / SC 1.6 mm Simplex	Riser	1	Configurable	FPCXSCSC21-R
LazrSPEED 550 SC / STII+ 1.6 mm Duplex	Riser	2	Configurable	FPCXSCEP22-R
LazrSPEED 550 SC / STII+ 1.6 mm Simplex	Riser	1	Configurable	FPCXSCEP21-R
LazrSPEED 550 LC / LC 1.6 mm Duplex	LSZH*	2	Configurable	FPCXLCLC22-H
LazrSPEED 550 SC / SC 1.6 mm Duplex	LSZH*	2	Configurable	FPCXSCSC22-H
LazrSPEED 550 LC / SC 1.6 mm Duplex	LSZH*	2	Configurable	FPCXLSC22-H



3.0 mm Patch Cords

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
LazrSPEED 550 SC / SC 3.0 mm Duplex	Riser	2	Configurable	FPCXSCSC32-R
LazrSPEED 550 SC / SC 3.0 mm Simplex	Riser	1	Configurable	FPCXSCSC31-R
LazrSPEED 550 SC / STII+ 3.0 mm Duplex	Riser	2	Configurable	FPCXSCEP32-R
LazrSPEED 550 SC / STII+ 3.0 mm Simplex	Riser	1	Configurable	FPCXSCEP31-R
LazrSPEED 550 STII+ / STII+ 3.0 mm Duplex	Riser	2	Configurable	FPCXEPEP32-R
LazrSPEED 550 STII+ / STII+ 3.0 mm Simplex	Riser	1	Configurable	FPCXEPEP31-R
LazrSPEED 550 LC-LC 3.0 mm Simplex	Plenum	1	Configurable	FPCXLCLC31-P
LazrSPEED 550 LC-LC 3.0 mm Duplex	Plenum	2	Configurable	FPCXLCLC32-P
LazrSPEED 550 STII-STII 3.0 mm simplex	Plenum	1	Configurable	FPCXSTST31-P
LazrSPEED 550 STII-STII 3.0 mm Duplex	Plenum	2	Configurable	FPCXSTST32-P
LazrSPEED 550 SC-SC 3.0 mm Simplex	Plenum	1	Configurable	FPCXSCSC31-P
LazrSPEED 550 SC-SC 3.0 mm Duplex	Plenum	2	Configurable	FPCXSCSC32-P
LazrSPEED 550 LC-STII 3.0 mm Simplex	Plenum	1	Configurable	FPCXL CST31-P
LazrSPEED 550 LC-STII 3.0 mm Duplex	Plenum	2	Configurable	FPCXL CST32-P
LazrSPEED 550 LC-SC 3.0 mm Simplex	Plenum	1	Configurable	FPCXLSC31-P
LazrSPEED 550 LC-SC 3.0 mm Duplex	Plenum	2	Configurable	FPCXLSC32-P
LazrSPEED 550 SC-STII, 3.0 mm Simplex	Plenum	1	Configurable	FPCXSCST31-P
LazrSPEED 550 SC-STII, 3.0 mm Duplex	Plenum	2	Configurable	FPCXSCST32-P
LazrSPEED 550 SC / SC 3.0 mm Duplex	LSZH*	2	Configurable	FPCXSCSC32-H
LazrSPEED 550 STII-STII 3.0 mm Duplex	LSZH*	2	Configurable	FPCXSTST32-H
LazrSPEED 550 SC-STII, 3.0 mm Duplex	LSZH*	2	Configurable	FPCXSCST32-H
LazrSPEED 550 LC-STII 3.0 mm Duplex	LSZH*	2	Configurable	FPCXL CST32-H

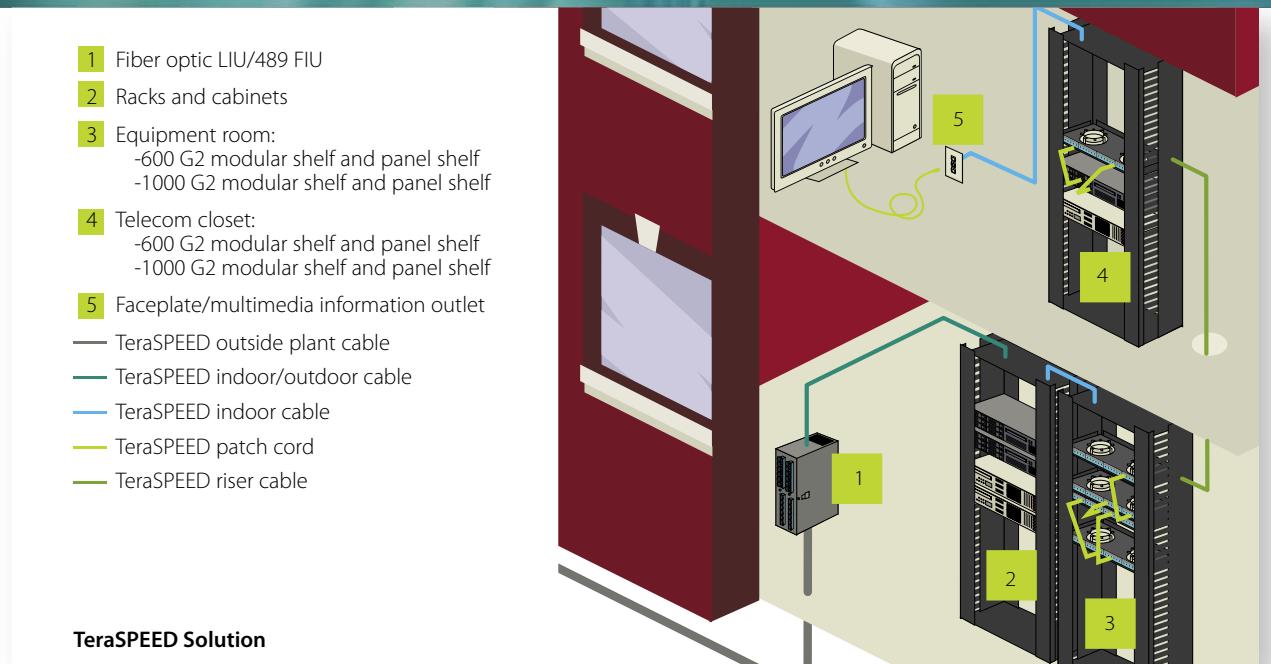
* LSZH fiber optic patch cords are offered in international only.

• Hybrid MTRJ fiber patch cords are also available. Please refer to the Fiber Patch Cord Product Identifier for ordering information.



TeraSPEED™ Solution

Zero Water Peak Singlemode



Features and Benefits:

- Zero water peak singlemode fiber
- G.652.C/D compliant
- Lowest loss fiber available at 1,383 nm E-band
- Supports legacy singlemode equipment and applications
- 60% more usable wavelengths
- Maximizes support for lowest cost CWDM technology and delivers lowest cost path to future singlemode applications
- Lowest loss small form factor connector available in the industry - LC Connector

SYSTIMAX TeraSPEED Solution was developed to provide a fiber optic solution that is the Metro/Campus backbone for both today's performance requirements. TeraSPEED cables provide the widest possible usable wavelength spectrum by eliminating the high loss caused by water impurities in the 1,400 nm region. With this 'water peak' eliminated, the entire spectrum from 1,260 nm to 1,620 nm is available, allowing for future expansion of data rates and additional services by the use of cost-effective coarse wavelength division multi-plexing (CWDM).

In addition to LC connectors, TeraSPEED Solution supports the duplex SC connector as well as the ST II+ connector. An extensive line of wall and rack mounted cabinets and telecommunication outlets for building entrance facilities, equipment rooms, telephone closets/floor distributors and work areas are available.

SYSTIMAX channels comprised exclusively of TeraSPEED singlemode passive products, end-to-end, are capable of delivering in excess of 10 Gigabit per second in accordance with application standards.

TeraSPEED products include:

- Building Cable
- Indoor/Outdoor Cable
- Outside Plant Cable (where appropriate for the enterprise market)
- LC Connectors (SC or ST II+ connectors available for limited applications and connections)
- Splice and Termination Shelves
- Multimedia Outlets and Boxes
- Connectorized Patch Cords

TeraSPEED™ Specifications

TeraSPEED Optical Fiber

Dispersion-Unshifted, Matched-Clad Singlemode Fiber

Physical Characteristics

Cladding Diameter	$125.0 \pm 0.7 \mu\text{m}$
Core/Clad Offset	$\leq 0.5 \mu\text{m}$
Coating Diameter (Uncolored)	$245 \pm 10 \mu\text{m}$
Coating Diameter (Colored)	$254 \pm 7 \mu\text{m}$
Coating/Cladding Concentricity Error, Max.	$12 \mu\text{m}$
Clad Non-Circularity	$\leq 1\%$

Mechanical Characteristics

Proof Test	100 kpsi (0.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Fiber Curl	$\geq 4 \text{ m}$
Dynamic Fatigue Parameter (nd)	≥ 18
Macrobending, Max. (100 turns)	0.05 dB (1,310/1,550 nm @ 50 mm) 0.05 dB (1,625 nm @ 60 mm)
Macrobending, Max. (1 turn @ 32 mm mandrel)	0.05 dB @ 1,550 nm

Optical Characteristics, Wavelength Specific

	1310 nm	1385 nm	1550 nm
Max. Attenuation, Loose Tube Cable	0.34 dB/km	0.31 dB/km	0.22 dB/km
Max. Attenuation, Tight Buffer Cable	0.70 dB/km	0.70 dB/km	0.70 dB/km
Mode Field Diameter	$9.2 \pm 0.3 \mu\text{m}$	$9.6 \pm 0.6 \mu\text{m}$	$10.4 \pm 0.5 \mu\text{m}$
Group Refractive Index	1.466	1.466	1.467
Dispersion, Max.	3.5 ps/(nm-km) from 1,285 to 1,330 nm		18 ps/(nm-km)

Optical Characteristics, General

Point Defects, Max.	0.10 dB
Cut-off Wavelength	≤ 1260
Zero Dispersion Wavelength	1,302-1,322 nm
Zero Dispersion Slope, Max.	0.090 ps/[km-nm-nm]
Polarization Mode Dispersion	$\leq 0.06 \text{ ps/sqrt(km)}$
Link Design Value	

Environmental Characteristics

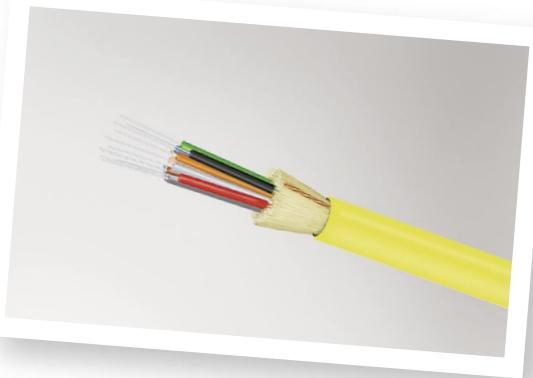
Temperature Dependence -76°F to 185°F (-60°C to 85°C)	$\leq 0.05 \text{ dB}$
Temperature Humidity Cycling 14°F to 185°F (-10°C to 85°C) up to 95% RH	$\leq 0.05 \text{ dB}$
Water Immersion, 73.4°F (23°C)	$\leq 0.05 \text{ dB}$
Heat Aging, 185°F (85°C)	$\leq 0.05 \text{ dB}$

TeraSPEED™ Singlemode Building Cable

The TeraSPEED Singlemode Building Cable is a dispersion unshifted, matched clad fiber which meets the ITU-T G.652 requirements.

This fiber is fully capable of handling existing and legacy singlemode applications which traditionally operate in the 1,310 nm and 1,550 nm regions. It is also designed to handle the new and emerging applications that utilize the "extended" E-band, 1,360 nm to 1,460 nm.

This fiber is the choice for 16-channel coarse wavelength division multiplexing applications because it is designed to provide optimum performance from 1,265 nm to 1,625 nm.



The TeraSPEED enhanced singlemode cable consists of single unit and multi-unit match clad optical fibers, aramid strength yarn and an outer jacket. It complies with the requirements of the National Electrical Code, Article 770-51; ANSI/TIA/EIA 568B.3, "Optical Fiber Cabling Components Standard" and Telcordia Generic Requirements for Premises Fiber Optic Cable (GR-409-CORE), Section 6.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Features and Benefits:

- Zero-water-peak singlemode fiber provides an increase of 50% on the bandwidth capabilities
- It is compatible with other singlemode fiber types
- It supports CWDM (Course Wave Division Multi-plexing) and provides at least 33% more channels than conventional singlemode fiber
- Long term reliability

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 57.3 lbf/in (10 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 4.34 lbf-ft (5.8 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 8.3 micron (\cong 9 micron mode field diameter)

Fibers are identified with standard color coding.

TS Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A WPYL	2	Single Unit	0.15 in (3.9 mm)	8.8 lbs/kft (13.1 kg/km)	760004317
5201 004A WPYL	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	760004325
5201 006A WPYL	6	Single Unit	0.19 in (4.8 mm)	15.1 lbs/kft (22 kg/km)	760004333
5201 008A WPYL	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760004341
5201 012A WPYL	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	760004358
5201 024A WPYL	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018630
5301 024A WPYL	24	Multi-unit	0.52 in (13.1 mm)	108.1 lbs/kft (161 kg/km)	760004366
5301 036A WPYL	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	760004374
5301 048A WPYL	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760004382
5301 072A WPYL	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760004390
5301 096A WPYL	96	Multi-unit	0.90 in (23.0 mm)	360.8 lbs/kft (537 kg/km)	760018051
5301 144A WPYL	144	Multi-unit	0.95 in (24.1 mm)	330.8 lbs/kft (492 kg/km)	760018895

TS Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A WRYL	2	Single Unit	0.16 in (4.1 mm)	8.6 lbs/kft (12.9 kg/km)	760004408
5200 004A WRYL	4	Single Unit	0.19 in (4.8 mm)	13.1 lbs/kft (19 kg/km)	760004416
5200 006A WRYL	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	760004424
5200 008A WRYL	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	760004432
5200 012A WRYL	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	760004440
5200 024A WRYL	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	760018515
5300 024A WRYL	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	760004457
5300 036A WRYL	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	760004465
5300 048A WRYL	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	760004473
5300 072A WRYL	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	760004481
5300 144A WRYL	144	Multi-unit	1.03 in (26.1 mm)	350.5 lbs/kft (522 kg/km)	760018887

TS LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 006A WHYL	6	Single Unit	0.20 in (5.2 mm)	16.4 lbs/kft (24 kg/km)	760004242
5202 008A WHYL	8	Single Unit	0.22 in (5.5 mm)	19.1 lbs/kft (28 kg/km)	760004259
5202 012A WHYL	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	760004267
5302 024A WHYL	24	Multi-unit	0.56 in (14.2 mm)	116.6 lbs/kft (174 kg/km)	760004275
5302 036A WHYL	36	Multi-unit	0.59 in (14.9 mm)	118.5 lbs/kft (176 kg/km)	760004283
5302 048A WHYL	48	Multi-unit	0.65 in (16.4 mm)	150.3 lbs/kft (224 kg/km)	760004291
5302 072A WHYL	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	760004309

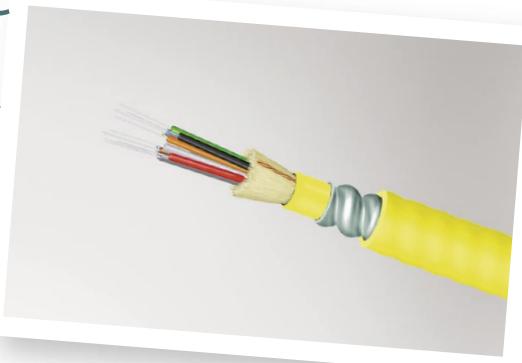
TeraSPEED™ Singlemode Armored Cable

SYSTIMAX Interlocking Armored Fiber Optic Cable provides superior protection and space savings. It provides installation protection from bending and excessive pull tension, significant time and labor reductions versus conduit or interduct installations and increased installation and design flexibility.

SYSTIMAX interlocking armor can be used anywhere additional protection and security for the fiber cable is desired. Applications include building backbone, zone distribution, raised floor, data centers and storage area networks (SANs). Vertical markets include: industrial, manufacturing, airports, stadiums, military and any other vertical where increased protection and security for the fiber cable is desired. These include: financial, hospitals, educational facilities and many more.

The SYSTIMAX interlocking armor is applied spirally around any premise distribution cable, and is available in either steel or aluminum. The armored cable is then over-jacketed with a sheath. This sheath is color-coded to the fiber type contained within, and provides not only the ability to print the armor with all relevant information on the cable inside, but also allows for easier handling and pulling.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20° to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0° to 70°C)

Storage Temperature: -40°F to 158°F (-40° to 70°C)

Crush Resistance: 57.3 lbf/in (10 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 4.34 lbf-ft (5.8 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 8.3 micron (\geq 9 micron mode field diameter)

Fibers are identified with standard color coding.

TS Steel Armored, Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A WPYL SPYL	2	Single Unit	0.56 in (14.1 mm)	157 lbs/kft (233 kg/km)	760004317-SPYL
5201 004A WPYL SPYL	4	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760004325-SPYL
5201 006A WPYL SPYL	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	760004333-SPYL
5201 008A WPYL SPYL	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	760004341-SPYL
5201 012A WPYL SPYL	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	760004358-SPYL
5201 024A WPYL SPYL	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	760018630-SPYL
5301 024A WPYL SPYL	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	760004366-SPYL
5301 036A WPYL SPYL	36	Multi-unit	0.86 in (21.7 mm)	384 lbs/kft (572 kg/km)	760004374-SPYL
5301 048A WPYL SPYL	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	760004382-SPYL
5301 072A WPYL SPYL	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760004390-SPYL
5301 096A WPYL SPYL	96	Multi-unit	1.26 in (31.9 mm)	730 lbs/kft (1087 kg/km)	760018051-SPYL
5301 144A WPYL SPYL	144	Multi-unit	1.26 in (31.9 mm)	700 lbs/kft (1042 kg/km)	760018895-SPYL

TS Steel Armored, Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A WRYL SRYL	2	Single Unit	0.56 in (14.1 mm)	149 lbs/kft (222 kg/km)	760004408-SRYL
5200 004A WRYL SRYL	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	760004416-SRYL
5200 006A WRYL SRYL	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	760004424-SRYL
5200 008A WRYL SRYL	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760004432-SRYL
5200 012A WRYL SRYL	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	760004440-SRYL
5200 024A WRYL SRYL	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760018515-SRYL
5300 024A WRYL SRYL	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	760004457-SRYL
5300 036A WRYL SRYL	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	760004465-SRYL
5300 048A WRYL SRYL	48	Multi-unit	0.91 in (23.0 mm)	400 lbs/kft (595 kg/km)	760004473-SRYL
5300 072A WRYL SRYL	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760004481-SRYL
5300 096A WRYL SRYL	96	Multi-unit	1.26 in (31.9 mm)	689 lbs/kft (1026 kg/km)	760026823-SRYL
5300 144A WRYL SRYL	144	Multi-unit	1.36 in (34.4 mm)	734 lbs/kft (1093 kg/km)	760018887-SRYL

TS Steel Armored, LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 006A WHYL SHYL	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760004242-SHYL
5202 008A WHYL SHYL	8	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (242 kg/km)	760004259-SHYL
5202 012A WHYL SHYL	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	760004267-SHYL
5202 024A WHYL SHYL	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019075-SHYL
5302 024A WHYL SHYL	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	760004275-SHYL
5302 036A WHYL SHYL	36	Multi-unit	0.91 in (23.0 mm)	385 lbs/kft (573 kg/km)	760004283-SHYL
5302 048A WHYL SHYL	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	760004291-SHYL
5302 072A WHYL SHYL	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760004309-SHYL

TS Aluminum Armored, Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 002A WPYL APYL	2	Single Unit	0.56 in (14.1 mm)	100 lbs/kft (148 kg/km)	760004317-APYL
5201 004A WPYL APYL	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	760004325-APYL
5201 006A WPYL APYL	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	760004333-APYL
5201 008A WPYL APYL	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760004341-APYL
5201 012A WPYL APYL	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	760004358-APYL
5201 024A WPYL APYL	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018630-APYL
5301 024A WPYL APYL	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	760004366-APYL
5301 036A WPYL APYL	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	760004374-APYL
5301 048A WPYL APYL	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	760004382-APYL
5301 072A WPYL APYL	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760004390-APYL
5301 096A WPYL APYL	96	Multi-unit	1.26 in (31.9 mm)	569 lbs/kft (847 kg/km)	760018051-APYL
5301 144A WPYL APYL	144	Multi-unit	1.26 in (31.9 mm)	539 lbs/kft (802 kg/km)	760018895-APYL

TS Aluminum Armored, Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 002A WRYL ARYL	2	Single Unit	0.56 in (14.1 mm)	92 lbs/kft (137 kg/km)	760004408-ARYL
5200 004A WRYL ARYL	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	760004416-ARYL
5200 006A WRYL ARYL	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	760004424-ARYL
5200 008A WRYL ARYL	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760004432-ARYL
5200 012A WRYL ARYL	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	760004440-ARYL
5200 024A WRYL ARYL	24	Single Unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	760018515-ARYL
5300 024A WRYL ARYL	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	760004457-ARYL
5300 036A WRYL ARYL	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	760004465-ARYL
5300 048A WRYL ARYL	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	760004473-ARYL
5300 072A WRYL ARYL	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760004481-ARYL
5300 096A WRYL ARYL	96	Multi-unit	1.26 in (31.9 mm)	528 lbs/kft (786 kg/km)	760026823-ARYL
5300 144A WRYL ARYL	144	Multi-unit	1.36 in (34.4 mm)	558 lbs/kft (830 kg/km)	760018887-ARYL

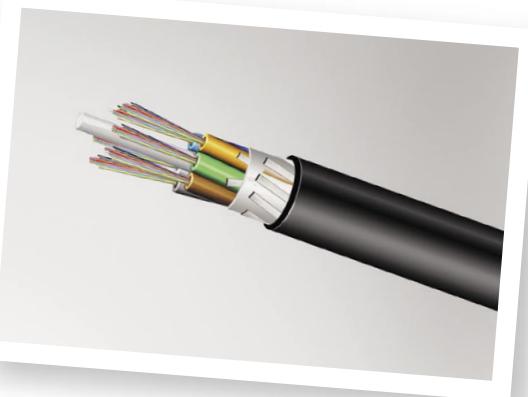


TS Aluminum Armored, LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 006A WHYL AHYL	6	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	760004242-AHYL
5202 008A WHYL AHYL	8	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (157 kg/km)	760004259-AHYL
5202 012A WHYL AHYL	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	760004267-AHYL
5202 024A WHYL AHYL	24	Single Unit	0.66 in (16.6 mm)	151 lbs/kft (224 kg/km)	760019075-AHYL
5302 024A WHYL AHYL	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	760004275-AHYL
5302 036A WHYL AHYL	36	Multi-unit	0.91 in (23.0 mm)	275 lbs/kft (409 kg/km)	760004283-AHYL
5302 048A WHYL AHYL	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	760004291-AHYL
5302 072A WHYL AHYL	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760004309-AHYL

TeraSPEED™ Singlemode Outdoor Loose Tube Cable

The TeraSPEED Loose tube cable is constructed with industry standard 3 mm gel-filled buffer tubes, stranded around a central strength member. The buffer tubes are compatible with standard hardware, cable routing and fan-out kits. The cable core is water blocked with dry water-blocking materials, making access and handling of individual tubes easier and craft-friendly. The metallic version is armored with a corrugated polymer coated steel tape.



These cables are designed for point-to-point applications as well as mid-span access, and provide a high-level of protection for fiber installed in the outside plant environment.

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

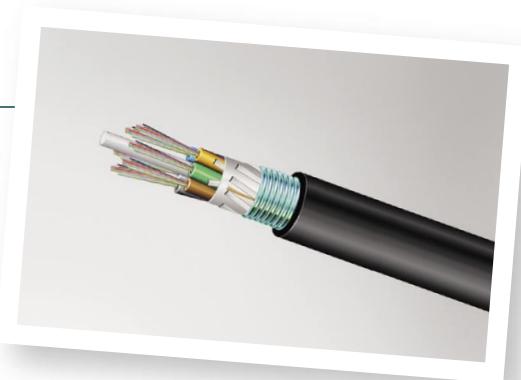
Physical Specifications:

Core Size: 8.3 micron (\geq 9 micron mode field diameter)

Buffer tubes and fibers are identified with standard color coding.

TS Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 004A WXBK	4	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002576
5024 006A WXBK	6	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002584
5024 012A WXBK	12	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002592
5024 018A WXBK	18	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002600
5024 024A WXBK	24	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002618
5024 036A WXBK	36	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002626
5024 048A WXBK	48	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002634
5024 072A WXBK	72	0.49 in (12.6 mm)	74 lbs/kft (110 kg/km)	760002642
5024 096A WXBK	96	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760002659
5024 144A WXBK	144	0.74 in (18.8 mm)	148 lbs/kft (220 kg/km)	760002667
5024 288A WXBK	288	0.86 in (21.8 mm)	192 lbs/kft (286 kg/km)	760002675



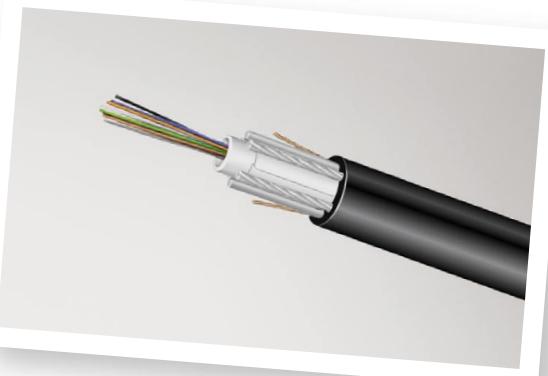
TS Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 004A WXBK	4	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002253
5023 006A WXBK	6	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002261
5023 012A WXBK	12	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002279
5023 016A WXBK	16	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760017939
5023 018A WXBK	18	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002287
5023 024A WXBK	24	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002295
5023 032A WXBK	32	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760017947
5023 036A WXBK	36	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002303
5023 048A WXBK	48	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002311
5023 072A WXBK	72	0.55 in (14.0 mm)	119 lbs/kft (177 kg/km)	760002329
5023 096A WXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760002337
5023 128A WXBK	128	0.80 in (20.3 mm)	214 lbs/kft (319 kg/km)	760017954
5023 144A WXBK	144	0.80 in (20.3 mm)	214 lbs/kft (319 kg/km)	760002345
5023 288A WXBK	288	0.91 in (23.3 mm)	267 lbs/kft (398 kg/km)	760002352



TeraSPEED™ Singlemode Outdoor Central Tube Cable

The TeraSPEED central tube, fiber optic cable consists of a core of colored match clad optical fibers inside a gel-filled polybutylene terephthalate (PBT) central tube. On opposite sides of the core tube are two longitudinal, rigid, strength members (Dielectric or Metallic) that run along the cable length. Additional flexible strength members are placed radially flanking each rigid strength member. This construction is then covered with a medium density polyethylene (MDPE) outer jacket with polyester ripcords underneath. The product complies with the requirements of Telcordia Generic Requirements for Optical Fiber.



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

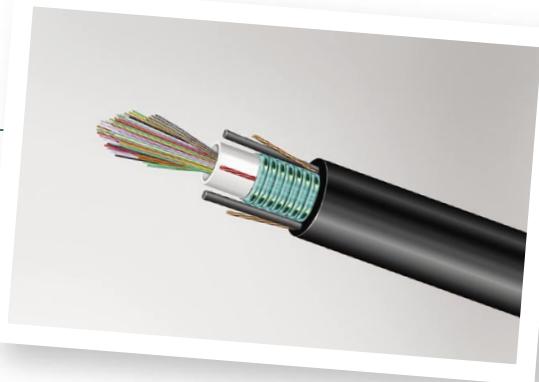
Physical Specifications:

Core Size: 8.3 micron (\leq 9 micron mode field diameter)

Buffer tubes and fibers are identified with standard color coding.

TS Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 004A WXBK	4	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004002
5022 006A WXBK	6	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004010
5022 008A WXBK	8	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004028
5022 012A WXBK	12	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004036
5022 016A WXBK	16	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760027789
5022 024A WXBK	24	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004044
5022 036A WXBK	36	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004051
5022 048A WXBK	48	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760004069
5022 072A WXBK	72	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	760004077
5022 096A WXBK	96	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	760004085



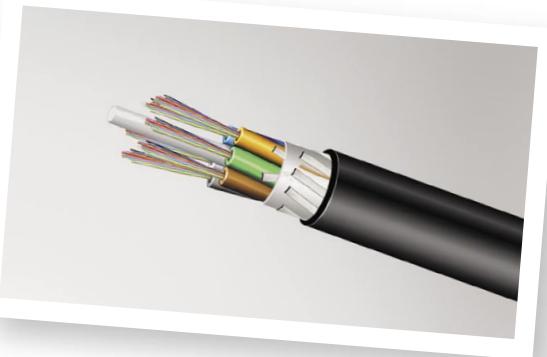
TS Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5021 004A WXBK	4	0.43 in (11.0 mm)	92 lbs/kft (137 kg/km)	760003913
5021 006A WXBK	6	0.43 in (11.0 mm)	92 lbs/kft (137 kg/km)	760003921
5021 008A WXBK	8	0.43 in (11.0 mm)	92 lbs/kft (137 kg/km)	760003939
5021 012A WXBK	12	0.43 in (11.0 mm)	92 lbs/kft (137 kg/km)	760003947
5021 024A WXBK	24	0.43 in (11.0 mm)	92 lbs/kft (137 kg/km)	760003954
5021 036A WXBK	36	0.51 in (13.0 mm)	120 lbs/kft (179 kg/km)	760003962
5021 048A WXBK	48	0.51 in (13.0 mm)	120 lbs/kft (179 kg/km)	760003970
5021 072A WXBK	72	0.59 in (15.0 mm)	151 lbs/kft (225 kg/km)	760003988
5021 096A WXBK	96	0.59 in (15.0 mm)	151 lbs/kft (225 kg/km)	760003996



TeraSPEED™ Singlemode Indoor/Outdoor Loose Tube Cable

The Plenum-Rated and Riser-Rated Indoor/Outdoor Stranded Loose Tube Dielectric Cable allows for connectivity ease and superior mid-span accessibility. The cable is designed to endure the rigors of outdoor use, but can also be run directly in plenum airspace or riser to eliminate a splice point at the building entrance. The basic construction utilizes standard 3.0 mm gel-filled (5124 Series) or dry-block (5125 Series) buffer tubes which contain up to 12 optical fibers, buffer tubes are stranded around a rigid fiberglass central strength member for protection against thermal expansion and contraction at operational temperature extremes.



A fluoropolymer thermoplastic material is used for the outer jacket and buffer tubes to provide excellent petrochemical resistance, flame propagation, and smoke generation properties that exceeds any similar cable design on the market today. These cables are designed for installation loads up to 600 lbs (2,700 N) and long term loads up to 180 lbs (800 N).

All cables meet the mechanical and environmental requirements of Telcordia GR-20-CORE Issue 2 Generic Requirements for Optical Fiber and Optical Fiber Cable and ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: 8.3 micron (\geq 9 micron mode field diameter)

Buffer tubes and fibers are identified with standard color coding.

TS Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 006A WPBK	6	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016550
5125 012A WPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016568
5125 024A WPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016576
5125 036A WPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016584
5125 048A WPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760012229
5125 072A WPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760012393

TS Riser

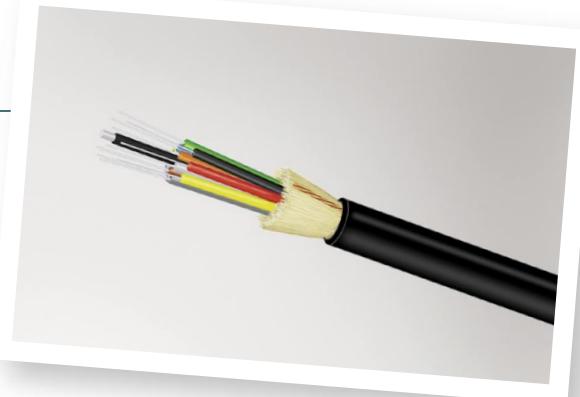
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 006A WRBK	6	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760004093
5124 012A WRBK	12	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760004101
5124 024A WRBK	24	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760004119
5124 036A WRBK	36	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760004127
5124 048A WRBK	48	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760004135
5124 072A WRBK	72	0.53 in (13.6 mm)	115 lbs/kft (172 kg/km)	760004143
5124 096A WRBK	96	0.62 in (15.7 mm)	152 lbs/kft (226 kg/km)	760004150
5124 144A WRBK	144	0.78 in (19.8 mm)	239 lbs/kft (357 kg/km)	760004168
5124 288A WRBK	288	0.92 in (23.4 mm)	298 lbs/kft (445 kg/km)	760004176

TeraSPEED™ Singlemode Indoor/Outdoor Tight Buffered Cable

The indoor/outdoor distribution cable provides network performance for the applications of today and tomorrow that can be used in non-traditional building entrance facilities.

Features and Benefits:

- 900 micron tight buffered construction allows for direct termination eliminating the need for furcation which minimizes installation expense
- Utilizes water blocking technology which makes the cable suitable for the outside plant environment, with gel-free cable access
- Black, UV stabilized jacket is resistant to chemical, moisture, abrasion and sunlight and does not require additional protection in most installations
- All-dielectric construction eliminates the need for bonding and grounding
- Tested and qualified to GR-409 with GR-20, environmental limits and; ICEA-696 and ICEA-640 environmental limits. Meets requirements for tight buffered constructions and suitable of installation in true OSP environmental conditions
- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 158°F (-30°C to 70°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: Exceeds 126 lbf/in (22 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds 4.34 lbf-ft (5.88 N/m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 8.3 micron (\geq 9 micron mode field diameter)

Cable Jacket: UV Stabilized Black

Fibers are identified with standard color coding.

TS Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5101 002A WPBK	2	Single Unit	0.17 in (4.2 mm)	10.7 lbs/kft (16 kg/km)	760037168
5101 004A WPBK	4	Single Unit	0.19 in (4.8 mm)	15.3 lbs/kft (23 kg/km)	760037176
5101 006A WPBK	6	Single Unit	0.20 in (5.1 mm)	18.7 lbs/kft (28 kg/km)	760036384
5101 006A WPBK	6	Single Unit	0.20 in (5.1 mm)	18.7 lbs/kft (28 kg/km)	760038372
5101 008A WPBK	8	Single Unit	0.23 in (5.8 mm)	25.0 lbs/kft (37 kg/km)	760037184
5101 012A WPBK	12	Single Unit	0.27 in (6.9 mm)	36.0 lbs/kft (54 kg/km)	760037192
5101 018A WPBK	18	Single Unit	0.28 in (7.1 mm)	32.2 lbs/kft (48 kg/km)	760037200
5101 024A WPBK	24	Single Unit	0.31 in (7.9 mm)	41.1 lbs/kft (62 kg/km)	760037218
5104 036A WPBK	36	Multi-unit	0.67 in (17.1 mm)	174 lbs/kft (259 kg/km)	760037895
5104 048A WPBK	48	Multi-unit	0.74 in (18.9 mm)	222 lbs/kft (330 kg/km)	760037903
5104 060A WPBK	60	Multi-unit	0.85 in (21.5 mm)	287 lbs/kft (427 kg/km)	760037911
5104 072A WPBK	72	Multi-unit	0.93 in (23.7 mm)	357 lbs/kft (532 kg/km)	760037929
5104 096A WPBK	96	Multi-unit	1.11 in (28.2 mm)	542 lbs/kft (806 kg/km)	760037937
5104 144A WPBK	144	Multi-unit	1.19 in (30.3 mm)	558 lbs/kft (831 kg/km)	760037945

TS Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5100 006A WRBK	6	Single Unit	0.22 in (5.5 mm)	18 lbs/kft (26 kg/km)	760009753
5100 012A WRBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	760004184
5103 024A WRBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760004192
5103 036A WRBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	760004200

TS LSZH

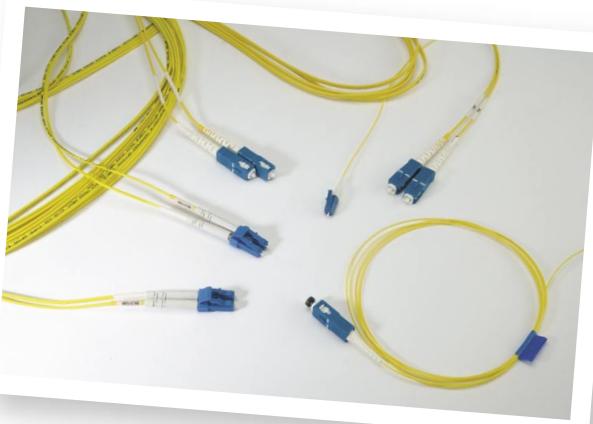
Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5102 006A WHBK	6	Single Unit	0.22 in (5.5 mm)	18 lbs/kft (26 kg/km)	760011049
5102 012A WHBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	760004218
5105 024A WHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760004226
5105 036A WHBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	760004234

TeraSPEED

TeraSPEED™ Singlemode Fiber Optic Patch Cords and Pigtails

The TeraSPEED fiber patch cord family supports the enhanced high-performance system level requirements designed into the TeraSPEED Zero Water Peak singlemode (ZWP-SM) cabling solution. The TeraSPEED family of fiber patch cords is configurable with standard LC, SC, and ST terminations, and is available in either 1.6 mm or 3.0 mm simplex or zipcord.

TeraSPEED fiber patch cords are offered in riser, plenum, and low smoke zero halogen (LSZH) options. Using our Fiber Patch Cord Product Identifier (in Fiber Reference section), fiber patch cord can be ordered with custom configured cordage size, jacket type, and length in either feet or meters, providing the ultimate in flexibility to meet any cabling infrastructure design. LSZH fiber patch cords are available for International region only.



Features and Benefits:

- 60% increase in usable bandwidth with TeraSPEED zero water peak singlemode
- Support for a wide variety of applications, including CWD
- Available 1.6 mm cordage makes these the smallest cords in the industry
- Double the density in panels/shelves/outlets, when configured with the LC connector
- Pull proof connector designs prevent unintended disconnect
- Distinctive color-coding for positive identification

Physical Specifications:

1.6 mm and 3.0 mm Patch Cords

Outside Diameter (simplex):

1.6 mm: 1.6 mm

3.0 mm: 3.0 mm

Outside Diameter (zip cord):

1.6 mm: 1.6 mm x 3.3 mm

3.0 mm: 3.0 mm x 5.9 mm

Minimum Cable Retention Strength:

1.6 mm: 11.24 lbs (50 N)

3.0 mm: 11.24 lbs (50 N)

Minimum Bend Radius:

1.6 mm: Loaded: 2.0 in (5.1 cm)
Unloaded: 1.4 in (3.5 cm)

3.0 mm: Loaded: 2.3 in (5.8 cm)
Unloaded: 1.4 in (3.5 cm)

Maximum Cordage Tensile Load:

1.6 mm: Short Term: 70 lbs (311 N)
Long Term: 21 lbs (93 N)

3.0 mm: Short Term: 90 lbs (400 N)
Long Term: 27 lbs (120 N)

Optical Specifications:

Fiber Type: TeraSPEED ZWP-SM

Max. Attenuation:

0.70 dB/km @ 1,310 nm

0.70 dB/km @ 1,383 nm

0.70 dB/km @ 1,550 nm

Pigtails

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
TeraSPEED LC / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCWLCUC11-R
TeraSPEED SC / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCWSCUC11-R
TeraSPEED STII+ / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCWEPU11-R
TeraSPEED LC / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCWLCUC01-R
TeraSPEED SC / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCWSCUC01-R
TeraSPEED STII+ / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCWEPU01-R

1.6 mm Patch Cords

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
TeraSPEED LC / LC 1.6 mm Duplex	Riser	2	Configurable	FPCWLCLC22-R
TeraSPEED LC / LC 1.6 mm Simplex	Riser	1	Configurable	FPCWLCLC21-R
TeraSPEED LC / SC 1.6 mm Duplex	Riser	2	Configurable	FPCWLSC22-R
TeraSPEED LC / STII+ 1.6 mm Duplex	Riser	2	Configurable	FPCWLCEP22-R
TeraSPEED LC / STII+ 1.6 mm Simplex	Riser	1	Configurable	FPCWLCEP21-R
TeraSPEED SC / SC 1.6 mm Duplex	Riser	2	Configurable	FPCWSCSC22-R
TeraSPEED SC / SC 1.6 mm Simplex	Riser	1	Configurable	FPCWSCSC21-R
TeraSPEED SC / STII+ 1.6 mm Duplex	Riser	2	Configurable	FPCWSCEP22-R
TeraSPEED SC / STII+ 1.6 mm Simplex	Riser	1	Configurable	FPCWSCEP21-R
TeraSPEED LC / LC 1.6 mm Duplex	LSZH*	2	Configurable	FPCWLCLC22-H
TeraSPEED SC / SC 1.6 mm Duplex	LSZH*	2	Configurable	FPCWSCSC22-H
TeraSPEED SC / SC 1.6 mm Duplex	LSZH*	2	Configurable	FPCWLSC22-H

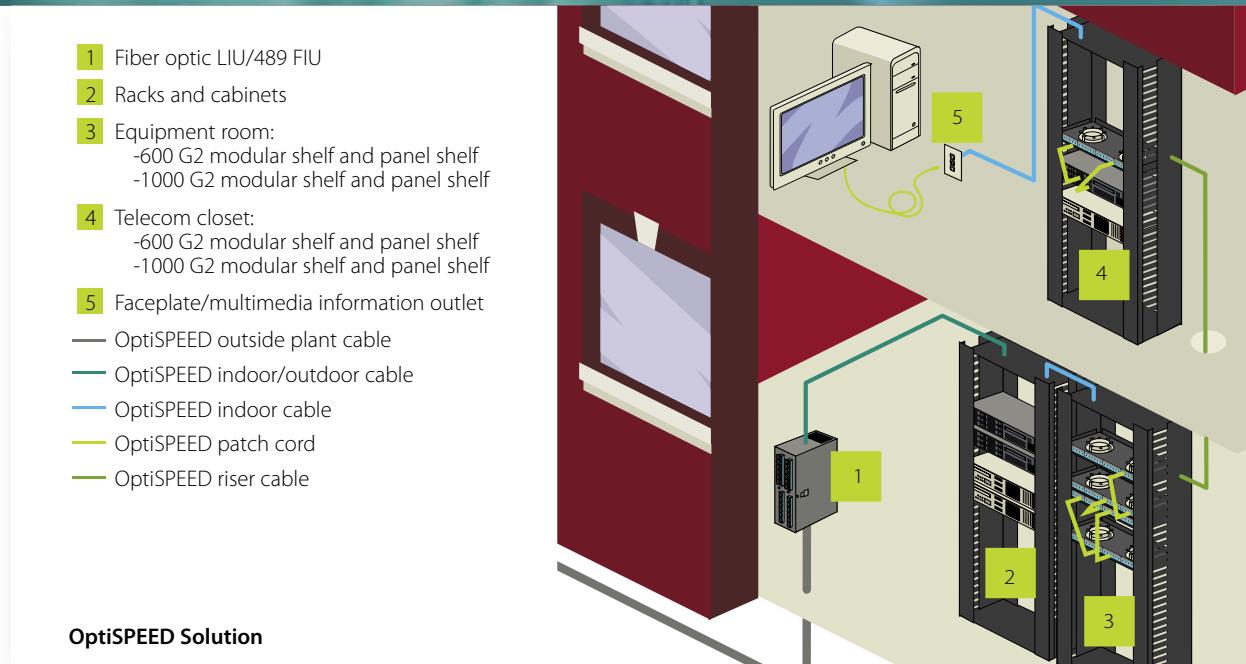
3.0 mm Patch Cords

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
TeraSPEED SC / SC 3.0 mm Duplex	Riser	2	Configurable	FPCWSCSC32-R
TeraSPEED SC / SC 3.0 mm Simplex	Riser	1	Configurable	FPCWSCSC31-R
TeraSPEED SC / STII+ 3.0 mm Duplex	Riser	2	Configurable	FPCWSCEP32-R
TeraSPEED SC / STII+ 3.0 mm Simplex	Riser	1	Configurable	FPCWSCEP31-R
TeraSPEED STII+ / STII 3.0 mm Duplex	Riser	2	Configurable	FPCWEPEP32-R
TeraSPEED STII+ / STII 3.0 mm Simplex	Riser	1	Configurable	FPCWEPEP31-R
TeraSPEED LC-LC 3.0 mm Simplex	Plenum	1	Configurable	FPCWLCLC31-P
TeraSPEED LC-LC 3.0 mm Duplex	Plenum	2	Configurable	FPCWLCLC32-P
TeraSPEED SC-SC 3.0 mm Simplex	Plenum	1	Configurable	FPCWSCSC31-P
TeraSPEED SC-SC 3.0 mm Duplex	Plenum	2	Configurable	FPCWSCSC32-P
TeraSPEED STII -STII 3.0 mm Simplex	Plenum	1	Configurable	FPCWSTST31-P
TeraSPEED STII -STII 3.0 mm Duplex	Plenum	2	Configurable	FPCWSTST32-P
TeraSPEED LC-STII 3.0 mm Simplex	Plenum	1	Configurable	FPCWLCLT31-P
TeraSPEED LC-STII 3.0 mm Duplex	Plenum	2	Configurable	FPCWLCLT32-P
TeraSPEED LC-SC 3.0 mm Simplex	Plenum	1	Configurable	FPCWLSC31-P
TeraSPEED LC-SC 3.0 mm Duplex	Plenum	2	Configurable	FPCWLSC32-P
TeraSPEED SC-STII 3.0 mm Simplex	Plenum	1	Configurable	FPCWSCST31-P
TeraSPEED SC-STII 3.0 mm Duplex	Plenum	2	Configurable	FPCWSCST32-P
TeraSPEED SC / SC 3.0 mm Duplex	LSZH*	2	Configurable	FPCWSCSC32-H
TeraSPEED LC-STII 3.0 mm Duplex	LSZH*	2	Configurable	FPCWSTST32-H
TeraSPEED SC-STII 3.0 mm Duplex	LSZH*	2	Configurable	FPCWSCST32-H
TeraSPEED LC-STII 3.0 mm Duplex	LSZH*	2	Configurable	FPCWLCLT32-H

* LSZH fiber optic patch cords are offered in international only.

• Hybrid MTRJ fiber patch cords are also available. Please refer to the Fiber Patch Cord Product Identifier for ordering information.

OptiSPEED® Solution Multimode



Features and Benefits:

- Standard multimode fiber
- Lowest multimode fiber channel loss available, up to 50% less than other systems
- Lowest loss small form factor connector available in the industry - LC connector

SYSTIMAX OptiSPEED Solution was developed to provide a fiber optic solution that is the backbone for today's performance requirements. 62.5 micron multimode fiber provides high speed links to support signal transmission up to the TIA standard of 300 meters within a building and up to 2,000 meters or 2 kilometers within a campus for many of today's legacy LAN's.

The OptiSPEED channel, including the low loss LC connector, supports the 1000BASE-SX Gbps ethernet LAN, up to 300 meters with 6 LC connections. OptiSPEED Solution supports up to 600 meter for 1000BASE-LX, Gbps ethernet LAN applications. In addition, OptiSPEED Solution supports 10 Gbps ethernet using CWDM 1,300 nm lasers to 300 meters.

In addition to LC connectors, OptiSPEED Solution supports the duplex SC connector as well as the ST II+ connector although over restricted applications and number of connections. The LC is a small form factor connector that allows two LC connectors to fit in the space of a traditional connector such as the SC or ST II+. An extensive line of wall and rack mounted cabinets and telecommunication outlets for building entrance facilities, equipment rooms, telephone closets/floor distributors and work areas are available.

SYSTIMAX channels comprised exclusively of OptiSPEED multimode passive products, end-to-end, are capable of delivering up to 10 Gbps in accordance with application standards.

OptiSPEED products include:

- Building Cable
- Indoor/Outdoor Cable
- Outside Plant Cable (where appropriate for the enterprise market)
- LC connectors (SC or ST II+ connectors available for limited applications and connections)
- Splice and Termination Shelves
- Multimedia Outlets and Boxes
- Connectorized Patch Cords

OptiSPEED® Specifications

OptiSPEED Optical Fiber

62.5 Micron, Multimode Fiber

Physical Characteristics

Core Diameter	$62.5 \pm 2.5 \mu\text{m}$
Cladding Diameter	$125.0 \pm 1.0 \mu\text{m}$
Core/Clad Offset	$\leq 1.5 \mu\text{m}$
Coating Diameter (Uncolored)	$245 \pm 10 \mu\text{m}$
Coating Diameter (Colored)	$254 \pm 7 \mu\text{m}$
Coating/Cladding Concentricity Error, Max.	$6 \mu\text{m}$
Clad Non-Circularity	$\leq 1\%$

Mechanical Characteristics

Proof Test	100 kpsi (0.69 Gpa)
Coating Strip Force	0.3 - 2.0 lbf (1.3 - 8.9 N)
Dynamic Fatigue Parameter (nd)	≥ 18
Macrobending, Max. (100 turns @ 75 mm mandrel)	0.50 dB max. @ 850 nm and 1,300 nm

Optical Characteristics, Wavelength Specific

	850 nm	1,300 nm
Max. Attenuation, Loose Tube Cable	3.0 dB/km	1.0 dB/km
Max. Attenuation, Tight Buffer Cable	3.4 dB/km	1.0 dB/km
Bandwidth, OFL	200 MHz-km	500 MHz-km
Group Refractive Index	1.496	1.491
1 Gb Ethernet Distance	300 m	550 m

Optical Characteristics, General

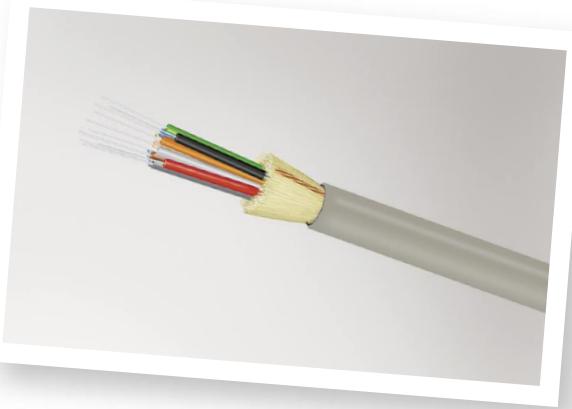
Numerical Aperature	0.275 ± 0.015
Point Defects, Max.	0.15 dB
Zero Dispersion Wavelength	1,320-1,365 nm
Zero Dispersion Slope	0.097 ps/[km-nm-nm]

Environmental Characteristics

Temperature Dependence -76°F to 185°F (-60°C to 85°C)	$\leq 0.20 \text{ dB}$
Temperature Humidity Cycling 14°F to 185°F (-10°C to 85°C) up to 95% RH	$\leq 0.20 \text{ dB}$
Water Immersion, 73.4°F (23°C)	$\leq 0.20 \text{ dB}$
Heat Aging, 185°F (85°C)	$\leq 0.20 \text{ dB}$

OptiSPEED® Multimode Building Cables

Designed and engineered for fiber-to-the-desk workstation applications, providing premise distribution systems with one cable that directly connects the building entrance splice to the user's desk-top equipment in both the horizontal and vertical riser. Consists of 2-12 individual 62.5/125 micron fibers, each with a color-coded buffer for easy installation. Reinforced with aramid yarn for superior strength. Contains no metallic elements.



- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 57.3 lbf/in (10 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 4.34 lbf-ft (5.8 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 62.5 micron

Fibers are identified with standard color coding.



OS Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5201 002A MPSL	2	Single Unit	0.15 in (3.9 mm)	8.8 lbs/kft (13.1 kg/km)	Slate	700009657
5201 004A MPSL	4	Single Unit	0.17 in (4.4 mm)	1.22 lbs/kft (18 kg/km)	Slate	700009582
5201 006A MPSL	6	Single Unit	0.19 in (4.8 mm)	1.51 lbs/kft (22 kg/km)	Slate	700009517
5201 008A MPSL	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	Slate	700009442
5201 012A MPSL	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	Slate	700009392
5201 018A MPSL	18	Single Unit	0.31 in (7.9 mm)	40.9 lbs/kft (61 kg/km)	Slate	760018648
5201 024A MPSL	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	Slate	760078663
5201 002A MPOR	2	Single Unit	0.15 in (3.9 mm)	8.8 lbs/kft (13.1 kg/km)	Orange	700009665
5201 004A MPOR	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	Orange	700009590
5201 006A MPOR	6	Single Unit	0.19 in (4.8 mm)	15.1 lbs/kft (22 kg/km)	Orange	700009525
5201 012A MPOR	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	Orange	700009400
5201 024A MPOR	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	Orange	760018655
5201 004A MPRD	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	Red	760025478
5301 018A MPSL	18	Multi-unit	0.45 in (11.4 mm)	82.5 lbs/kft (123 kg/km)	Slate	700009319
5301 024A MPSL	24	Multi-unit	0.52 in (13.1 mm)	108.1 lbs/kft (161 kg/km)	Slate	700009277
5301 036A MPSL	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	Slate	700009186
5301 048A MPSL	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	Slate	700009095
5301 072A MPSL	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	Slate	700009004
5301 144A MPSL	144	Multi-unit	0.95 in (24.1 mm)	330.8 lbs/kft (492 kg/km)	Slate	760032821
5301 024A MPOR	24	Multi-unit	0.52 in (13.1 mm)	108.1 lbs/kft (161 kg/km)	Orange	700009285

OS Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5200 002A MRSL	2	Single Unit	0.16 in (4.6 mm)	8.6 lbs/kft (12.9 kg/km)	Slate	700009640
5200 004A MRSL	4	Single Unit	0.19 in (4.8 mm)	13.1 lbs/kft (19.4 kg/km)	Slate	700009574
5200 006A MRSL	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	Slate	700009509
5200 008A MRSL	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	Slate	700009434
5200 012A MRSL	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	Slate	700009384
5200 018A MRSL	18	Single Unit	0.30 in (7.7 mm)	32.1 lbs/kft (48 kg/km)	Slate	760018523
5200 024A MRSL	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	Slate	760018531
5200 002A MROR	2	Single Unit	0.16 in (4.1 mm)	8.6 lbs/kft (12.9 kg/km)	Orange	700010184
5200 004A MROR	4	Single Unit	0.19 in (4.8 mm)	13.1 lbs/kft (19.4 kg/km)	Orange	700012172
5200 006A MROR	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	Orange	700010176
5200 008A MROR	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	Orange	700012180
5200 012A MROR	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	Orange	700010168
5300 018A MRSL	18	Multi-unit	0.48 in (12.3 mm)	99.8 lbs/kft (148 kg/km)	Slate	700009301
5300 024A MRSL	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	Slate	700009269
5300 036A MRSL	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	Slate	700009178
5300 048A MRSL	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	Slate	700009087
5300 072A MRSL	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	Slate	700008998

OS LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5202 002A MHOR	2	Single Unit	0.15 in (3.9 mm)	7.82 lbs/kft (11.6 kg/km)	Orange	700008485
5202 004A MHOR	4	Single Unit	0.19 in (4.8 mm)	14.3 lbs/kft (21 kg/km)	Orange	700008477
5202 006A MHOR	6	Single Unit	0.20 in (5.2 mm)	16.4 lbs/kft (24 kg/km)	Orange	700008469
5202 008A MHOR	8	Single Unit	0.22 in (5.5 mm)	19.1 lbs/kft (28 kg/km)	Orange	700008451
5202 012A MHOR	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	Orange	700008444
5302 024A MHOR	24	Multi-unit	0.56 in (14.2 mm)	116.6 lbs/kft (174 kg/km)	Orange	700009293
5302 036A MHOR	36	Multi-unit	0.59 in (14.9 mm)	118.5 lbs/kft (176 kg/km)	Orange	700009194
5302 048A MHOR	48	Multi-unit	0.65 in (16.4 mm)	150.3 lbs/kft (224 kg/km)	Orange	700009103
5302 072A MHOR	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	Orange	700009012

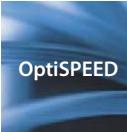
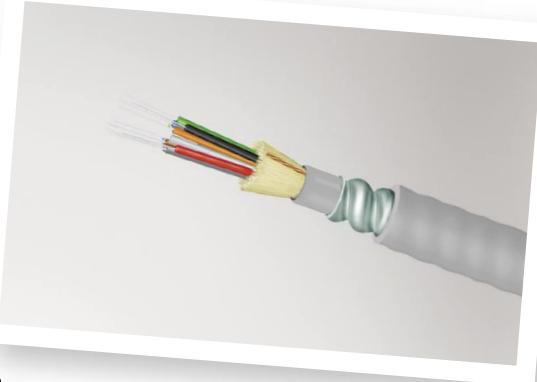
OptiSPEED® Multimode Armored Cables

SYSTIMAX Interlocking Armored Fiber Optic Cable provides superior protection and space savings. It provides installation protection from bending and excessive pull tension, significant time and labor reductions versus conduit or interduct installations and increased installation and design flexibility.

SYSTIMAX Interlocking Armor can be used anywhere additional protection and security for the fiber cable is desired. Applications include building backbone, zone distribution, raised floor, data centers and storage area networks (SANs). Vertical markets include: industrial, manufacturing, airports, stadiums, military and any other vertical where increased protection and security for the fiber cable is desired. These include: financial, hospitals, educational facilities and many more.

The SYSTIMAX Interlocking Armor is applied spirally around any premise distribution cable and is available in either steel or aluminum. The armored cable is then over jacketed with a sheath. This sheath is color-coded to the fiber type contained within, and provides not only the ability to print the armor with all relevant information on the cable inside, but also allows for easier handling and pulling.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 486.8 lbf/in (85 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 25.8 lbf-ft (35 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 62.5 micron

Fibers are identified with standard color coding.

OS Steel Armored, Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5201 002A MPOR SPOR	2	Single Unit	0.56 in (14.1 mm)	157 lbs/kft (233 kg/km)	Orange	700009665-SPOR
5201 002A MPSL SPSL	2	Single Unit	0.56 in (14.1 mm)	157 lbs/kft (233 kg/km)	Slate	700009657-SPSL
5201 004A MPOR SPOR	4	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	Orange	700009590-SPOR
5201 004A MPSL SPSL	4	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	Slate	700009582-SPSL
5201 006A MPOR SPOR	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	Orange	700009525-SPOR
5201 006A MPSL SPSL	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	Slate	700009517-SPSL
5201 008A MPSL SPSL	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	Slate	700009442-SPSL
5201 012A MPSL SPSL	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	Slate	700009392-SPSL
5201 012A MPOR SPOR	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	Orange	700009400-SPOR
5201 018A MPSL SPSL	18	Single Unit	0.66 in (16.6 mm)	225 lbs/kft (334 kg/km)	Slate	760018648-SPSL
5201 024A MPOR SPOR	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	Orange	760018655-SPOR
5201 024A MPSL SPSL	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	Slate	760018663-SPSL
5201 024A MPSL SPSL	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	Slate	760078663-SPSL
5301 018A MPSL SPSL	18	Multi-unit	0.76 in (19.2 mm)	302 lbs/kft (450 kg/km)	Slate	700009319-SPSL
5301 024A MPOR SPOR	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	Orange	700009285-SPOR
5301 024A MPSL SPSL	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	Slate	700009277-SPSL

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5301 036A MPSL SPSL	36	Multi-unit	0.86 in (21.7 mm)	384 lbs/kft (572 kg/km)	Slate	700009186-SPSL
5301 048A MPSL SPSL	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	Slate	700009095-SPSL
5301 072A MPSL SPSL	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	Slate	700009004-SPSL
5301 144A MPSL SPSL	144	Multi-unit	1.26 in (31.9 mm)	700 lbs/kft (1042 kg/km)	Slate	760032821-SPSL

OS Steel Armored, Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5200 002A MROR SROR	2	Single Unit	0.56 in (14.1 mm)	149 lbs/kft (222 kg/km)	Orange	700010184-SROR
5200 002A MRSL SRSL	2	Single Unit	0.56 in (14.1 mm)	149 lbs/kft (222 kg/km)	Slate	700009640-SRSL
5200 004A MROR SROR	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	Orange	700012172-SROR
5200 004A MRSL SRSL	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	Slate	700009574-SRSL
5200 006A MROR SROR	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	Orange	700010176-SROR
5200 006A MRSL SRSL	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	Slate	700009509-SRSL
5200 008A MROR SROR	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	Orange	700012180-SROR
5200 008A MRSL SRSL	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	Slate	700009434-SRSL
5200 012A MROR SROR	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	Orange	700010168-SROR
5200 012A MRSL SRSL	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	Slate	700009384-SRSL
5200 018A MRSL SRSL	18	Single Unit	0.66 in (16.6 mm)	207 lbs/kft (308 kg/km)	Slate	760018523-SRSL
5200 024A MRSL SRSL	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	Slate	760018531-SRSL
5300 018A MRSL SRSL	18	Multi-unit	0.81 in (20.4 mm)	327 lbs/kft (486 kg/km)	Slate	700009301-SRSL
5300 024A MRSL SRSL	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	Slate	700009269-SRSL
5300 036A MRSL SRSL	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	Slate	700009178-SRSL
5300 048A MRSL SRSL	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	Slate	700009087-SRSL
5300 072A MRSL SRSL	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	Slate	700008998-SRSL
5300 096A MRSL SRSL	96	Multi-unit	1.26 in (31.9 mm)	689 lbs/kft (1026 kg/km)	Slate	760026815-SRSL

OS Steel Armored, LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5202 002A MHOR SHOR	2	Single Unit	0.56 in (14.1 mm)	151 lbs/kft (225 kg/km)	Orange	700008485-SHOR
5202 004A MHOR SHOR	4	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	Orange	700008477-SHOR
5202 006A MHOR SHOR	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	Orange	700008469-SHOR
5202 008A MHOR SHOR	8	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (242 kg/km)	Orange	700008451-SHOR
5202 012A MHOR SHOR	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	Orange	700008444-SHOR
5202 024A MHOR SHOR	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	Orange	760019083-SHOR
5302 024A MHOR SHOR	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	Orange	700009293-SHOR
5302 036A MHOR SHOR	36	Multi-unit	0.91 in (23.0 mm)	385 lbs/kft (573 kg/km)	Orange	700009194-SHOR
5302 048A MHOR SHOR	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	Orange	700009103-SHOR
5302 072A MHOR SHOR	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	Orange	700009012-SHOR

OS Aluminum Armored, Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5201 002A MPOR APOR	2	Single Unit	0.56 in (14.1 mm)	100 lbs/kft (148 kg/km)	Orange	700009665-APOR
5201 002A MPSL APSL	2	Single Unit	0.56 in (14.1 mm)	100 lbs/kft (148 kg/km)	Slate	700009657-APSL
5201 004A MPOR APOR	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	Orange	700009590-APOR
5201 004A MPSL APSL	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	Slate	700009582-APSL
5201 006A MPOR APOR	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	Orange	700009525-APOR
5201 006A MPSL APSL	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	Slate	700009517-APSL
5201 008A MPSL APSL	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	Slate	700009442-APSL
5201 012A MPSL APSL	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	Slate	700009392-APSL
5201 012A MPOR APOR	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	Orange	700009400-APOR
5201 018A MPSL APSL	18	Single Unit	0.66 in (16.6 mm)	153 lbs/kft (227 kg/km)	Slate	760018648-APSL
5201 018A MPSL APSL	18	Single Unit	0.66 in (16.6 mm)	153 lbs/kft (227 kg/km)	Slate	760018663-APSL
5201 024A MPOR APOR	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	Orange	760018655-APOR
5201 024A MPSL APSL	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	Slate	760078663-APSL
5301 018A MPSL APSL	18	Multi-unit	0.76 in (19.2 mm)	215 lbs/kft (320 kg/km)	Slate	700009319-APSL
5301 024A MPOR APOR	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	Orange	700009285-APOR
5301 024A MPSL APSL	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	Slate	700009277-APSL
5301 036A MPSL APSL	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	Slate	700009186-APSL
5301 048A MPSL APSL	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	Slate	700009095-APSL
5301 072A MPSL APSL	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	Slate	700009004-APSL
5301 144A MPSL APSL	144	Multi-unit	1.26 in (31.9 mm)	539 lbs/kft (802 kg/km)	Slate	760032821-APSL



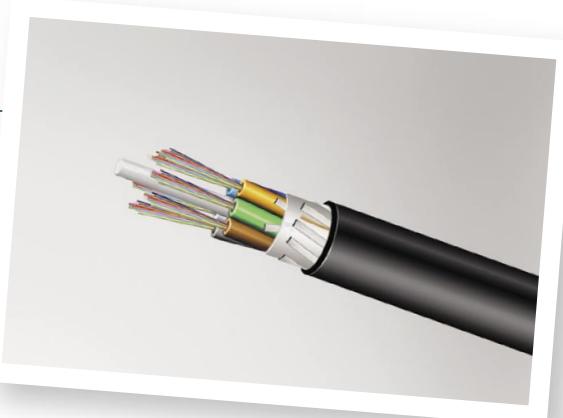
OS Aluminum Armored, Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5200 002A MROR AROR	2	Single Unit	0.56 in (14.1 mm)	92 lbs/kft (137 kg/km)	Orange	700010184-AROR
5200 002A MRSL ARSL	2	Single Unit	0.56 in (14.1 mm)	92 lbs/kft (137 kg/km)	Slate	700009640-ARSL
5200 004A MROR AROR	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	Orange	700012172-AROR
5200 004A MRSL ARSL	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	Slate	700009574-ARSL
5200 006A MROR AROR	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	Orange	700010176-AROR
5200 006A MRSL ARSL	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	Slate	700009509-ARSL
5200 008A MROR AROR	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	Orange	700012180-AROR
5200 008A MRSL ARSL	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	Slate	700009434-ARSL
5200 012A MROR AROR	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	Orange	700010168-AROR
5200 012A MRSL ARSL	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	Slate	700009384-ARSL
5200 018A MRSL ARSL	18	Single Unit	0.66 in (16.6 mm)	135 lbs/kft (201 kg/km)	Slate	760018523-ARSL
5200 024A MRSL ARSL	24	Single Unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	Slate	760018531-ARSL
5300 018A MRSL ARSL	18	Multi-unit	0.81 in (20.4 mm)	232 lbs/kft (345 kg/km)	Slate	700009301-ARSL
5300 024A MRSL ARSL	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	Slate	700009269-ARSL
5300 036A MRSL ARSL	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	Slate	700009178-ARSL
5300 048A MRSL ARSL	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	Slate	700009087-ARSL
5300 072A MRSL ARSL	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	Slate	700008998-ARSL
5300 096A MRSL ARSL	96	Multi-unit	1.26 in (31.9 mm)	528 lbs/kft (786 kg/km)	Slate	760026815-ARSL

OptiSPEED® Multimode Outdoor Loose Tube Cable

The OptiSPEED Loose Tube Dielectric cable is constructed with industry standard 3 mm gel-filled, buffer tubes, stranded around a central strength member. The buffer tubes are compatible with standard hardware, cable routing and fan-out kits.

The OptiSPEED Loose Tube Metallic Stranded is armored with a corrugated, polymer coated steel tape and constructed with industry standard 3 mm gel-filled, buffer tubes, stranded around a central strength member. The armor layer provides added crush protection and meets the Telcordia requirements for superior armored cable. The buffer tubes are compatible with standard hardware, cable routing and fan-out kits.



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

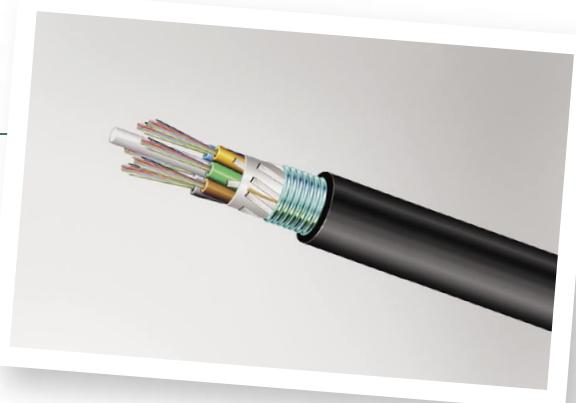
Physical Specifications:

Core Size: 62.5 micron

Buffer tubes and fibers are identified with standard color coding.

OS Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 004A MXBK	4	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002683
5024 006A MXBK	6	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002691
5024 012A MXBK	12	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002709
5024 018A MXBK	18	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002717
5024 024A MXBK	24	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002725
5024 036A MXBK	36	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002733
5024 048A MXBK	48	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760002741
5024 072A MXBK	72	0.49 in (12.6 mm)	74 lbs/kft (110 kg/km)	760002758
5024 096A MXBK	96	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760002766
5024 288A MXBK	288	0.86 in (21.8 mm)	192 lbs/kft (286 kg/km)	760002774



OS Metallic

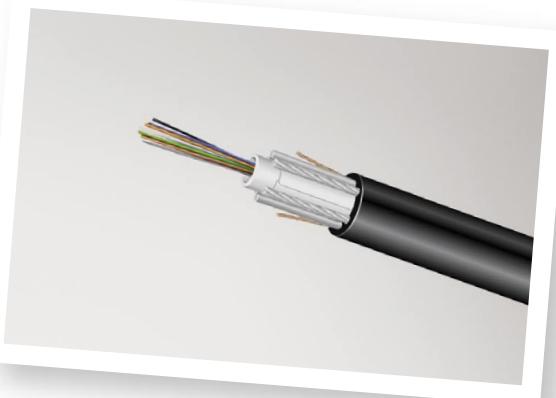
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 004A MXBK	4	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002360
5023 006A MXBK	6	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002378
5023 012A MXBK	12	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002386
5023 018A MXBK	18	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002394
5023 024A MXBK	24	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002402
5023 036A MXBK	36	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002410
5023 048A MXBK	48	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760002428
5023 072A MXBK	72	0.55 in (14.0 mm)	119 lbs/kft (177 kg/km)	760002436
5023 096A MXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760002444
5023 288A MXBK	288	0.91 in (23.3 mm)	267 lbs/kft (398 kg/km)	760002451



OptiSPEED® Multimode Outdoor Central Tube Cable

The OptiSPEED Multimode Outdoor Central Tube Cable is designed for use in underground conduit, direct buried, or aerial applications. It has a core containing 4 to 96 multimode 62.5/125 micron fibers, which are separated into color-coded binder groups surrounded by a core tube. The core is gel-filled with water-blocking compound.

The dielectric cable's sheath has non-metallic strength members parallel to the core and outside the core. The metallic cable's sheath has two steel wires placed opposite one another parallel to the core and outside the core. Steel armor provides protection from rodents and lightning. Sheath jacket material is medium-density Polyethylene (MDPE) for maximum environmental protection.



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 62.5 micron

Buffer tubes and fibers are identified with standard color coding.

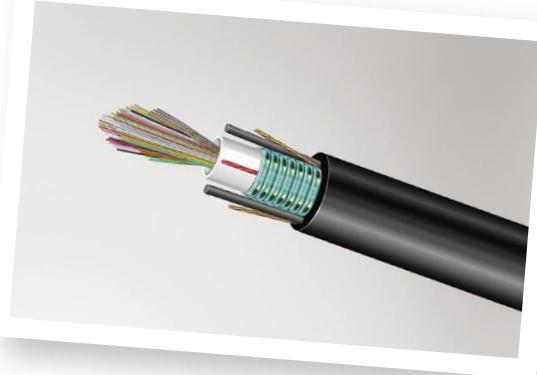
OS Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 004A MXBK	4	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010739
5022 006A MXBK	6	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010721
5022 008A MXBK	8	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010713
5022 012A MXBK	12	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010705
5022 018A MXBK	18	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010697
5022 024A MXBK	24	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010689
5022 036A MXBK	36	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010671
5022 048A MXBK	48	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	700010663
5022 060A MXBK	60	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	700010655
5022 072A MXBK	72	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	700010648
5022 096A MXBK	96	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	700010630

OS Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5021 004A MXBK	4	0.43 in (11.0 mm)	92 lbs/kft (137 kg/m)	700010622
5021 006A MXBK	6	0.43 in (11.0 mm)	92 lbs/kft (137 kg/m)	700010614
5021 008A MXBK	8	0.43 in (11.0 mm)	92 lbs/kft (137 kg/m)	700010606
5021 012A MXBK	12	0.43 in (11.0 mm)	92 lbs/kft (137 kg/m)	700010598
5021 024A MXBK	24	0.43 in (11.0 mm)	92 lbs/kft (137 kg/m)	700010580
5021 036A MXBK	36	0.51 in (13.0 mm))	92 lbs/kft (137 kg/m)	700010572
5021 048A MXBK	48	0.51 in (13.0 mm)	120 lbs/kft (179 kg/m)	700010564
5021 072A MXBK	72	0.59 in (15.0 mm)	151 lbs/kft (225 kg/m)	700010556
5021 096A MXBK	96	0.59 in (15.0 mm)	151 lbs/kft (225 kg/m)	700010549

OptiSPEED



OptiSPEED® Multimode Indoor/Outdoor Loose Tube Cable

The Plenum-Rated and Riser-Rated Indoor/Outdoor Stranded Loose Tube Dielectric Cable allows for connectivity ease and superior mid-span accessibility. The cable is designed to endure the rigors of outdoor use, but can also be run directly in plenum airspace or riser to eliminate a splice point at the building entrance. The basic construction utilizes standard 3.0 mm gel-filled (5124 series) or dry block (5125 series) buffer tubes which contain up to 12 optical fibers. Buffer tubes are stranded around a rigid fiberglass central strength member for protection against thermal expansion and contraction at operational temperature extremes.

A fluoropolymer thermoplastic material is used for the outer jacket and buffer tubes to provide excellent petrochemical resistance, flame propagation, and smoke generation properties that exceeds any similar cable design on the market today. These cables are designed for installation loads up to 600 lbs (2,700 N) and long term loads up to 180 lbs (800 N).

All cables meet the mechanical and environmental requirements of Telcordia GR-20-CORE Issue 2 Generic Requirements for Optical Fiber and Optical Fiber Cable and ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

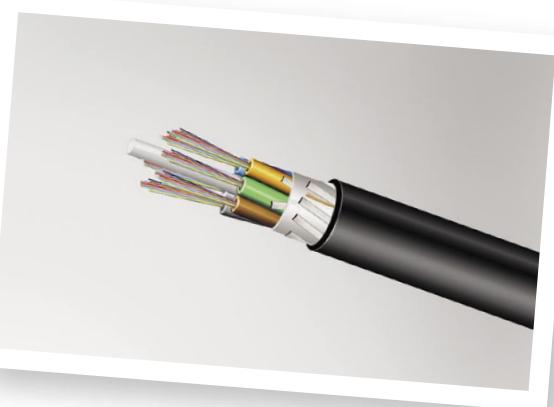
Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: 62.5 micron

Buffer tubes and fibers are identified with standard color coding.



OS Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 006A MPBK	6	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016626
5125 012A MPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016634
5125 024A MPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016642
5125 036A MPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016659
5125 048A MPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016667
5125 072A MPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760016675

OS Riser

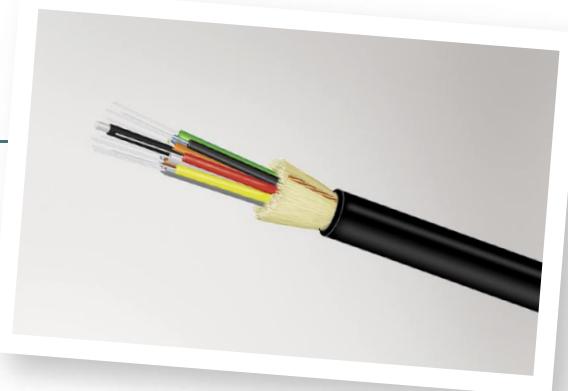
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 006A MRBK	6	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	700191430
5124 012A MRBK	12	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	700191448
5124 024A MRBK	24	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	700191455
5124 036A MRBK	36	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	700191463
5124 048A MRBK	48	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	700191471
5124 072A MRBK	72	0.53 in (13.6 mm)	115 lbs/kft (172 kg/km)	700191489
5124 096A MRBK	96	0.62 in (15.7 mm)	152 lbs/kft (226 kg/km)	700191497
5124 144A MRBK	144	0.78 in (19.8 mm)	239 lbs/kft (357 kg/km)	700191505
5124 288A MRBK	288	0.92 in (23.4 mm)	298 lbs/kft (445 kg/km)	700191513

OptiSPEED® Multimode Indoor/Outdoor Tight Buffered Cable

The indoor/outdoor distribution cable provides network performance for the applications of today and tomorrow that can be used in non-traditional building entrance facilities.

Features and Benefits:

- 900 micron tight buffered construction allows for direct termination eliminating the need for furcation which minimizes installation expense
- Utilizes water blocking technology which makes the cable suitable for the outside plant environment, with gel-free cable access
- Black, UV stabilized jacket is resistant to chemical, moisture, abrasion and sunlight and does not require additional protection in most installations
- All-dielectric construction eliminates the need for bonding and grounding
- Tested and qualified to GR-409 with GR-20, environmental limits and ICEA-696 and ICEA-640 environmental limits. Meets requirements for tight buffered constructions and suitable of installation in true OSP environmental conditions
- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 158°F (-30°C to 70°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: Exceeds 126 lbf/in (22 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds 4.34 lbf-ft (5.88 N/m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: 62.5 micron

Fibers are identified with standard color coding.

OS Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5101 002A MPBK	2	Single Unit	0.17 in (4.2 mm)	10.7 lbs/kft (16 kg/km)	760037226
5101 004A MPBK	4	Single Unit	0.19 in (4.8 mm)	15.3 lbs/kft (23 kg/km)	760037234
5101 006A MPBK	6	Single Unit	0.20 in (5.1 mm)	18.7 lbs/kft (28 kg/km)	760036392
5101 008A MPBK	8	Single Unit	0.23 in (5.8 mm)	25.0 lbs/kft (37 kg/km)	760037242
5101 012A MPBK	12	Single Unit	0.27 in (6.9 mm)	36.0 lbs/kft (54 kg/km)	760037259
5101 018A MPBK	18	Single Unit	0.28 in (7.1 mm)	32.2 lbs/kft (48 kg/km)	760037267
5101 024A MPBK	24	Single Unit	0.31 in (7.9 mm)	41.1 lbs/kft (62 kg/km)	760037275
5104 036A MPBK	36	Multi-unit	0.67 in (17.1 mm)	174 lbs/kft (259 kg/km)	760037952
5104 048A MPBK	48	Multi-unit	0.74 in (18.9 mm)	222 lbs/kft (330 kg/km)	760037960
5104 060A MPBK	60	Multi-unit	0.85 in (21.5 mm)	287 lbs/kft (427 kg/km)	760037978
5104 072A MPBK	72	Multi-unit	0.93 in (23.7 mm)	357 lbs/kft (532 kg/km)	760037986
5104 096A MPBK	96	Multi-unit	1.11 in (28.2 mm)	542 lbs/kft (806 kg/km)	760037994
5104 144A MPBK	144	Multi-unit	1.19 in (30.3 mm)	558 lbs/kft (831 kg/km)	760038000

OS Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5100 004A MRBK	4	Single Unit	0.20 in (5.1 mm)	14 lbs/kft (20 kg/km)	760005165
5100 012A MRBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	700211279
5103 024A MRBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	700211287
5103 036A MRBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	700211295

OS LSZH

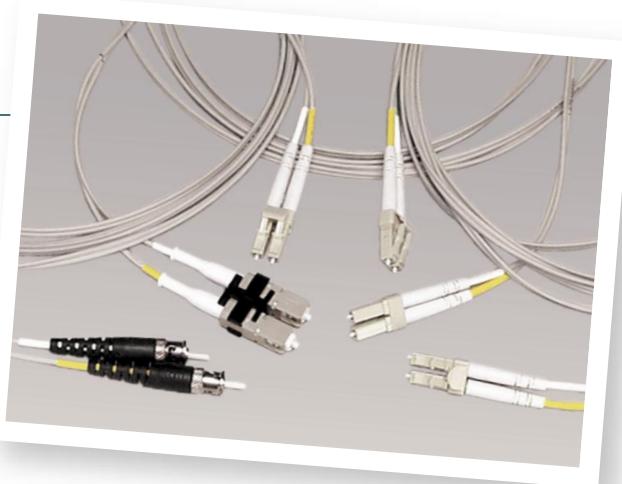
Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5102 012A MHBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	700010390
5105 024A MHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	700008543
5105 036A MHBK	36	Multi-unit	0.73 in (18.5 mm)	155 lbs/kft (231 kg/km)	700008519



OptiSPEED® Multimode Fiber Optic Patch Cords and Pigtails

Fiber patch cords are used to connect fiber optic equipment to fiber optic cross-connects, inter-connects and information outlets. The SYSTIMAX OptiSPEED fiber optic patch cord family is used to support legacy 62.5 µm multimode fiber applications, and is configurable with standard LC, SC, and ST terminations. The patch cords are available in either 1.6 mm or 3.0 mm simplex or duplex zipcord.

OptiSPEED MM fiber patch cords are offered in riser, plenum, and low smoke zero halogen (LSZH) options. Using the Fiber Patch Cord Product Identifier (in Fiber Reference section), fiber patch cord can be ordered with custom configured cordage size, jacket type, and length in either feet or meters, providing the ultimate in flexibility to meet any cabling infrastructure design. LSZH fiber patch cords are available for international region only.



Physical Specifications:

1.6 mm and 3.0 mm Patch Cords

Outside Diameter (simplex):

1.6 mm: 1.6 mm

3.0 mm: 3.0 mm

Outside Diameter (zip cord):

1.6 mm: 1.6 mm x 3.3 mm

3.0 mm: 3.0 mm x 5.9 mm

Minimum Cable Retention Strength:

1.6 mm: 11.24 lbs (50 N)

3.0 mm: 11.24 lbs (50 N)

Minimum Bend Radius:

1.6 mm: Loaded: 2.0 in (5.1 cm)

Unloaded: 1.4 in (3.5 cm)

3.0 mm: Loaded: 2.3 in (5.8 cm)

Unloaded: 1.4 in (3.5 cm)

Maximum Cordage Tensile Load:

1.6 mm: Short Term: 70 lbs (311 N)

Long Term: 21 lbs (93 N)

3.0 mm: Short Term: 90 lbs (400 N)

Long Term: 27 lbs (120 N)

Optical Specifications:

Fiber Type: 62.5 micron

Minimum Bandwidth:

200 MHz-km @ 850 nm

500 MHz-km @ 1300 nm

Pigtails

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
OptiSPEED MM LC / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCMLCUC11-R
OptiSPEED MM SC / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCMSCUC11-R
OptiSPEED MM STII+ / UC 0.9 mm Pigtail, Ruggedized	Riser	1	Configurable	FPCMEPUC11-R
OptiSPEED MM LC / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCMLCUC01-R
OptiSPEED MM SC / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCMSCUC01-R
OptiSPEED MM STII+ / UC 0.9 mm Pigtail, Tight Buffered Fiber	Riser	1	Configurable	FPCMEPUC01-R

1.6 mm Patch Cords

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
OptiSPEED MM LC / LC 1.6 mm Duplex	Riser	2	Configurable	FPCMLCLC22-R
OptiSPEED MM LC / LC 1.6 mm Simplex	Riser	1	Configurable	FPCMLCLC21-R
OptiSPEED MM LC / SC 1.6 mm Duplex	Riser	2	Configurable	FPCMLCSC22-R
OptiSPEED MM LC / STII+ 1.6 mm Duplex	Riser	2	Configurable	FPCMLCEP22-R
OptiSPEED MM LC / STII+ 1.6 mm Simplex	Riser	1	Configurable	FPCMLCEP21-R
OptiSPEED MM SC / SC 1.6 mm Duplex	Riser	2	Configurable	FPCMSCSC22-R
OptiSPEED MM SC / SC 1.6 mm Simplex	Riser	1	Configurable	FPCMSCSC21-R
OptiSPEED MM SC / STII+ 1.6 mm Duplex	Riser	2	Configurable	FPCMSCEP22-R
OptiSPEED MM SC / STII+ 1.6 mm Simplex	Riser	1	Configurable	FPCMSCEP21-R
OptiSPEED MM LC / LC 1.6 mm Duplex	LSZH*	2	Configurable	FPCMLCLC22-H
OptiSPEED MM SC / SC 1.6 mm Duplex	LSZH*	2	Configurable	FPCMSCSC22-H
OptiSPEED MM LC / SC 1.6 mm Duplex	LSZH*	2	Configurable	FPCMLCSC22-H

3.0 mm Patch Cords

Detailed Description	Fire Rating	Fiber Count	Length	FPC Code
OptiSPEED MM SC / SC 3.0 mm Duplex	Riser	2	Configurable	FPCMSCSC32-R
OptiSPEED MM SC / SC 3.0 mm Simplex	Riser	1	Configurable	FPCMSCSC31-R
OptiSPEED MM SC / STII+ 3.0 mm Duplex	Riser	2	Configurable	FPCMSCEP32-R
OptiSPEED MM SC / STII+ 3.0 mm Simplex	Riser	1	Configurable	FPCMSCEP31-R
OptiSPEED MM STII+ / STII+ 3.0 mm Duplex	Riser	2	Configurable	FPCMEPEP32-R
OptiSPEED MM STII+ / STII+ 3.0 mm Simplex	Riser	1	Configurable	FPCMEPEP31-R
OptiSPEED MM LC / LC, 3.0 mm, Simplex	Plenum	1	Configurable	FPCMLCLC31-P
OptiSPEED MM LC / LC, 3.0 mm, Duplex	Plenum	2	Configurable	FPCMLCLC32-P
OptiSPEED MM SC / SC, 3.0 mm, Simplex	Plenum	1	Configurable	FPCMSCSC31-P
OptiSPEED MM SC / SC, 3.0 mm, Duplex	Plenum	2	Configurable	FPCMSCSC32-P
OptiSPEED MM STII / STII, 3.0 mm, Simplex	Plenum	1	Configurable	FPCMSTST31-P
OptiSPEED MM STII / STII, 3.0 mm, Duplex	Plenum	2	Configurable	FPCMSTST32-P
OptiSPEED MM SC / STII, 3.0 mm, Simplex	Plenum	1	Configurable	FPCMLCST31-P
OptiSPEED MM SC / STII, 3.0 mm, Duplex	Plenum	2	Configurable	FPCMLCST32-P
OptiSPEED MM LC / STII, 3.0 mm, Simplex	Plenum	1	Configurable	FPCMLCST31-P
OptiSPEED MM LC / STII, 3.0 mm, Duplex	Plenum	2	Configurable	FPCMLCST32-P
OptiSPEED MM LC / SC, 3.0 mm, Simplex	Plenum	1	Configurable	FPCMSCSC31-P
OptiSPEED MM LC / SC, 3.0 mm, Duplex	Plenum	2	Configurable	FPCMSCSC32-P
OptiSPEED MM SC / SC 3.0 mm Simplex	LSZH*	1	Configurable	FPCMSCSC31-H
OptiSPEED MM SC / SC 3.0 mm Duplex	LSZH*	2	Configurable	FPCMSCSC32-H
OptiSPEED MM STII / STII, 3.0 mm, Simplex	LSZH*	1	Configurable	FPCMSTST31-H
OptiSPEED MM STII / STII, 3.0 mm, Duplex	LSZH*	2	Configurable	FPCMSTST32-H
OptiSPEED MM LC / STII, 3.0 mm, Simplex	LSZH*	1	Configurable	FPCMSCST31-H
OptiSPEED MM SC / STII, 3.0 mm, Duplex	LSZH*	2	Configurable	FPCMSCST32-H
OptiSPEED MM LC / STII, 3.0 mm, Duplex	LSZH*	2	Configurable	FPCMLCST32-H

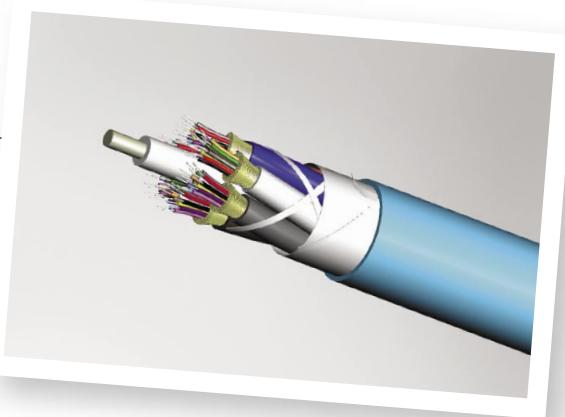
* LSZH fiber optic patch cords are offered in international only.

Hybrid MTRJ fiber patch cords are also available. Please refer to the Fiber Patch Cord Product Identifier for ordering information.



TeraSPEED™/LazrSPEED® Composite Building Cable

The SYSTIMAX TeraSPEED/LazrSPEED Composite Fiber Optic Outside Plant cable provides the ultimate in future proofing. This combination of fibers provides the benefits of a Zero Water Peak singlemode, and LazrSPEED 150 or 300 laser Optimized Multimode Fiber (LOMMF), the leading 10 Gbps (OM3) fiber. The incorporation of both singlemode and multimode fibers under one jacket provides not only for seamless future migration should the need arise, but also for improved installation time and decreased installation expense. This composite cable is reinforced with aramid yarn for superior strength.



This cable complies with the requirements of the National Electrical Code, Article 770-51; ANSI/TIA/EIA 568B.3, "Optical Fiber Cabling Components Standard" and Telcordia Generic Requirements for Premises Fiber Optic Cable (GR-409-CORE), Section 6. It is available with riser, plenum or low smoke zero halogen ratings.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 57.3 lbf/in (10 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 4.34 lbf-ft (5.8 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: TeraSPEED-8.3 micron (\leq 9 micron mode field diameter)

LazrSPEED-50 micron

Fibers are identified with standard color coding.

TS/LS 300 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 02/02A W/ZPAQ	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	760008078
5201 02/04A W/ZPAQ	6	Single Unit	0.18 in (4.6 mm)	14.4 lbs/kft (21 kg/km)	760008086
5201 02/06A W/ZPAQ	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760008094
5201 04/04A W/ZPAQ	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760008102
5201 04/08A W/ZPAQ	12	Single Unit	0.22 in (5.7 mm)	20.8 lbs/kft (31 kg/km)	760008110
5201 06/06A W/ZPAQ	12	Single Unit	0.22 in (5.7 mm)	20.8 lbs/kft (31 kg/km)	760008128
5201 06/12A W/ZPAQ	18	Single Unit	0.31 in (7.9 mm)	40.9 lbs/kft (61 kg/km)	760018739
5201 06/18A W/ZPAQ	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018747
5201 12/12A W/ZPAQ	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018754
5301 06/12A W/ZPAQ	18	Multi-unit	0.45 in (11.5 mm)	96.1 lbs/kft (143 kg/km)	760008136
5301 06/18A W/ZPAQ	24	Multi-unit	0.5 in (12.7 mm)	104.5 lbs/kft (155 kg/km)	760008144
5301 12/12A W/ZPAQ	24	Multi-unit	0.5 in (12.7 mm)	104.5 lbs/kft (155 kg/km)	760008151
5301 12/24A W/ZPAQ	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	760008177
5301 12/36A W/ZPAQ	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760008193
5301 24/24A W/ZPAQ	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760008201
5301 12/48A W/ZPAQ	60	Multi-unit	0.68 in (17.2 mm)	190.0 lbs/kft (282 kg/km)	760008219

Composite
Fiber

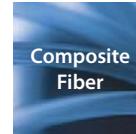
Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5301 24/48A W/ZPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760008227
5301 12/60A W/ZPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760008235
5301 36/36A W/ZPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760008243

TS/LS 150 Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 06/12A W/HPAQ	18	Single Unit	0.31 in (7.9 mm)	40.9 lbs/kft (61 kg/km)	760019158
5301 06/12A W/HPAQ	18	Multi-unit	0.45 in (11.4 mm)	82.5 lbs/kft (123 kg/km)	760018770
5301 24/48A W/HPAQ	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760018788

TS/LS 300 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 02/02A W/ZRAQ	4	Single Unit	0.19 in (4.8 mm)	13.1 lbs/kft (19 kg/km)	760007898
5200 02/04A W/ZRAQ	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	760007906
5200 02/06A W/ZRAQ	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	760007914
5200 04/04A W/ZRAQ	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	760007922
5200 04/08A W/ZRAQ	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	760007930
5200 06/06A W/ZRAQ	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	760007948
5200 06/12A W/ZRAQ	18	Single Unit	0.30 in (7.7 mm)	32.1 lbs/kft (48 kg/km)	760018606
5200 06/18A W/ZRAQ	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	760018614
5200 12/12A W/ZRAQ	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	760018622
5300 06/12A W/ZRAQ	18	Multi-unit	0.48 in (12.3 mm)	99.8 lbs/kft (148 kg/km)	760007955
5300 06/18A W/ZRAQ	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	760007963
5300 12/12A W/ZRAQ	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	760007971
5300 12/24A W/ZRAQ	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	760007997
5300 12/36A W/ZRAQ	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	760008011
5300 24/24A W/ZRAQ	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	760008029
5300 12/48A W/ZRAQ	60	Multi-unit	0.71 in (18.0 mm)	187.6 lbs/kft (279 kg/km)	760008037
5300 24/48A W/ZRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	760008045
5300 12/60A W/ZRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	760008052
5300 36/36A W/ZRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	760008060



TS/LS 150 Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 06/12A W/HRAQ	18	Single Unit	0.30 in (7.7 mm)	32.1 lbs/kft (48 kg/km)	760019166
5300 06/12A W/HRAQ	18	Multi-unit	0.48 in (12.3 mm)	99.8 lbs/kft (148 kg/km)	760018390
5300 12/24A W/HRAQ	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	760024893
5300 24/48A W/HRAQ	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	760018408

TS/LS 300 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 02/02A W/ZHAQ	4	Single Unit	0.19 in (4.8 mm)	14.3 lbs/kft (21 kg/km)	760009183
5202 02/04A W/ZHAQ	6	Single Unit	0.20 in (5.2 mm)	16.4 lbs/kft (24 kg/km)	760009191
5202 02/06A W/ZHAQ	8	Single Unit	0.22 in (5.5 mm)	19.1 lbs/kft (28 kg/km)	760009209
5202 04/04A W/ZHAQ	8	Single Unit	0.22 in (5.5 mm)	19.1 lbs/kft (28 kg/km)	760009217
5202 04/08A W/ZHAQ	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	760009225
5202 06/06A W/ZHAQ	12	Single Unit	0.24 in (6.1 mm)	23.0 lbs/kft (34 kg/km)	760009233
5302 06/12A W/ZHAQ	18	Multi-unit	0.51 in (12.9 mm)	92.2 lbs/kft (137 kg/km)	760009241
5302 06/18A W/ZHAQ	24	Multi-unit	0.56 in (12.4 mm)	116.6 lbs/kft (174 kg/km)	760009258
5302 12/12A W/ZHAQ	24	Multi-unit	0.56 in (12.4 mm)	116.6 lbs/kft (174 kg/km)	760009266
5302 12/24A W/ZHAQ	36	Multi-unit	0.59 in (14.9 mm)	118.5 lbs/kft (176 kg/km)	760009282
5302 12/36A W/ZHAQ	48	Multi-unit	0.65 in (16.4 mm)	150.3 lbs/kft (224 kg/km)	760009308
5302 24/24A W/ZHAQ	48	Multi-unit	0.65 in (16.4 mm)	150.3 lbs/kft (224 kg/km)	760009316
5302 12/48A W/ZHAQ	60	Multi-unit	0.73 in (18.5 mm)	196.6 lbs/kft (293 kg/km)	760009324
5302 24/48A W/ZHAQ	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	760009332
5302 12/60A W/ZHAQ	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	760009340
5302 36/36A W/ZHAQ	72	Multi-unit	0.79 in (20.2 mm)	242.2 lbs/kft (360 kg/km)	760009357

Composite
Fiber

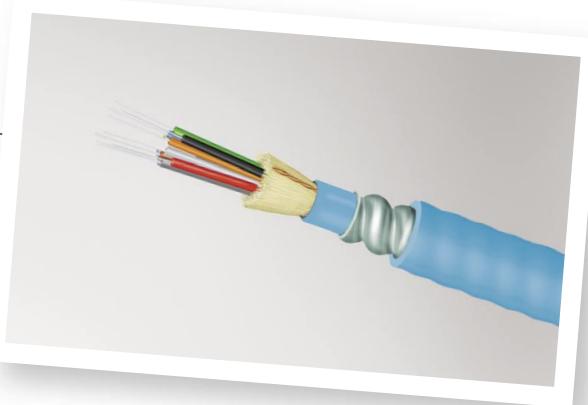
TeraSPEED™/LazrSPEED® Composite Armored Cables

SYSTIMAX Interlocking Armored Fiber Optic Cable provides superior protection and space savings. It provides installation protection from bending and excessive pull tension, significant time and labor reductions versus conduit or interduct installations and increased installation and design flexibility.

SYSTIMAX Interlocking Armor can be used anywhere additional protection and security for the fiber cable is desired. Applications include building backbone, zone distribution, raised floor, data centers and storage area networks (SANs). Vertical markets include: industrial, manufacturing, airports, stadiums, military, and any other vertical where increased protection and security for the fiber cable is desired. These include: financial, hospitals, educational facilities and many more.

The SYSTIMAX Interlocking Armor is applied spirally around any premise distribution cable, and is available in either steel or aluminum. The armored cable is then over jacketed with a sheath. This sheath is color-coded to the fiber type contained within, and provides not only the ability to print the armor with all relevant information on the cable inside, but also allows for easier handling and pulling.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant



Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 486.8 lbf/in (85 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 25.8 lbf-ft (35 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)



Physical Specifications:

Core Size: TeraSPEED–8.3 micron (\leq 9 micron mode field diameter)

LazrSPEED–50 micron

Fibers are identified with standard color coding.

TS/LS 300 Steel Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 02/02A W/ZPAQ SPAQ	4	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760008078-SPAQ
5201 02/04A W/ZPAQ SPAQ	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	760008086-SPAQ
5201 02/06A W/ZPAQ SPAQ	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	760008094-SPAQ
5201 04/04A W/ZPAQ SPAQ	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	760008102-SPAQ
5201 04/08A W/ZPAQ SPAQ	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	760008110-SPAQ
5201 06/06A W/ZPAQ SPAQ	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	760008128-SPAQ
5201 06/12A W/ZPAQ SPAQ	18	Single Unit	0.66 in (16.6 mm)	225 lbs/kft (334 kg/km)	760018739-SPAQ
5201 06/18A W/ZPAQ SPAQ	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	760018747-SPAQ
5201 12/12A W/ZPAQ SPAQ	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	760018754-SPAQ
5301 06/12A W/ZPAQ SPAQ	18	Multi-unit	0.76 in (19.2 mm)	302 lbs/kft (450 kg/km)	760008136-SPAQ
5301 06/18A W/ZPAQ SPAQ	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	760008144-SPAQ
5301 12/12A W/ZPAQ SPAQ	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	760008151-SPAQ
5301 12/24A W/ZPAQ SPAQ	36	Multi-unit	0.86 in (21.7 mm)	384 lbs/kft (572 kg/km)	760008177-SPAQ
5301 12/36A W/ZPAQ SPAQ	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	760008193-SPAQ

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5301 24/24A W/ZPAQ SPAQ	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	760008201-SPAQ
5301 12/48A W/ZPAQ SPAQ	60	Multi-unit	1.01 in (25.5 mm)	476 lbs/kft (709 kg/km)	760008219-SPAQ
5301 12/60A W/ZPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760008235-SPAQ
5301 24/48A W/ZPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760008227-SPAQ
5301 36/36A W/ZPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760008243-SPAQ

TS/LS 150 Steel Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 06/12A W/HPAQ SPAQ	18	Single Unit	0.66 in (16.6 mm)	225 lbs/kft (334 kg/km)	760019158-SPAQ
5301 06/12A W/HPAQ SPAQ	18	Multi-unit	0.76 in (19.2 mm)	302 lbs/kft (450 kg/km)	760018770-SPAQ
5301 24/48A W/HPAQ SPAQ	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760018788-SPAQ

TS/LS 300 Steel Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 02/02A W/ZRAQ SRAQ	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	760007898-SRAQ
5200 02/04A W/ZRAQ SRAQ	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	760007906-SRAQ
5200 02/06A W/ZRAQ SRAQ	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760007914-SRAQ
5200 04/04A W/ZRAQ SRAQ	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760007922-SRAQ
5200 04/08A W/ZRAQ SRAQ	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	760007930-SRAQ
5200 06/06A W/ZRAQ SRAQ	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	760007948-SRAQ
5200 06/18A W/ZRAQ SRAQ	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760018614-SRAQ
5200 12/12A W/ZRAQ SRAQ	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760018622-SRAQ
5300 06/12A W/ZRAQ SRAQ	18	Multi-unit	0.81 in (20.4 mm)	327 lbs/kft (486 kg/km)	760007955-SRAQ
5300 06/18A W/ZRAQ SRAQ	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	760007963-SRAQ
5300 12/12A W/ZRAQ SRAQ	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	760007971-SRAQ
5300 12/24A W/ZRAQ SRAQ	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	760007997-SRAQ
5300 12/36A W/ZRAQ SRAQ	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	760008011-SRAQ
5300 24/24A W/ZRAQ SRAQ	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	760008029-SRAQ
5300 12/48A W/ZRAQ SRAQ	60	Multi-unit	1.06 in (26.8 mm)	476 lbs/kft (709 kg/km)	760008037-SRAQ
5300 12/60A W/ZRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760008052-SRAQ
5300 24/48A W/ZRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760008045-SRAQ
5300 36/36A W/ZRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760008060-SRAQ

TS/LS 150 Steel Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 06/12A W/HRAQ SRAQ	18	Single Unit	0.66 in (16.6 mm)	207 lbs/kft (308 kg/km)	760019166-SRAQ
5300 06/12A W/HRAQ SRAQ	18	Multi-unit	0.81 in (20.4 mm)	327 lbs/kft (486 kg/km)	760018390-SRAQ
5300 12/24A W/HRAQ SRAQ	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	760024893-SRAQ
5300 24/48A W/HRAQ SRAQ	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760018408-SRAQ

Composite
Fiber

TS/LS 300 Steel Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 02/02A W/ZHAQ SHAQ	4	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760009183-SHAQ
5202 02/04A W/ZHAQ SHAQ	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760009191-SHAQ
5202 02/06A W/ZHAQ SHAQ	8	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (242 kg/km)	760009209-SHAQ
5202 04/04A W/ZHAQ SHAQ	8	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (242 kg/km)	760009217-SHAQ
5202 04/08A W/ZHAQ SHAQ	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	760009225-SHAQ
5202 06/06A W/ZHAQ SHAQ	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	760009233-SHAQ
5202 06/12A W/ZHAQ SHAQ	18	Single Unit	0.66 in (16.6 mm)	215 lbs/kft (319 kg/km)	760019174-SHAQ
5202 06/18A W/ZHAQ SHAQ	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019182-SHAQ
5202 12/12A W/ZHAQ SHAQ	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019190-SHAQ
5302 06/12A W/ZHAQ SHAQ	18	Multi-unit	0.86 in (21.7 mm)	341 lbs/kft (507 kg/km)	760009241-SHAQ
5302 06/18A W/ZHAQ SHAQ	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	760009258-SHAQ
5302 12/12A W/ZHAQ SHAQ	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	760009266-SHAQ
5302 12/24A W/ZHAQ SHAQ	36	Multi-unit	0.91 in (23.0 mm)	385 lbs/kft (573 kg/km)	760009282-SHAQ
5302 12/36A W/ZHAQ SHAQ	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	760009308-SHAQ
5302 24/24A W/ZHAQ SHAQ	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	760009316-SHAQ
5302 12/48A W/ZHAQ SHAQ	60	Multi-unit	1.06 in (26.8 mm)	491 lbs/kft (730 kg/km)	760009324-SHAQ
5302 12/60A W/ZHAQ SHAQ	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760009340-SHAQ
5302 24/48A W/ZHAQ SHAQ	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760009332-SHAQ
5302 36/36A W/ZHAQ SHAQ	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760009357-SHAQ



TS/LS 300 Aluminum Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 02/02A W/ZPAQ APAQ	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	760008078-APAQ
5201 02/04A W/ZPAQ APAQ	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	760008086-APAQ
5201 02/06A W/ZPAQ APAQ	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760008094-APAQ
5201 04/04A W/ZPAQ APAQ	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760008102-APAQ
5201 04/08A W/ZPAQ APAQ	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	760008110-APAQ
5201 06/06A W/ZPAQ APAQ	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	760008128-APAQ
5301 06/12A W/ZPAQ APAQ	18	Single Unit	0.66 in (16.6 mm)	153 lbs/kft (227 kg/km)	760008136-APAQ
5201 06/12A W/ZPAQ APAQ	18	Single Unit	0.66 in (16.6 mm)	153 lbs/kft (227 kg/km)	760018739-APAQ
5201 06/18A W/ZPAQ APAQ	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018747-APAQ
5201 12/12A W/ZPAQ APAQ	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018754-APAQ
5301 06/18A W/ZPAQ APAQ	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	760008144-APAQ
5301 12/12A W/ZPAQ APAQ	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	760008151-APAQ
5301 12/24A W/ZPAQ APAQ	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	760008177-APAQ
5301 12/36A W/ZPAQ APAQ	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	760008193-APAQ
5301 24/24A W/ZPAQ APAQ	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	760008201-APAQ
5301 12/48A W/ZPAQ APAQ	60	Multi-unit	1.01 in (25.5 mm)	352 lbs/kft (524 kg/km)	760008219-APAQ
5301 12/60A W/ZPAQ APAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760008235-APAQ
5301 24/48A W/ZPAQ APAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760008227-APAQ

TS/LS 150 Aluminum Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 06/12A W/HPAQ APAQ	18	Single Unit	0.66 in (16.6 mm)	153 lbs/kft (227 kg/km)	760019158-APAQ
5301 24/48A W/HPAQ APAQ	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (633 kg/km)	760018788-APAQ
5301 06/12A W/HPAQ APAQ	18	Multi-unit	0.76 in (19.2 mm)	215 lbs/kft (320 kg/km)	760018770-APAQ

TS/LS 300 Aluminum Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 02/02A W/ZRAQ ARAQ	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	760007898-ARAQ
5200 02/04A W/ZRAQ ARAQ	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	760007906-ARAQ
5200 02/06A W/ZRAQ ARAQ	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760007914-ARAQ
5200 04/04A W/ZRAQ ARAQ	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760007922-ARAQ
5200 04/08A W/ZRAQ ARAQ	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	760007930-ARAQ
5200 06/06A W/ZRAQ ARAQ	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	760007948-ARAQ
5200 06/12A W/ZRAQ ARAQ	18	Single Unit	0.66 in (16.6 mm)	135 lbs/kft (201 kg/km)	760018606-ARAQ
5300 06/12A W/ZRAQ ARAQ	18	Multi-unit	0.81 in (20.4 mm)	232 lbs/kft (345 kg/km)	760007955-ARAQ
5200 06/18A W/ZRAQ ARAQ	24	Multi-unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	760018614-ARAQ
5200 12/12A W/ZRAQ ARAQ	24	Multi-unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	760018622-ARAQ
5300 06/18A W/ZRAQ ARAQ	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	760007963-ARAQ
5300 12/12A W/ZRAQ ARAQ	24	Multi-unit	0.91 in (23.0 mm)	258 lbs/kft (385 kg/km)	760007971-ARAQ
5300 12/24A W/ZRAQ ARAQ	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	760007997-ARAQ
5300 12/36A W/ZRAQ ARAQ	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	760008011-ARAQ
5300 24/24A W/ZRAQ ARAQ	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	760008029-ARAQ
5300 12/48A W/ZRAQ ARAQ	60	Multi-unit	1.06 in (26.8 mm)	345 lbs/kft (513 kg/km)	760008037-ARAQ
5300 12/60A W/ZRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760008052-ARAQ
5300 24/48A W/ZRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760008045-ARAQ
5300 36/36A W/ZRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760008060-ARAQ

TS/LS 150 Aluminum Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 06/12A W/HRAQ ARAQ	18	Single Unit	0.66 in (16.6 mm)	135 lbs/kft (201 kg/km)	760019166-ARAQ
5300 06/12A W/HRAQ ARAQ	18	Multi-unit	0.81 in (20.4 mm)	232 lbs/kft (345 kg/km)	760018390-ARAQ
5300 12/24A W/HRAQ ARAQ	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	760024893-ARAQ
5300 24/48A W/HRAQ ARAQ	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760018408-ARAQ

Composite
Fiber

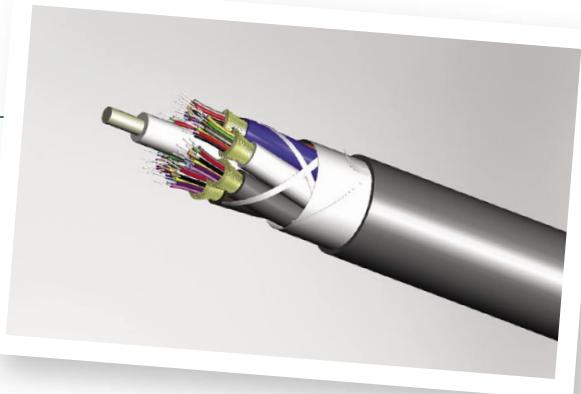
TS/LS 300 Aluminum Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 02/02A W/ZHAQ AHAQ 4	4	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760009183-AHAQ
5202 02/04A W/ZHAQ AHAQ 6	6	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	760009191-AHAQ
5202 02/06A W/ZHAQ AHAQ 8	8	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (157 kg/km)	760009209-AHAQ
5202 04/04A W/ZHAQ AHAQ 8	8	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (157 kg/km)	760009217-AHAQ
5202 04/08A W/ZHAQ AHAQ 12	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	760009225-AHAQ
5202 06/06A W/ZHAQ AHAQ 12	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	760009233-AHAQ
5202 06/12A W/ZHAQ AHAQ 18	18	Single Unit	0.66 in (16.6 mm)	215 lbs/kft (319 kg/km)	760019174-AHAQ
5202 06/18A W/ZHAQ AHAQ 24	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019182-AHAQ
5202 12/12A W/ZHAQ AHAQ 24	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019190-AHAQ
5302 06/12A W/ZHAQ AHAQ 18	18	Multi-unit	0.86 in (21.7 mm)	239 lbs/kft (355 kg/km)	760009241-AHAQ
5302 06/18A W/ZHAQ AHAQ 24	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	760009258-AHAQ
5302 12/12A W/ZHAQ AHAQ 24	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	760009266-AHAQ
5302 12/24A W/ZHAQ AHAQ 36	36	Multi-unit	0.91 in (23.0 mm)	275 lbs/kft (409 kg/km)	760009282-AHAQ
5302 12/36A W/ZHAQ AHAQ 48	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	760009308-AHAQ
5302 24/24A W/ZHAQ AHAQ 48	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	760009316-AHAQ
5302 12/48A W/ZHAQ AHAQ 60	60	Multi-unit	1.06 in (26.8 mm)	359 lbs/kft (535 kg/km)	760009324-AHAQ
5302 12/60A W/ZHAQ AHAQ 72	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760009340-AHAQ
5302 24/48A W/ZHAQ AHAQ 72	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760009332-AHAQ
5302 36/36A W/ZHAQ AHAQ 72	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760009357-AHAQ

Composite
Fiber

TeraSPEED™/OptiSPEED® Composite Building Cable

The SYSTIMAX TeraSPEED/OptiSPEED Composite cable incorporates the new TeraSPEED singlemode fiber with the OptiSPEED multimode fiber, all under one jacket. This provides a cost-effective alternative for those with modest bandwidth requirements today, while allowing a seamless migration to singlemode for future requirements. Having both singlemode and multimode fibers under one jacket provides not only for future migration should the need arise, but also for improved installation time and decreased installation expense. TeraSPEED/OptiSPEED composite premise riser cable is reinforced with aramid yarn for superior strength and is available in riser, plenum, and low smoke zero halogen rating.



- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 57.3 lbf/in (10 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 4.34 lbf-ft (5.8 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 100 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Core Size: TeraSPEED–8.3 micron (\leq 9 micron mode field diameter)

OptiSPEED–62.5 micron

Fibers are identified with standard color coding.

TS/OS Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 02/02A W/MPSL	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	760007716
5201 02/04A W/MPSL	6	Single Unit	0.18 in (4.6 mm)	14.4 lbs/kft (21 kg/km)	760007724
5201 02/06A W/MPSL	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760007732
5201 04/04A W/MPSL	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760007740
5201 04/08A W/MPSL	12	Single Unit	0.23 in (5.8 mm)	20.8 lbs/kft (31 kg/km)	760007757
5201 06/06A W/MPSL	12	Single Unit	0.22 in (5.7 mm)	20.8 lbs/kft (31 kg/km)	760007765
5201 06/12A W/MPSL	18	Single Unit	0.31 in (7.9 mm)	40.9 lbs/kft (61 kg/km)	760018705
5201 06/18A W/MPSL	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018713
5201 12/12A W/MPSL	24	Single Unit	0.33 in (8.5 mm)	47.3 lbs/kft (70 kg/km)	760018721
5301 06/12A W/MPSL	18	Multi-unit	0.45 in (11.5 mm)	96.1 lbs/kft (143 kg/km)	760007773
5301 06/18A W/MPSL	24	Multi-unit	0.5 in (12.7 mm)	104.5 lbs/kft (155 kg/km)	760007781
5301 12/12A W/MPSL	24	Multi-unit	0.5 in (12.7 mm)	104.5 lbs/kft (155 kg/km)	760007799
5301 12/24A W/MPSL	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	760007815
5301 12/36A W/MPSL	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760007831
5301 24/24A W/MPSL	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760007849
5301 12/48A W/MPSL	60	Multi-unit	0.68 in (17.2 mm)	190.0 lbs/kft (282 kg/km)	760007856
5301 24/48A W/MPSL	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760007864
5301 12/60A W/MPSL	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760007872
5301 36/36A W/MPSL	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760007880

TS/OS Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Color	Material ID
5200 02/02A W/MRSL	4	Single Unit	0.19 in (4.8 mm)	13.1 lbs/kft (19 kg/km)	Slate	760007534
5200 02/04A W/MRSL	6	Single Unit	0.20 in (5.1 mm)	15.2 lbs/kft (23 kg/km)	Slate	760007559
5200 02/06A W/MRSL	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	Slate	760007567
5200 04/04A W/MRSL	8	Single Unit	0.22 in (5.5 mm)	17.2 lbs/kft (26 kg/km)	Slate	760007575
5200 04/08A W/MRSL	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	Slate	760007583
5200 06/06A W/MRSL	12	Single Unit	0.24 in (6.0 mm)	21.7 lbs/kft (32 kg/km)	Slate	760007591
5200 06/12A W/MRSL	18	Single Unit	0.30 in (7.7 mm)	32.1 lbs/kft (48 kg/km)	Slate	760018572
5200 06/18A W/MRSL	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	Slate	760018580
5200 12/12A W/MRSL	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	Slate	760018598
5200 12/12A W/MROR	24	Single Unit	0.33 in (8.4 mm)	37.9 lbs/kft (56 kg/km)	Orange	760026393
5300 06/12A W/MRSL	18	Multi-unit	0.48 in (12.3 mm)	99.8 lbs/kft (148 kg/km)	Slate	760007609
5300 06/18A W/MRSL	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	Slate	760007617
5300 12/12A W/MRSL	24	Multi-unit	0.56 in (14.1 mm)	106.7 lbs/kft (159 kg/km)	Slate	760007625
5300 12/24A W/MRSL	36	Multi-unit	0.58 in (14.6 mm)	112.4 lbs/kft (167 kg/km)	Slate	760007641
5300 12/36A W/MRSL	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	Slate	760007666
5300 12/60A W/MRSL	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	Slate	760007682
5300 24/24A W/MRSL	48	Multi-unit	0.63 in (16.1 mm)	142.8 lbs/kft (212 kg/km)	Slate	760007674
5300 24/48A W/MRSL	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	Slate	760007690
5300 36/36A W/MRSL	72	Multi-unit	0.79 in (19.9 mm)	231.6 lbs/kft (345 kg/km)	Slate	760007708
5300 48/48A W/MRSL	96	Multi-unit	0.93 in (23.7 mm)	337.2 lbs/kft (502 kg/km)	Slate	760017616



TS/OS LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 02/02A W/MHOR	4	Single Unit	0.17 in (4.4 mm)	12.2 lbs/kft (18 kg/km)	760009001
5202 02/04A W/MHOR	6	Single Unit	0.18 in (4.6 mm)	14.4 lbs/kft (21 kg/km)	760009019
5202 02/06A W/MHOR	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760009027
5202 04/04A W/MHOR	8	Single Unit	0.20 in (5.1 mm)	16.8 lbs/kft (25 kg/km)	760009035
5202 04/08A W/MHOR	12	Single Unit	0.22 in (5.7 mm)	20.8 lbs/kft (31 kg/km)	760009043
5202 06/06A W/MHOR	12	Single Unit	0.22 in (5.7 mm)	20.8 lbs/kft (31 kg/km)	760009050
5302 06/12A W/MHOR	18	Multi-unit	0.45 in (11.5 mm)	96.1 lbs/kft (143 kg/km)	760009068
5302 06/18A W/MHOR	24	Multi-unit	0.5 in (12.7 mm)	104.5 lbs/kft (155 kg/km)	760009076
5302 12/12A W/MHOR	24	Multi-unit	0.5 in (12.7 mm)	104.5 lbs/kft (155 kg/km)	760009084
5302 12/24A W/MHOR	36	Multi-unit	0.54 in (13.7 mm)	128.4 lbs/kft (191 kg/km)	760009100
5302 12/36A W/MHOR	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760009126
5302 24/24A W/MHOR	48	Multi-unit	0.59 in (15.1 mm)	137.7 lbs/kft (205 kg/km)	760009134
5302 12/48A W/MHOR	60	Multi-unit	0.68 in (17.2 mm)	190.0 lbs/kft (282 kg/km)	760009142
5302 24/48A W/MHOR	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760009159
5302 12/60A W/MHOR	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760009167
5302 36/36A W/MHOR	72	Multi-unit	0.75 in (19.1 mm)	237.1 lbs/kft (353 kg/km)	760009175

TeraSPEED™/OptiSPEED® Composite Armored Cables

SYSTIMAX Interlocking Armored Fiber Optic Cable provides superior protection and space savings. It provides installation protection from bending and excessive pull tension, significant time and labor reductions versus conduit or interduct installations and increased installation and design flexibility.

SYSTIMAX Interlocking Armor can be used anywhere additional protection and security for the fiber cable is desired. Applications include building backbone, zone distribution, raised floor, data centers, and storage area networks (SANs). Vertical markets include: industrial, manufacturing, airports, stadiums, military, and any other vertical where increased protection and security for the fiber cable is desired. These include: financial, hospitals, educational facilities and many more.

The SYSTIMAX Interlocking Armor is applied spirally around any premise distribution cable, and is available in either steel or aluminum. The armored cable is then over jacketed with a sheath. This sheath is color-coded to the fiber type contained within, and provides not only the ability to print the armor with all relevant information on the cable inside, but also allows for easier handling and pulling.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR
- The LSZH cable is (UL and cUL) TYPE OFNR, OFN-LS, IEC60332-3C and IEC61034-2 compliant

Environmental and Mechanical Specifications:

Operating Temperature: -4°F to 158°F (-20°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: 32°F to 158°F (0°C to 70°C)

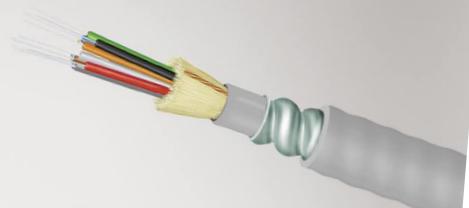
Storage Temperature: -40°F to 158°F (-40°C to 70°C)

Crush Resistance: 486.8 lbf/in (85 N/mm) (Test Method: FOTP – 41)

Impact Resistance: 25.8 lbf-ft (35 N-m) (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)



Physical Specifications:

Core Size: TeraSPEED–8.3 micron (\leq 9 micron mode field diameter)

OptiSPEED–62.5 micron

Fibers are identified with standard color coding.

TS/OS Steel Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 02/02A W/MPSL SPSL	4	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760007716-SPSL
5201 02/04A W/MPSL SPSL	6	Single Unit	0.56 in (14.1 mm)	163 lbs/kft (243 kg/km)	760007724-SPSL
5201 02/06A W/MPSL SPSL	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	760007732-SPSL
5201 04/04A W/MPSL SPSL	8	Single Unit	0.56 in (14.1 mm)	165 lbs/kft (245 kg/km)	760007740-SPSL
5201 04/08A W/MPSL SPSL	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	760007757-SPSL
5201 06/06A W/MPSL SPSL	12	Single Unit	0.56 in (14.1 mm)	169 lbs/kft (251 kg/km)	760007765-SPSL
5201 06/12A W/MPSL SPSL	18	Single Unit	0.66 in (16.6 mm)	225 lbs/kft (334 kg/km)	760018705-SPAQ
5201 06/18A W/MPSL SPSL	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	760018713-SPSL
5201 12/12A W/MPSL SPSL	24	Single Unit	0.66 in (16.6 mm)	231 lbs/kft (344 kg/km)	760018721-SPSL
5301 06/12A W/MPSL SPSL	18	Multi-unit	0.76 in (19.2 mm)	302 lbs/kft (450 kg/km)	760007773-SPSL
5301 06/18A W/MPSL SPSL	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	760007781-SPSL
5301 12/12A W/MPSL SPSL	24	Multi-unit	0.86 in (21.7 mm)	364 lbs/kft (542 kg/km)	760007799-SPSL
5301 12/24A W/MPSL SPSL	36	Multi-unit	0.86 in (21.7 mm)	384 lbs/kft (572 kg/km)	760007815-SPSL
5301 12/36A W/MPSL SPSL	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	760007831-SPSL
5301 24/24A W/MPSL SPSL	48	Multi-unit	0.91 in (23.0 mm)	412 lbs/kft (613 kg/km)	760007849-SPSL
5301 12/48A W/MPSL SPSL	60	Multi-unit	1.01 in (25.5 mm)	476 lbs/kft (709 kg/km)	760007856-SPSL
5301 12/60A W/MPSL SPSL	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760007872-SPSL
5301 24/48A W/MPSL SPSL	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760007864-SPSL
5301 36/36A W/MPSL SPSL	72	Multi-unit	1.11 in (28.1 mm)	557 lbs/kft (829 kg/km)	760007880-SPSL

TS/OS Steel Armored Riser

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5200 02/02A W/MRSL SRSL	4	Single Unit	0.56 in (14.1 mm)	154 lbs/kft (229 kg/km)	760007534-SRSL
5200 02/04A W/MRSL SRSL	6	Single Unit	0.56 in (14.1 mm)	156 lbs/kft (232 kg/km)	760007559-SRSL
5200 02/06A W/MRSL SRSL	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760007567-SRSL
5200 04/04A W/MRSL SRSL	8	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760007575-SRSL
5200 04/08A W/MRSL SRSL	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	760007583-SRSL
5200 06/06A W/MRSL SRSL	12	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (241 kg/km)	760007591-SRSL
5200 06/12A W/MRSL SRSL	18	Single Unit	0.66 in (16.6 mm)	207 lbs/kft (308 kg/km)	760018572-SRSL
5200 06/18A W/MRSL SRSL	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760018580-SRSL
5200 12/12A W/MRSL SRSL	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760018598-SRSL
5200 12/12A W/MROR SROR	24	Single Unit	0.66 in (16.6 mm)	213 lbs/kft (317 kg/km)	760026393-SROR
5300 06/12A W/MRSL SRSL	18	Multi-unit	0.81 in (20.4 mm)	327 lbs/kft (486 kg/km)	760007609-SRSL
5300 06/18A W/MRSL SRSL	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	760007617-SRSL
5300 12/12A W/MRSL SRSL	24	Multi-unit	0.91 in (23.0 mm)	368 lbs/kft (548 kg/km)	760007625-SRSL
5300 12/24A W/MRSL SRSL	36	Multi-unit	0.91 in (23.0 mm)	374 lbs/kft (557 kg/km)	760007641-SRSL
5300 12/36A W/MRSL SRSL	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	760007666-SRSL
5300 24/24A W/MRSL SRSL	48	Multi-unit	0.96 in (24.3 mm)	400 lbs/kft (595 kg/km)	760007674-SRSL
5300 12/60A W/MRSL SRSL	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760007682-SRSL
5300 24/48A W/MRSL SRSL	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760007690-SRSL
5300 36/36A W/MRSL SRSL	72	Multi-unit	1.11 in (28.1 mm)	536 lbs/kft (798 kg/km)	760007708-SRSL
5300 48/48A W/MRSL SRSL	96	Multi-unit	1.26 in (31.9 mm)	689 lbs/kft (1026 kg/km)	760017616-SRSL

Composite
Fiber

TS/OS Steel Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 02/02A W/MHOR SHOR	4	Single Unit	0.56 in (14.1 mm)	158 lbs/kft (235 kg/km)	760009001-SHOR
5202 02/04A W/MHOR SHOR	6	Single Unit	0.56 in (14.1 mm)	160 lbs/kft (238 kg/km)	760009019-SHOR
5202 02/06A W/MHOR SHOR	8	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (242 kg/km)	760009027-SHOR
5202 04/04A W/MHOR SHOR	8	Single Unit	0.56 in (14.1 mm)	162 lbs/kft (242 kg/km)	760009035-SHOR
5202 04/08A W/MHOR SHOR	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	760009043-SHOR
5202 06/06A W/MHOR SHOR	12	Single Unit	0.56 in (14.1 mm)	166 lbs/kft (248 kg/km)	760009050-SHOR
5202 06/12A W/MHOR SHOR	18	Single Unit	0.66 in (16.6 mm)	215 lbs/kft (319 kg/km)	760019125-SHOR
5202 06/18A W/MHOR SHOR	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019133-SHOR
5202 12/12A W/MHOR SHOR	24	Single Unit	0.66 in (16.6 mm)	223 lbs/kft (331 kg/km)	760019141-SHOR
5302 06/12A W/MHOR SHOR	18	Multi-unit	0.86 in (21.7 mm)	341 lbs/kft (507 kg/km)	760009068-SHOR
5302 06/18A W/MHOR SHOR	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	760009076-SHOR
5302 12/12A W/MHOR SHOR	24	Multi-unit	0.91 in (23.0 mm)	383 lbs/kft (570 kg/km)	760009084-SHOR
5302 12/24A W/MHOR SHOR	36	Multi-unit	0.91 in (23.0 mm)	385 lbs/kft (573 kg/km)	760009100-SHOR
5302 12/36A W/MHOR SHOR	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	760009126-SHOR
5302 24/24A W/MHOR SHOR	48	Multi-unit	0.96 in (24.3 mm)	412 lbs/kft (614 kg/km)	760009134-SHOR
5302 12/48A W/MHOR SHOR	60	Multi-unit	1.06 in (26.8 mm)	491 lbs/kft (730 kg/km)	760009142-SHOR
5302 12/60A W/MHOR SHOR	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760009167-SHOR
5302 24/48A W/MHOR SHOR	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760009159-SHOR
5302 36/36A W/MHOR SHOR	72	Multi-unit	1.11 in (28.1 mm)	552 lbs/kft (822 kg/km)	760009175-SHOR

TS/OS Aluminum Armored Plenum

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5201 02/02A W/MPSL APSL	4	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (154 kg/km)	760007716-APSL
5201 02/04A W/MPSL APSL	6	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (158 kg/km)	760007724-APSL
5201 02/06A W/MPSL APSL	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760007732-APSL
5201 04/04A W/MPSL APSL	8	Single Unit	0.56 in (14.1 mm)	108 lbs/kft (160 kg/km)	760007740-APSL
5201 04/08A W/MPSL APSL	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	760007757-APSL
5201 06/06A W/MPSL APSL	12	Single Unit	0.56 in (14.1 mm)	112 lbs/kft (166 kg/km)	760007765-APSL
5201 06/12A W/MPSL APSL	18	Single Unit	0.66 in (16.6 mm)	153 lbs/kft (227 kg/km)	760018705-APAQ
5201 06/18A W/MPSL APSL	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018713-APSL
5201 12/12A W/MPSL APSL	24	Single Unit	0.66 in (16.6 mm)	159 lbs/kft (237 kg/km)	760018721-APSL
5301 06/12A W/MPSL APSL	18	Multi-unit	0.76 in (19.2 mm)	215 lbs/kft (320 kg/km)	760007773-APSL
5301 06/18A W/MPSL APSL	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	760007781-APSL
5301 12/12A W/MPSL APSL	24	Multi-unit	0.86 in (21.7 mm)	262 lbs/kft (389 kg/km)	760007799-APSL
5301 12/24A W/MPSL APSL	36	Multi-unit	0.86 in (21.7 mm)	282 lbs/kft (420 kg/km)	760007815-APSL
5301 12/36A W/MPSL APSL	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	760007831-APSL
5301 24/24A W/MPSL APSL	48	Multi-unit	0.91 in (23.0 mm)	302 lbs/kft (449 kg/km)	760007849-APSL
5301 12/48A W/MPSL APSL	60	Multi-unit	1.01 in (25.5 mm)	352 lbs/kft (524 kg/km)	760007856-APSL
5301 12/60A W/MPSL APSL	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760007872-APSL
5301 24/48A W/MPSL APSL	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760007864-APSL
5301 36/36A W/MPSL APSL	72	Multi-unit	1.11 in (28.1 mm)	418 lbs/kft (622 kg/km)	760007880-APSL

TS/OS Aluminum Armored Riser

Product Number	Pair Count	Construction Type	Outside Diameter	Weight	Material ID
5200 02/02A W/MRSL ARSL	4	Single Unit	0.56 in (14.1 mm)	97 lbs/kft (144 kg/km)	760007534-ARSL
5200 02/04A W/MRSL ARSL	6	Single Unit	0.56 in (14.1 mm)	99 lbs/kft (147 kg/km)	760007559-ARSL
5200 02/06A W/MRSL ARSL	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760007567-ARSL
5200 04/04A W/MRSL ARSL	8	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760007575-ARSL
5200 04/08A W/MRSL ARSL	12	Single Unit	0.56 in (14.1 mm)	105 lbs/kft (157 kg/km)	760007583-ARSL
5200 06/06A W/MRSL ARSL	12	Single Unit	0.56 in (14.1 mm)	102 lbs/kft (152 kg/km)	760007591-ARSL
5200 06/12A W/MRSL ARSL	18	Single Unit	0.66 in (16.6 mm)	135 lbs/kft (201 kg/km)	760018572-ARSL
5200 06/18A W/MRSL ARSL	24	Single Unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	760018580-ARSL
5200 12/12A W/MRSL ARSL	24	Single Unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	760018598-ARSL
5200 12/12A W/MROR AROR	24	Single Unit	0.66 in (16.6 mm)	141 lbs/kft (210 kg/km)	760026393-AROR
5300 06/12A W/MRSL ARSL	18	Multi-unit	0.81 in (20.4 mm)	232 lbs/kft (345 kg/km)	760007609-ARSL
5300 06/18A W/MRSL ARSL	24	Multi-unit	0.91 in (23.0 mm)	106.7 lbs/kft (159 kg/km)	760007617-ARSL
5300 12/12A W/MRSL ARSL	24	Multi-unit	0.91 in (23.0 mm)	106.7 lbs/kft (159 kg/km)	760007625-ARSL
5300 12/24A W/MRSL ARSL	36	Multi-unit	0.91 in (23.0 mm)	264 lbs/kft (393 kg/km)	760007641-ARSL
5300 12/36A W/MRSL ARSL	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	760007666-ARSL
5300 24/24A W/MRSL ARSL	48	Multi-unit	0.96 in (24.3 mm)	283 lbs/kft (422 kg/km)	760007674-ARSL
5300 12/60A W/MRSL ARSL	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760007682-ARSL
5300 24/48A W/MRSL ARSL	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760007690-ARSL
5300 36/36A W/MRSL ARSL	72	Multi-unit	1.11 in (28.1 mm)	397 lbs/kft (591 kg/km)	760007708-ARSL
5300 48/48A W/MRSL ARSL	96	Multi-unit	1.26 in (31.9 mm)	528 lbs/kft (786 kg/km)	760017616-ARSL

Composite
Fiber

TS/OS Aluminum Armored LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5202 02/02A W/MHOR AHOR	4	Single Unit	0.56 in (14.1 mm)	101 lbs/kft (150 kg/km)	760009001-AHOR
5202 02/04A W/MHOR AHOR	6	Single Unit	0.56 in (14.1 mm)	103 lbs/kft (153 kg/km)	760009019-AHOR
5202 02/06A W/MHOR AHOR	8	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (157 kg/km)	760009027-AHOR
5202 04/04A W/MHOR AHOR	8	Single Unit	0.56 in (14.1 mm)	106 lbs/kft (157 kg/km)	760009035-AHOR
5202 04/08A W/MHOR AHOR	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	760009043-AHOR
5202 06/06A W/MHOR AHOR	12	Single Unit	0.56 in (14.1 mm)	109 lbs/kft (163 kg/km)	760009050-AHOR
5202 06/12A W/MHOR AHOR	18	Single Unit	0.66 in (16.6 mm)	109 lbs/kft (163 kg/km)	760019125-AHOR
5202 06/18A W/MHOR AHOR	24	Single Unit	0.66 in (16.6 mm)	151 lbs/kft (224 kg/km)	760019133-AHOR
5202 12/12A W/MHOR AHOR	24	Single Unit	0.66 in (16.6 mm)	151 lbs/kft (224 kg/km)	760019141-AHOR
5302 06/12A W/MHOR AHOR	18	Multi-unit	0.86 in (21.7 mm)	239 lbs/kft (355 kg/km)	760009068-AHOR
5302 06/18A W/MHOR AHOR	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	760009076-AHOR
5302 12/12A W/MHOR AHOR	24	Multi-unit	0.91 in (23.0 mm)	273 lbs/kft (406 kg/km)	760009084-AHOR
5302 12/24A W/MHOR AHOR	36	Multi-unit	0.91 in (23.0 mm)	275 lbs/kft (409 kg/km)	760009100-AHOR
5302 12/36A W/MHOR AHOR	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	760009126-AHOR
5302 24/24A W/MHOR AHOR	48	Multi-unit	0.96 in (24.3 mm)	296 lbs/kft (440 kg/km)	760009134-AHOR
5302 12/48A W/MHOR AHOR	60	Multi-unit	1.06 in (26.8 mm)	359 lbs/kft (535 kg/km)	760009142-AHOR
5302 12/60A W/MHOR AHOR	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760009167-AHOR
5302 24/48A W/MHOR AHOR	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760009159-AHOR
5302 36/36A W/MHOR AHOR	72	Multi-unit	1.11 in (28.1 mm)	414 lbs/kft (616 kg/km)	760009175-AHOR

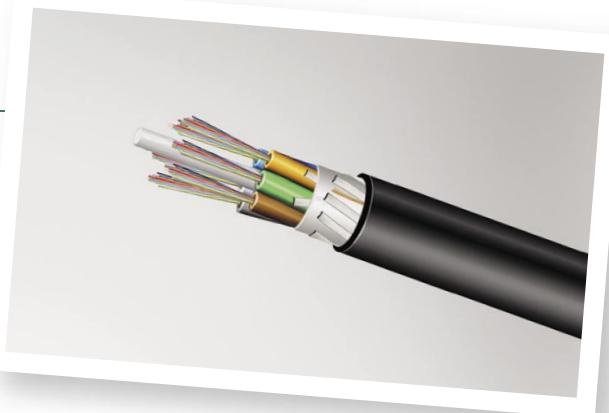
Composite
Fiber

TeraSPEED™/LazrSPEED® Composite Outdoor Loose Tube Cable

The Dielectric Stranded Loose Tube Cable is constructed with industry standard 3 mm buffer tubes, stranded around a central strength member.

The Metallic Stranded Loose Tube Cable is armored with a corrugated, polymer coated steel tape and constructed with industry standard 3 mm buffer tubes, stranded around a central strength member. The armor layer provides added crush protection and meets the Telcordia requirements for superior armored cable.

The buffer tubes are compatible with standard hardware, cable routing and fan-out kits. The individual gel-filled tubes with water-blocking binders are placed between the central strength member and the tubes; then a water-blocking tape is formed around the core. These cables provide a high level of protection for fiber installed in the outside plant environment where mid-span access and cable management is required.



Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)
Installation Temperature: -22°F to 140°F (-30°C to 60°C)
Storage Temperature: -40°F to 167°F (-40°C to 75°C)
Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)
Impact Resistance: Exceeds (Test Method: FOTP – 25)
Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)
Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black
Core Size: TeraSPEED–8.3 micron (\leq 9 micron mode field diameter)
LazrSPEED–50 micron
Buffer tubes and fibers are identified with standard color coding.

TS/LS 550 Dielectric

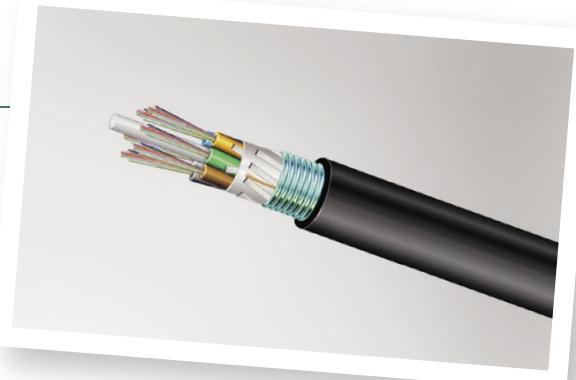
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 12/12A W/XXBK	24	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760036046
5024 24/24A W/XXBK	48	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760042242
5024 144/144A W/XXBK	288	0.86 in (21.8 mm)	192 lbs/kft (286 kg/km)	760039321

TS/LS 300 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 12/12A W/ZX BK	24	0.49 in (12.6 mm)	61 lbs/kft (91 kg/km)	760008722
5024 24/36A W/ZX BK	60	0.49 in (12.6 mm)	61 lbs/kft (91 kg/km)	760018457
5024 48/48A W/ZX BK	96	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760035857
5024 48/72A W/ZX BK	120	0.66 in (16.7 mm)	121 lbs/kft (180 kg/km)	760035840
5024 144/144A W/ZX BK	288	0.86 in (21.8 mm)	192 lbs/kft (286 kg/km)	760039339

TS/LS 150 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 48/48A W/HXBK	96	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760036038



TS/LS 300 Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 12/24A W/ZXBK	36	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760035824
5023 24/24A W/ZXBK	48	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760032813
5023 48/48A W/ZXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760035873
5023 072/24A W/ZXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760042457
5023 48/72A W/ZXBK	120	0.71 in (18.2 mm)	178 lbs/kft (266 kg/km)	760035865

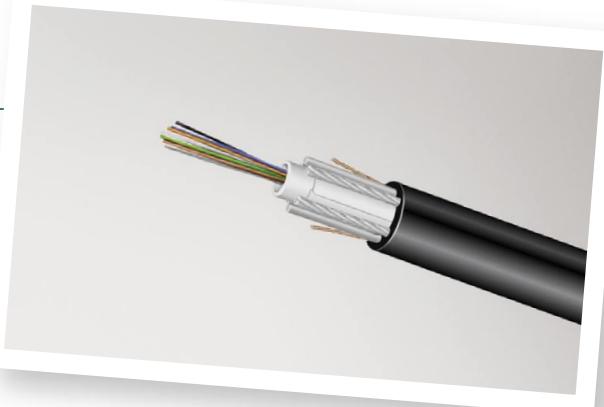
TS/LS 150 Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 48/48A W/HXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760036020



TeraSPEED™/LazrSPEED® Composite Outdoor Central Tube Cable

The SYSTIMAX TeraSPEED/LazrSPEED Composite Fiber Optic Outside Plant cable provides the ultimate in future proofing. This combination of fibers provides the benefits of a Zero Water Peak singlemode, and LazrSPEED Laser Optimized Multimode Fiber (LOMMF), the leading 10 Gbps (OM3) fiber. The incorporation of both singlemode and multimode fibers under one jacket provides not only for seamless future migration should the need arise, but also for improved installation time and decreased installation expense. This central core composite cable is reinforced with aramid yarn for superior strength.



SYSTIMAX central gel-filled core cables comply with the Telcordia Generic Requirements for Optical Fiber and Optical Fiber Cable (GR-20-CORE), Section 6. These products also satisfy the requirements of ICEA S-87-640-1999, "Optical Fiber Outside Plant Communications Cable."

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: TeraSPEED–8.3 micron (\geq 9 micron mode field diameter)

LazrSPEED–50 micron

Buffer tubes and fibers are identified with standard color coding.

TS/LS 550 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 36/36A W/XXBK	72	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	760037804

TS/LS 300 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 06/06A W/ZXBK	12	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008318
5022 06/12A W/ZXBK	18	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008326
5022 12/12A W/ZXBK	24	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008334
5022 12/24A W/ZXBK	36	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008342
5022 24/24A W/ZXBK	48	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008359
5022 36/36A W/ZXBK	72	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	760036541
5022 48/48A W/ZXBK	96	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	760008367

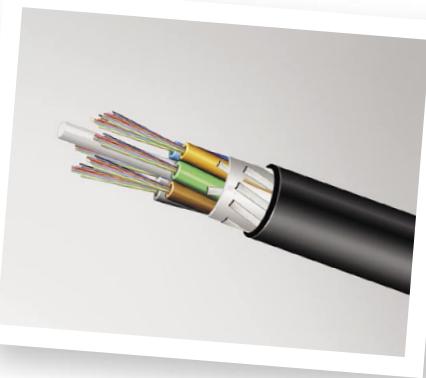
TS/LS 150 Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 16/16A W/HXBK	32	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760027797

TeraSPEED™/OptiSPEED® Composite Outdoor Loose Tube Cable

The Dielectric Stranded Loose Tube Cable is constructed with industry standard 3 mm buffer tubes, stranded around a central strength member.

The Metallic Stranded Loose Tube Cable is armored with a corrugated, polymer coated steel tape and constructed with industry standard 3 mm buffer tubes, stranded around a central strength member. The armor layer provides added crush protection and meets the Telcordia requirements for superior armored cable.



The buffer tubes are compatible with standard hardware, cable routing and fan-out kits. The individual gel-filled tubes with water-blocking binders are placed between the central strength member and the tubes; then a water-blocking tape is formed around the core. These cables provide a high level of protection for fiber installed in the outside plant environment where mid-span access and cable management is required.

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: TeraSPEED—8.3 micron (\geq 9 micron mode field diameter)

OptiSPEED—62.5 micron

Buffer tubes and fibers are identified with standard color coding.



TS/OS Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5024 24/12A W/MXBK	36	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760039354
5024 36/12A W/MXBK	48	0.46 in (11.6 mm)	61 lbs/kft (91 kg/km)	760025395
5024 36/48A W/MXBK	84	0.57 in (14.6 mm)	97 lbs/kft (145 kg/km)	760008490

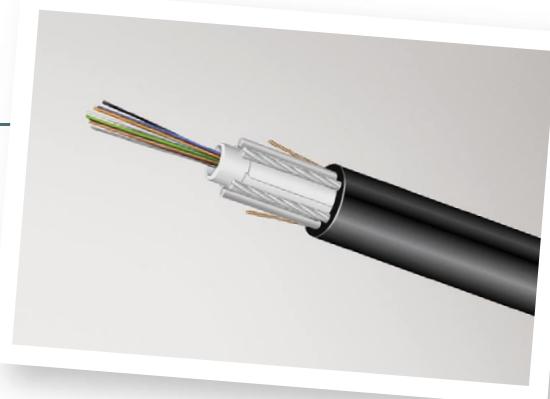


TS/OS Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5023 24/24A W/MXBK	48	0.51 in (13.1 mm)	102 lbs/kft (152 kg/km)	760034637
5023 48/48A W/MXBK	96	0.63 in (16.1 mm)	148 lbs/kft (220 kg/km)	760038299

TeraSPEED™/OptiSPEED® Composite Outdoor Central Tube Cable

The SYSTIMAX TeraSPEED/OptiSPEED Composite OSP Central Filled Core Dielectric and Metallic cables incorporate the new TeraSPEED singlemode fiber with the OptiSPEED multimode fiber, all under one jacket. This provides a cost-effective alternative for those with modest bandwidth requirements today, while allowing a seamless migration to singlemode for future requirements.



Having both singlemode and multimode fibers under one jacket provides not only for future migration should the need arise, but also for improved installation time and decreased installation expense. SYSTIMAX central gel-filled core cables comply with the Telcordia Generic Requirements for Optical Fiber and Optical Fiber Cable (GR-20-CORE), Section 6. These products also satisfy the requirements of ICEA S-87-640-1999, Optical Fiber Outside Plant Communications Cable.

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

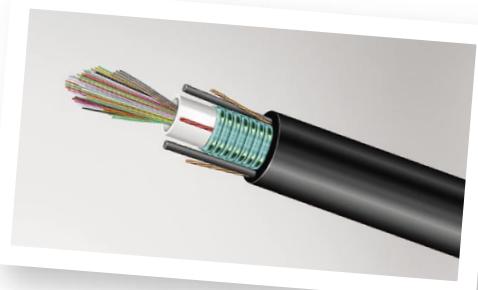
Core Size: TeraSPEED–8.3 micron (\geq 9 micron mode field diameter)

OptiSPEED–62.5 micron

Buffer tubes and fibers are identified with standard color coding.

TS/OS Dielectric

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5022 06/06A W/MXBK	12	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008250
5022 06/12A W/MXBK	18	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008268
5022 12/12A W/MXBK	24	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008276
5022 12/24A W/MXBK	36	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008284
5022 12/36A W/MXBK	48	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760010140
5022 24/24A W/MXBK	48	0.49 in (12.4 mm)	102 lbs/kft (152 kg/km)	760008292
5022 48/48A W/MXBK	96	0.57 in (14.4 mm)	127 lbs/kft (189 kg/km)	760008300



TS/OS Metallic

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5021 12/12A W/MXBK	24	0.43 in (11.0 mm)	92 lbs/kft (137 kg/km)	760031526
5021 12/24A W/MXBK	36	0.51 in (13.0 mm)	120 lbs/kft (179 kg/km)	760032854

TeraSPEED™/LazrSPEED® Composite Indoor/Outdoor Loose Tube Cable

The Plenum-Rated and Riser-Rated Indoor/Outdoor Stranded Loose Tube Dielectric Cable allows for connectivity ease and superior mid-span accessibility. The cable is designed to endure the rigors of outdoor use, but can also be run directly in plenum airspace or riser to eliminate a splice point at the building entrance. The basic construction utilizes standard 3.0 mm gel-filled (5124 Series) or dry-block (5125 Series) buffer tubes which contain up to 12 optical fibers. Buffer tubes are stranded around a rigid fiberglass central strength member for protection against thermal expansion and contraction at operational temperature extremes.



A fluoropolymer thermoplastic material is used for the outer jacket and buffer tubes to provide excellent petrochemical resistance, flame propagation, and smoke generation properties that exceeds any similar cable design on the market today. These cables are designed for installation loads up to 600 lbs (2700 N) and long term loads up to 180 lbs (800 N).

All cables meet the mechanical and environmental requirements of Telcordia GR-20-CORE Issue 2 Generic Requirements for Optical Fiber and Optical Fiber Cable and ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

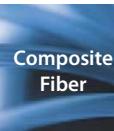
Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)



Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: TeraSPEED–8.3 micron (\geq 9 micron mode field diameter)

LazrSPEED–50 micron

Buffer tubes and fibers are identified with standard color coding.

TS/LS 550 Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 06/06A W/XPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017137
5125 12/12A W/XPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017145
5125 12/24A W/XPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017152
5125 24/24A W/XPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017160
5125 24/48A W/XPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017178
5125 36/36A W/XPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017186

TS/LS 300 Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 06/06A W/ZPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017095
5125 12/24A W/ZPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017103
5125 36/36A W/ZPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017111

TS/LS 150 Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 06/06A W/HPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017020
5125 12/12A W/HPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017038
5125 12/24A W/HPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017046
5125 24/24A W/HPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760017053
5125 24/48A W/HPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017061
5125 36/36A W/HPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017079

TS/LS 300 Riser

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 06/06A W/ZRBK	12	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008433
5124 12/12A W/ZRBK	24	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008441
5124 12/24A W/ZRBK	36	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008458
5124 24/24A W/ZRBK	48	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008466
5124 36/36A W/ZRBK	72	0.53 in (13.6 mm)	115 lbs/kft (172 kg/km)	760008474
5124 48/48A W/ZXBK	96	0.62 in (15.7 mm)	152 lbs/kft (226 kg/km)	760008482

TS/LS 150 Riser

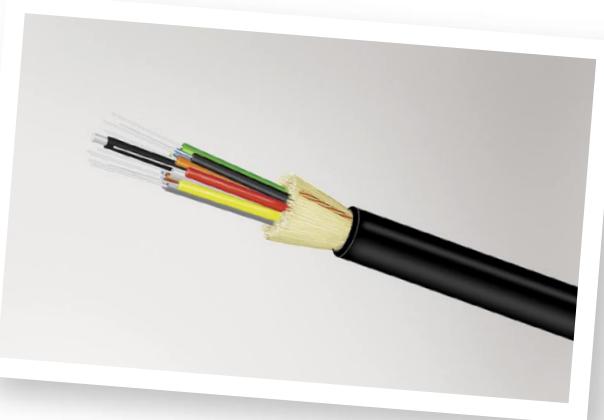
Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 12/06A W/HRBK	18	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760026807

Composite
Fiber

TeraSPEED™/LazrSPEED® Composite Indoor/Outdoor Tight Buffered Cable

Indoor/Outdoor Fiber Optic Cable is a totally dry and waterproof central core cable. It does not contain any gel, filling or flooding compound, grease or other flammable water blocking fluids.

The Low Smoke Zero Halogen (LSZH) Fiber Optic Indoor/Outdoor Cable is built to the International ISO/IEC specifications and features a LSZH design. The UV protected Fiber Optic Indoor/Outdoor Cable is totally halogen free and flame retardant (self-extinguishing).



Indoor/Outdoor Cables use aramid yarns for strength in conjunction with a glass reinforced polymer (GRP) central strength member (CSM). The aramid yarns are specially prepared with an agent that provides the waterproof attribute of the Indoor/Outdoor cables.

Because of the use of buffered fibers rather than coated fibers, connectorization does not require buffer tubing. The absence of gel, filling compound, flooding compound, grease or other flammable water blocking fluids further guarantee an easy and clean connectorization process.

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)



Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: TeraSPEED–8.3 micron (\geq 9 micron mode field diameter)

LazrSPEED–50 micron

Fibers are identified with standard color coding.

TS/LS 550 LSZH

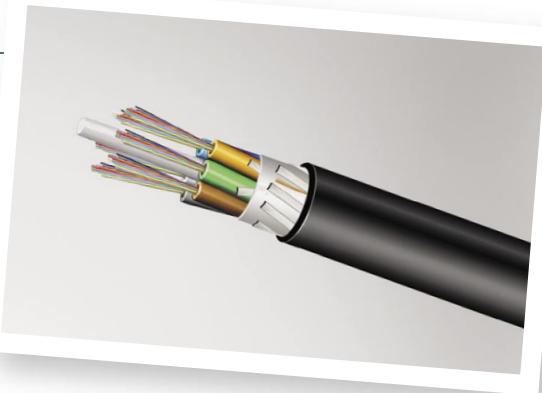
Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5105 12/12A W/XHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760025460

TS/LS 300 LSZH

Product Number	Fiber Count	Construction Type	Outside Diameter	Weight	Material ID
5102 06/06A W/ZHBK	12	Single Unit	0.28 in (7.1 mm)	31 lbs/kft (47 kg/km)	760025411
5105 12/12A W/ZHBK	24	Multi-unit	0.67 in (16.9 mm)	133 lbs/kft (198 kg/km)	760025429
5105 24/24A W/ZHBK	48	Multi-unit	0.79 in (20.0 mm)	198 lbs/kft (295 kg/km)	760025437

TeraSPEED™/OptiSPEED® Composite Indoor/Outdoor Loose Tube Cable

The Plenum-Rated and Riser-Rated Indoor/Outdoor Stranded Loose Tube Dielectric Cable allows for connectivity ease and superior mid-span accessibility. The cable is designed to endure the rigors of outdoor use, but can also be run directly in plenum airspace or riser to eliminate a splice point at the building entrance. The basic construction utilizes standard 3.0 mm gel-filled (5124 Series) or dry-block (5125 Series) buffer tubes which contain up to 12 optical fibers. Buffer tubes are stranded around a rigid fiberglass central strength member for protection against thermal expansion and contraction at operational temperature extremes.



A fluoropolymer thermoplastic material is used for the outer jacket and buffer tubes to provide excellent petrochemical resistance, flame propagation, and smoke generation properties that exceeds any similar cable design on the market today. These cables are designed for installation loads up to 600 lbs (2700 N) and long term loads up to 180 lbs (800 N).

All cables meet the mechanical and environmental requirements of Telcordia GR-20-CORE Issue 2 Generic Requirements for Optical Fiber and Optical Fiber Cable and ANSI/ICEA S-87-640 Standard for Optical Fiber Outside Plant Communications Cable.

- The Plenum cable is (UL and cUL) TYPE OFNP
- The Riser cable is (UL and cUL) TYPE OFNR

Environmental and Mechanical Specifications:

Operating Temperature: -40°F to 158°F (-40°C to 70°C) (Test Method: FOTP – 3)

Installation Temperature: -22°F to 140°F (-30°C to 60°C)

Storage Temperature: -40°F to 167°F (-40°C to 75°C)

Crush Resistance: 250 lbf/in (44 N/mm) (Test Method: FOTP – 41)

Impact Resistance: Exceeds (Test Method: FOTP – 25)

Flexing: Exceeds 25 cycles (Test Method: FOTP – 104)

Twist Bend: Exceeds (Test Method: FOTP – 85)

Physical Specifications:

Cable Jacket: UV Stabilized Black

Core Size: TeraSPEED–8.3 micron (\geq 9 micron mode field diameter)

OptiSPEED–62.5 micron

Buffer tubes and fibers are identified with standard color coding.

TS/OS Plenum

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5125 06/06A W/MPBK	12	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016956
5125 12/12A W/MPBK	24	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016964
5125 12/24A W/MPBK	36	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016972
5125 24/24A W/MPBK	48	0.43 in (11.0 mm)	78 lbs/kft (116 kg/km)	760016980
5125 24/48A W/MPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760016998
5125 36/36A W/MPBK	72	0.47 in (11.9 mm)	92 lbs/kft (136 kg/km)	760017004

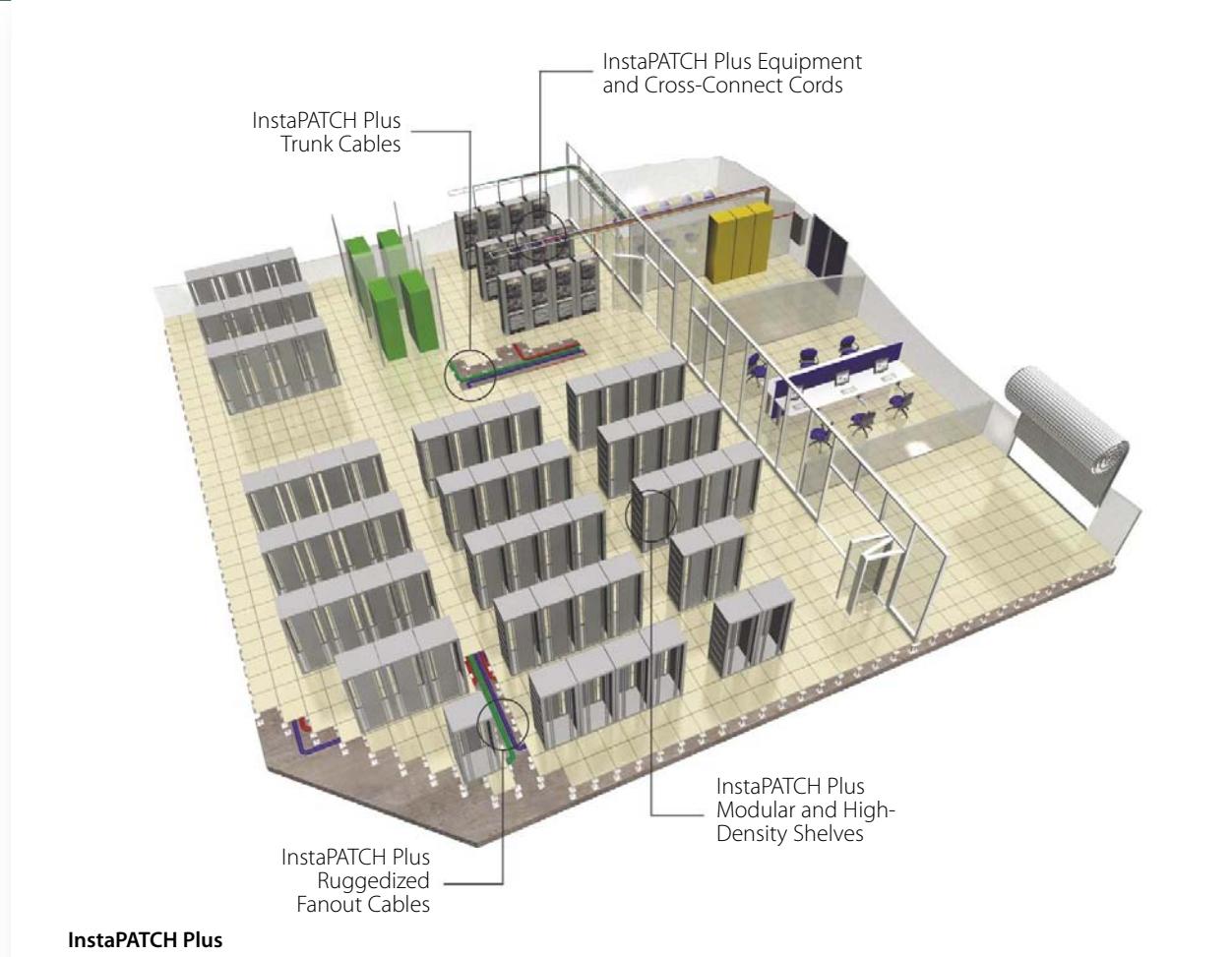
TS/OS Riser

Product Number	Fiber Count	Outside Diameter	Weight	Material ID
5124 06/06A W/MRBK	12	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008375
5124 12/12A W/MRBK	24	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008383
5124 12/24A W/MRBK	36	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008391
5124 24/24A W/MRBK	48	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760008409
5124 36/24A W/MRBK	60	0.49 in (12.6 mm)	99 lbs/kft (148 kg/km)	760036897
5124 36/36A W/MRBK	72	0.53 in (13.6 mm)	115 lbs/kft (172 kg/km)	760008417
5124 48/48A W/MRBK	96	0.62 in (15.7 mm)	152 lbs/kft (226 kg/km)	760008425
5124 96/72A W/MRBK	168	0.80 in (20.5 mm)	229 lbs/kft (341 kg/km)	760033233





InstaPATCH™ Plus Fiber System



The SYSTIMAX InstaPATCH Plus System features a high-density, factory terminated, factory tested, modular fiber connectivity solution that allows installers to simply and quickly connect system components together. This modular system approach enables 96 fibers to be ready for service in the time it takes to make a single fiber connection with traditional systems.

Developed by SYSTIMAX Labs, the InstaPATCH Plus System is designed to support locations, such as data centers, that require high-density, rapid deployment and high performance. The InstaPATCH Plus System incorporates SYSTIMAX LazrSPEED multimode and TeraSPEED singlemode fiber technologies to support today's most demanding applications, while allowing easy migration to the next generation technology.

The InstaPATCH Plus System includes pre-terminated hardware, pre-terminated backbone trunk cables, ruggedized MPO-single fiber fanout patch cords and standard fiber patch cords. The InstaPATCH Plus System utilizes one common module, one common rugged fanout, standard fiber patch cords, and retains the full benefits of easy installation and system administration, while maintaining a future upgrade path to parallel connectivity. Moreover, the InstaPATCH Plus System features an improved labeling system that is accurate and logical when positioned in four orientations, affording more flexibility in design, installation and application.

Pre-terminated with MPO connectors and offered in customer-specified lengths, the InstaPATCH Plus trunk cables are offered in 12, 24, 48, 72, 96, and 144 fibers. Solutions supported are:

- LazrSPEED 300
- LazrSPEED 150
- TeraSPEED

InstaPATCH™ Plus Modular Shelf and DM2 Modules

The InstaPATCH Modular Series includes unpopulated shelves and DM2 modules. The modular design allows fast moves and changes of the optical data network.

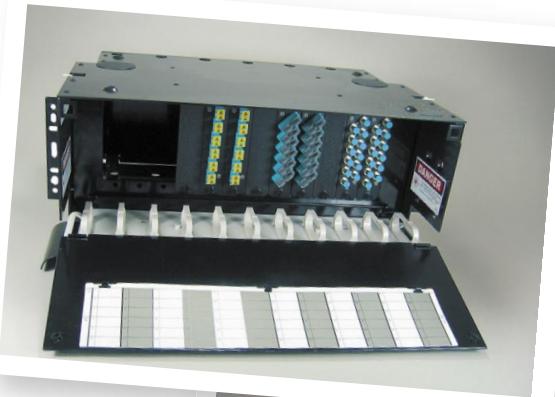
The options of the unpopulated shelf include a 1U 19 inch panel, 1U 19 inch shelf and a 4U 19 inch shelf, that house pre-terminated DM2 modules. Eight versions of pre-terminated modules are offered: LC, SC, ST and a double density LC, each available in LazrSPEED multimode (LS) or TeraSPEED singlemode (SM) options.

The InstaPATCH Plus DM2 module can be fitted in any combination in 1U panel, 1U shelf and 4U shelf. In addition, MPO panels and blank panels, with the same footprint as the DM2 modules, are also available to support additional configurations.

Each DM2 module has a dual polarity labeling scheme, to allow the use of a single module for each end of the InstaPATCH Plus channel.

Features and Benefits:

- 12-fiber MPO connector based modular design enables simple connections
- DM2 modules are constructed with LazrSPEED 300 fibers or TeraSPEED ZWP fibers to provide headroom for future system upgrades
- Factory-terminated and tested modules for instant field connections and guaranteed quality and performance
- Designed for administrative convenience—guaranteed transmit-to-receive connectivity
- No special or non-standard polarity components
- Supports easy reconfiguration for moves, adds, and changes
- Easy upgrade path to parallel connectivity and associated applications, while preserving most of investment
- Automatic shutters for LC adapters



InstaPATCH MP-1U Panel and InstaPATCH MS-1U Shelf

The 1U panel and 1U shelf can house any combination of up to 3 InstaPATCH Plus DM2 modules to achieve up to 72 fiber terminations per unit. In addition, MS-1U provides ample space for storing up to 2 meters of cable slack inside the shelf.

The 1U panel and shelf are equipped with a front trough for patch cord management that provides ample room for labeling. The MP-1U panel comes with conversion brackets for mounting on a 19", 23" or ETSI rack. The InstaPATCH MP-1U also includes a rear cable management bar, labels for network mapping, mounting hardware and installation instructions.

InstaPATCH MS-4U Shelf

The 4U shelf houses any combination up to 12 InstaPATCH Plus DM2 modules to achieve up to 288 fiber terminations per shelf. It can be mounted either on a 19", 23" or ETSI rack. The InstaPATCH MS-4U includes trunk cable storage clips, labels for network mapping, mounting hardware and installation instructions.

InstaPATCH Plus DM2-12LC-LS / -SM Module

This module features 6 pre-installed duplex LC adapters at the front routed to a pre-installed 12-fiber MPO adapter at the back. As with the InstaPATCH Plus DS2-LC shelf, this module features spring-loaded shutters for improved dust prevention and occupational safety.

InstaPATCH Plus DM2-24LC-LS / -SM Module

This module features 12 pre-installed duplex LC adapters at the front routed to 2 pre-installed 12-fiber MPO adapters at the back. As with the InstaPATCH Plus DS2-LC shelf, this high-density module features spring-loaded shutters for improved dust prevention.

InstaPATCH Plus DM2-12SC-LS / -SM Module

This module features 6 pre-installed duplex SC adapters routed to a pre-installed 12-fiber MPO adapter at the back. The duplex SC adapter includes two "easy-pull" protective dust caps.

InstaPATCH Plus DM2-12ST-LS / -SM Module:

This module features 12 simplex ST adapters routed to a pre-installed 12-fiber MPO adapter at the back. The ST adapter includes a protective dust cap.

InstaPATCH Plus DM-MPO Module:

The MPO module features a panel equipped with either 2 or 6 MPO adapters. The module allows for direct connections with MPO equipment for parallel applications.

Physical Specifications:

	MP-1U Panel	MS-4U Shelf	DM2 Modules-LC, SC, ST
Height:	1.7 in (4.37 cm)	7.0 in (17.8 cm)	1.1 in (2.9 cm)
Width:	19.0 in (48.3 cm)	17.0 in (43.2 cm)	5.1 in (13.0 cm)
Depth:	9.7 in (24.6 cm)	11.0 in (27.9 cm)	5.0 in (12.8 cm)
Listing:	UL	UL	UL

Optical Performance:

Module Component	LazrSPEED Total Insertion Loss	Return Loss	TeraSPEED Total Insertion Loss	Return Loss
DM2-LC Modules	≤ 1.15 dB	≥ 20 dB	≤ 1.15 dB	≥ 55 dB
DM2-SC Modules	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB
DM2-ST Modules	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB

InstaPATCH Plus Modular Panels/Shelves

Detailed Description	Material ID
InstaPATCH MP-1U modular panel, supports 3 DM2 modules (not included)	760013458
InstaPATCH MS-1U modular shelf, supports 3 DM2 modules (not included)	760033787
InstaPATCH MS-4U modular shelf, supports 12 DM2 modules (not included)	760013722



InstaPATCH Plus DM2 Modules

Detailed Description	Material ID
InstaPATCH Plus DM2-12LC-LS module	760039727
InstaPATCH Plus DM2-12LC-SM module	760039743
InstaPATCH Plus DM2-12SC-LS module	760039768
InstaPATCH Plus DM2-12SC-SM module	760039784
InstaPATCH Plus DM2-12ST-LS module	760039800
InstaPATCH Plus DM2-12ST-SM module	760039826
InstaPATCH Plus DM2-24LC-LS module	760039685
InstaPATCH Plus DM2-24LC-SM module	760039701
InstaPATCH Plus DM2-2MPO module	760015412
InstaPATCH Plus DM2-6MPO module	760034280
Blank panel for MP-1U and MS-4U, 6/pk	760016063

InstaPATCH™ Plus Pre-terminated Shelves

Available in both LazrSPEED and TeraSPEED Solutions, the InstaPATCH Plus pre-terminated shelf series features pre-terminated, one unit (1U) height LC and SC shelves. The high-density shelves feature 48 and 96 LC connections or 48 SC connections, up to twice that of standard shelves. The InstaPATCH Plus pre-terminated shelves are rack mountable, with a sliding tray for easy access to front side connectors.



The shelf includes a top cover and a patch cord management trough that provides ample room for labeling. The InstaPATCH Plus high-density 1U shelf can be mounted either on a 19", 23" or ETSI rack via extension brackets.

Features and Benefits:

- Slide-out tray ensures the highest usable density on the market – 96LC in 1U
- Shelves are constructed with LazrSPEED 300 fibers or TeraSPEED ZWP fibers to provide headroom for future system upgrades
- Factory-terminated and tested shelves for instant field connections and guaranteed quality and performance
- Designed for administrative convenience – guaranteed transmit-to-receive connectivity
- Easy upgrade path to parallel connectivity and associated applications
- Improved patch cord management and system labeling capabilities
- Automatic shutters for LC adapters

InstaPATCH Plus DS2 Pre-terminated LC Shelf

The high-density LC shelf features 48 pre-installed duplex LC adapters at the front panel routed to 8 pre-installed 12-fiber MPO adapters at the rear of the shelf. The alternative high-density LC shelf includes 24 pre-installed duplex LC adapters at the front panel routed to 4 pre-installed 12-fiber MPO adapters at the rear of the shelf. Also featured are automatic shutters for LC adapters to minimize dust contamination. The InstaPATCH DS shelves also include a rear trunk cable management bar with slack storage coils, labels for network mapping, mounting hardware and installation instructions.

InstaPATCH Plus DS2-48SC Pre-terminated Shelf

The high-density SC shelf features 24 pre-installed duplex SC adapters at the front panel, routed to 4 pre-installed 12-fiber MPO adapters at the rear of the shelf. The InstaPATCH DS shelves also include a rear trunk cable management bar with slack storage coils, labels for network mapping, mounting hardware and installation instructions.

Physical Specifications:

Height: 1.7 in (4.37 cm)

Width: 17.2 in (43.7 cm)

Depth: 16.2 in (41.1 cm)*

Listing: UL

*The depth of the DS shelf includes the front jumper trough and rear cable management features.

Optical Performance:

Module Component	LazrSPEED Total Insertion Loss	Return Loss	TeraSPEED Total Insertion Loss	Return Loss
1U LC DS Shelf	≤ 1.15 dB	≥ 20 dB	≤ 1.15 dB	≥ 55 dB
1U SC DS Shelf	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB
LC DM Module	≤ 1.15 dB	≥ 20 dB	≤ 1.15 dB	≥ 55 dB
SC DM Module	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB
ST DM Module	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB

Detailed Description	Material ID
InstaPATCH Plus DS2-96LC-LS high-density shelf	760040246
InstaPATCH Plus DS2-96LC-SM high-density shelf	760040329
InstaPATCH Plus DS2-48LC-LS high-density shelf	760040261
InstaPATCH Plus DS2-48LC-SM high-density shelf	760040303
InstaPATCH Plus DS2-48SC-LS high-density shelf	760040220
InstaPATCH Plus DS2-48SC-SM high-density shelf	760040303

InstaPATCH™ Plus Pre-terminated Cables and Cords

The SYSTIMAX InstaPATCH Plus System features a high-density, factory-terminated, factory tested, modular fiber connectivity solution that allows installers to simply and quickly connect system components together.

Developed by SYSTIMAX Labs, the InstaPATCH Plus System is designed to support locations, such as data centers, that require high-density, rapid deployment and high performance. The InstaPATCH Plus System incorporates SYSTIMAX LazrSPEED multimode and TeraSPEED singlemode fiber technologies to support today's most demanding applications, while allowing easy migration to next generation technology.



InstaPATCH Plus Trunk Cables

InstaPATCH Plus trunk cables are offered in LazrSPEED 150, LazrSPEED 300 and TeraSPEED Solutions. Two cable constructions are offered: the InstaPATCH-IPR and the InstaPATCH-IPD trunk cables.

The InstaPATCH-IPR trunk cables are constructed from 12 fiber ribbons in flat sheaths and available in 12 or 24 fiber versions. They are plenum-rated and are factory-terminated on both ends with 12 fiber female MPO connections.

The InstaPATCH-IPD trunk cables are round and offered in 12, 24, 48, 72, 96 and 144 fibers. The cable is constructed with multiple subunits, each with 12 fibers and is terminated on both ends with MPO 12-fiber connectors. There is no splicing within the cable, and each group of 12 fibers is protected by over-sheath. The lengths of the breakout over-sheaths are staggered for easy routing and handling. The maximum length of the breakout over-sheath is 33 inches from the transition point.

All IPD cables and the 12 fiber IPR cable can be ordered with or without a pulling eye.

Features and Benefits:

- Available in LazrSPEED 150, LazrSPEED 300 and TeraSPEED Solutions
- 12 fiber MPO connector-based modular design enables simple connections
- Factory terminated and tested trunk cables for instant field connections and guaranteed quality and performance
- Designed for administrative convenience – guaranteed transmit-to-receive connectivity
- Supports easy reconfiguration for moves, adds and changes
- Easy upgrade path to parallel connectivity and associated applications, while preserving most of the investment



InstaPATCH Plus Equipment Cords

The InstaPATCH Plus equipment cords, offered in both LazrSPEED 300 and TeraSPEED Solutions, are used to connect hardware using parallel transceivers to trunk cables. The InstaPATCH Plus equipment cords are constructed with a 12 fiber ribbon cable and provide a female MPO connector on one end to attach to a transceiver and a male MPO on the other end to attach to a trunk cable through a DM-2PO or a DM-6MPO module. The cords are custom built and can be ordered to specific lengths in feet or meters.

InstaPATCH Plus Cross-Connect Cords

The InstaPATCH Plus cross-connect cords, offered in LazrSPEED 300, LazrSPEED 150 and TeraSPEED Solutions, are used to cross-connect trunk cables at the patch panel for convenient administration of groups of twelve fibers at a time. The InstaPATCH Plus cross-connect cords are constructed with a 12 fiber ribbon cable and provide male MPO connectors on both ends to cross-connect trunk cables through DM-2MPO or a DM-6MPO modules. The cords are custom built and can be ordered to specific lengths in feet or meters.

Cable Specifications:

Attenuation, max:	LazrSPEED 150	LazrSPEED 300	TeraSPEED
IPR:	3.5 dB/km @ 850 nm	3.5 dB/km @ 850 nm	0.5 dB/km @ 1,310 nm
	1.5 dB/km @ 1,300 nm	1.5 dB/km @ 1,300 nm	0.5 dB/km @ 1,385 nm 0.5 dB/km @ 1,550 nm
IPD:	3.0 dB/km @ 850 nm	3.0 dB/km @ 850 nm	0.35 dB/km @ 1,310 nm
	1.0 dB/km @ 1,300 nm	1.0 dB/km @ 1,300 nm	0.32 dB/km @ 1,382 nm 0.24 dB/km @ 1,550 nm
Minimum Bandwidth, MHz-km:			
Overfilled:	700 @ 850 nm	1,500 @ 850 nm	N/A
	500 @ 1,300 nm	500 @ 1,300 nm	N/A
Laser:	950 @ 850 nm	2,000 @ 850 nm	N/A
	500 @ 1,300 nm	500 @ 1,300 nm	N/A

Cable Dimension, mm, Cross-Section:

12 Fiber Single Ribbon	2.50 x 4.70
24 Fiber Dual Ribbon	2.50 x 9.40
24 Fiber Multi-unit	3.9 x 6.9 (oval)
48 Fiber Multi-unit	9.1
72 Fiber Multi-unit	10.7
96 Fiber Multi-unit	12.3
144 Fiber Multi-unit	13.1

Cable Listing: OFNP (UL) OFN FT-6 (CSA) LSZH

Temperature Range: 32°F to 158°F (0°C to 70°C)

Tensile Rating: Ribbon IPR: 670 N (150 lbs)

Distribution IPD - 670-2670 N (150-600 lbs)

Minimum Bending Radius: 20X Cable OD During Installation
10X Cable OD After Installation

MPO Connector Type: Trunk - female
Equipment - female/male
Cross-connect - male

Total Termination Insertion Loss per Trunk Cable: < 1.45 dB

Mating Durability (per EIA 455-21A): < 0.2 dB change 1,000 remate

Return Loss: ≥ 20 dB change 1,000 remate for MM

≥ 55 dB change 1,000 remate for SM

Detailed Description	FPC Code
LazrSPEED 150 IPR MPO(f)-MPO(f) Trunk Cable, 12 Fiber Ribbon, Plenum	FPCHMPMP9A-P
LazrSPEED 150 IPR MPO(f)-MPO(f) Trunk Cable, 12 Fiber Ribbon, Plenum, with Pulling Eye	FPCHMPMP9A-E
LazrSPEED 150 IPR MPO(f)-MPO(f) Trunk Cable, 2x12 Fiber Ribbon, Plenum	FPCHMPMP9B-P
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 24 Fiber Multi-unit Cable, Plenum	FPCHMPMP6D-P
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 24 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCHMPMP6D-E
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 48 Fiber Multi-unit Cable, Plenum	FPCHMPMP6E-P
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 48 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCHMPMP6E-E
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 72 Fiber Multi-unit Cable, Plenum	FPCHMPMP6F-P
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 72 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCHMPMP6F-E
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 96 Fiber Multi-unit Cable, Plenum	FPCHMPMP6G-P
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 96 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCHMPMP6G-E
LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 144 Fiber Multi-unit Cable, Plenum	FPCHMPMP6H-P



Detailed Description**FPC Code**

LazrSPEED 150 IPD MPO(f)-MPO(f) Trunk Cable, 144 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCCHMPMP6H-E
LazrSPEED 300 IPR MPO(f)-MPO(f) Trunk Cable, 12 Fiber Ribbon, Plenum	FPCZMPMP9A-P
LazrSPEED 300 IPR MPO(f)-MPO(f) Trunk Cable, 12 Fiber Ribbon, Plenum, with Pulling Eye	FPCZMPMP9A-E
LazrSPEED 300 IPR MPO(f)-MPO(f) Trunk Cable, 2x12 Fiber Ribbon, Plenum	FPCZMPMP9B-P
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 24 Fiber Multi-unit Cable, Plenum	FPCZMPMP6D-P
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 24 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCZMPMP6D-E
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 48 Fiber Multi-unit Cable, Plenum	FPCZMPMP6E-P
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 48 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCZMPMP6E-E
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 72 Fiber Multi-unit Cable, Plenum	FPCZMPMP6F-P
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 72 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCZMPMP6F-E
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 96 Fiber Multi-unit Cable, Plenum	FPCZMPMP6G-P
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 96 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCZMPMP6G-E
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 144 Fiber Multi-unit Cable, Plenum	FPCZMPMP6H-P
LazrSPEED 300 IPD MPO(f)-MPO(f) Trunk Cable, 144 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCZMPMP6H-E
TeraSPEED IPR MPO(f)-MPO(f) Trunk Cable, 12 Fiber Ribbon, Plenum	FPCWMPMP9A-P
TeraSPEED IPR MPO(f)-MPO(f) Trunk Cable, 12 Fiber Ribbon, Plenum, with Pulling Eye	FPCWMPMP9A-E
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 24 Fiber Multi-unit Cable, Plenum	FPCWMPMP6D-P
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 24 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCWMPMP6D-E
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 48 Fiber Multi-unit Cable, Plenum	FPCWMPMP6E-P
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 48 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCWMPMP6E-E
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 72 Fiber Multi-unit Cable, Plenum	FPCWMPMP6F-P
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 72 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCWMPMP6F-E
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 96 Fiber Multi-unit Cable, Plenum	FPCWMPMP6G-P
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 96 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCWMPMP6G-E
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 144 Fiber Multi-unit Cable, Plenum	FPCWMPMP6H-P
TeraSPEED IPD MPO(f)-MPO(f) Trunk Cable, 144 Fiber Multi-unit Cable, Plenum, with Pulling Eye	FPCWMPMP6H-E
LazrSPEED 300 IPR MPO(f)-MPO(m) 12 Fiber Ribbon Equipment Cord, Plenum	FPCZMPMX9A-P
LazrSPEED 150 IPR MPO(m)-MPO(m) 12 Fiber Ribbon Cross-connect Cord, Plenum	FPCCHMXMX9A-P
LazrSPEED 300 IPR MPO(m)-MPO(m) 12 Fiber Ribbon Cross-connect Cord, Plenum	FPCZMXMX9A-P



InstaPATCH™ Plus Ruggedized Fanout Cable

The InstaPATCH Plus ruggedized fanout cables support direct connection to equipment from the patch panel. Terminated with MPO connectors on one end and clipped duplex connectors (LC, SC or ST) on the other end, the ruggedized fanout cable is designed for use with InstaPATCH Plus modular shelves and MPO panels.

The ruggedized fanouts are available in LazrSPEED 300 and TeraSPEED Solutions, in 12, 24, 48 and 72 fiber counts. The fanout is built with either InstaPATCH IPR (ribbon) or InstaPATCH IPD (12 fiber subunit distribution cable), and furcated to individual fiber legs, terminated with individual connectors. Each fiber leg is protected with aramid yarn and 2.0 mm furcation tubing for rugged applications.

Ruggedized fanout cables can be ordered in custom length, with or without a pulling eye on the MPO end. The length of the furcated legs is approximately 48 inches from the connector end.



Features and Benefits:

- 12 fiber MPO connector based modular design enables simple connections
- Ruggedized fanouts are constructed with LazrSPEED 300 fibers or TeraSPEED ZWP fibers to provide headroom for future system upgrades
- Provide ultra high-density patching to achieve maximum density of 216 individual fibers in 1U
- Factory-terminated and tested for instant field connections and guaranteed quality and performance
- Designed for administrative convenience—guaranteed transmit-to-receive connectivity
- No special or non-standard polarity components

Optical Performance:

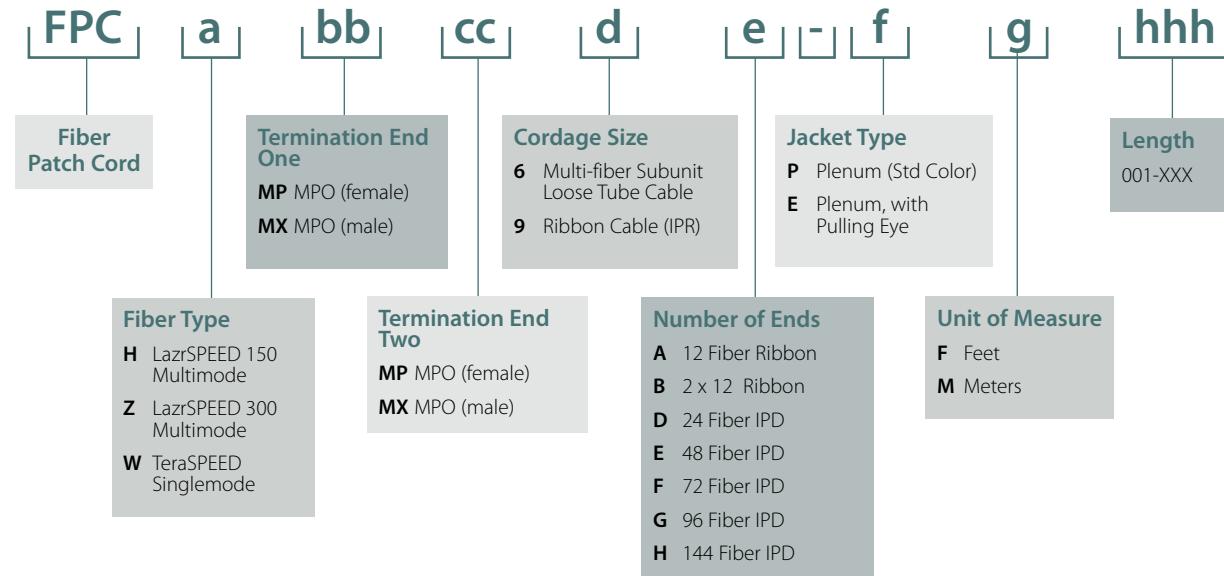
Module Component	LazrSPEED Total Insertion Loss	Return Loss	TeraSPEED Total Insertion Loss	Return Loss
LC Ruggedized Fanout	≤ 1.15 dB	≥ 20 dB	≤ 1.15 dB	≥ 55 dB
SC Ruggedized Fanout	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB
ST Ruggedized Fanout	≤ 1.3 dB	≥ 20 dB	≤ 1.3 dB	≥ 55 dB

Detailed Description	FPC Code
LazrSPEED 300 12 Fiber IPR MPO(m)-LC, Plenum	FPCZMXLCYA-P
LazrSPEED 300 12 Fiber IPR MPO(m)-LC, Plenum, with Pulling Eye	FPCZMXLCYA-E
LazrSPEED 300 24 Fiber IPD MPO(m)-LC, Plenum	FPCZMXLCYD-P
LazrSPEED 300 24 Fiber IPD MPO(m)-LC, Plenum, with Pulling Eye	FPCZMXLCYD-E
LazrSPEED 300 48 Fiber IPD MPO(m)-LC, Plenum	FPCZMXLCYE-P
LazrSPEED 300 48 Fiber IPD MPO(m)-LC, Plenum, with Pulling Eye	FPCZMXLCYE-E
LazrSPEED 300 72 Fiber IPD MPO(m)-LC, Plenum	FPCZMXLCYF-P
LazrSPEED 300 72 Fiber IPD MPO(m)-LC, Plenum, with Pulling Eye	FPCZMXLCYF-E
LazrSPEED 300 12 Fiber IPR MPO(m)-SC, Plenum	FPCZMXSCYA-P
LazrSPEED 300 12 Fiber IPR MPO(m)-SC, Plenum, with Pulling Eye	FPCZMXSCYA-E
LazrSPEED 300 24 Fiber IPD MPO(m)-SC, Plenum	FPCZMXSCYD-P
LazrSPEED 300 24 Fiber IPD MPO(m)-SC, Plenum, with Pulling Eye	FPCZMXSCYD-E
LazrSPEED 300 48 Fiber IPD MPO(m)-SC, Plenum	FPCZMXSCYE-P
LazrSPEED 300 48 Fiber IPD MPO(m)-SC, Plenum, with Pulling Eye	FPCZMXSCYE-E

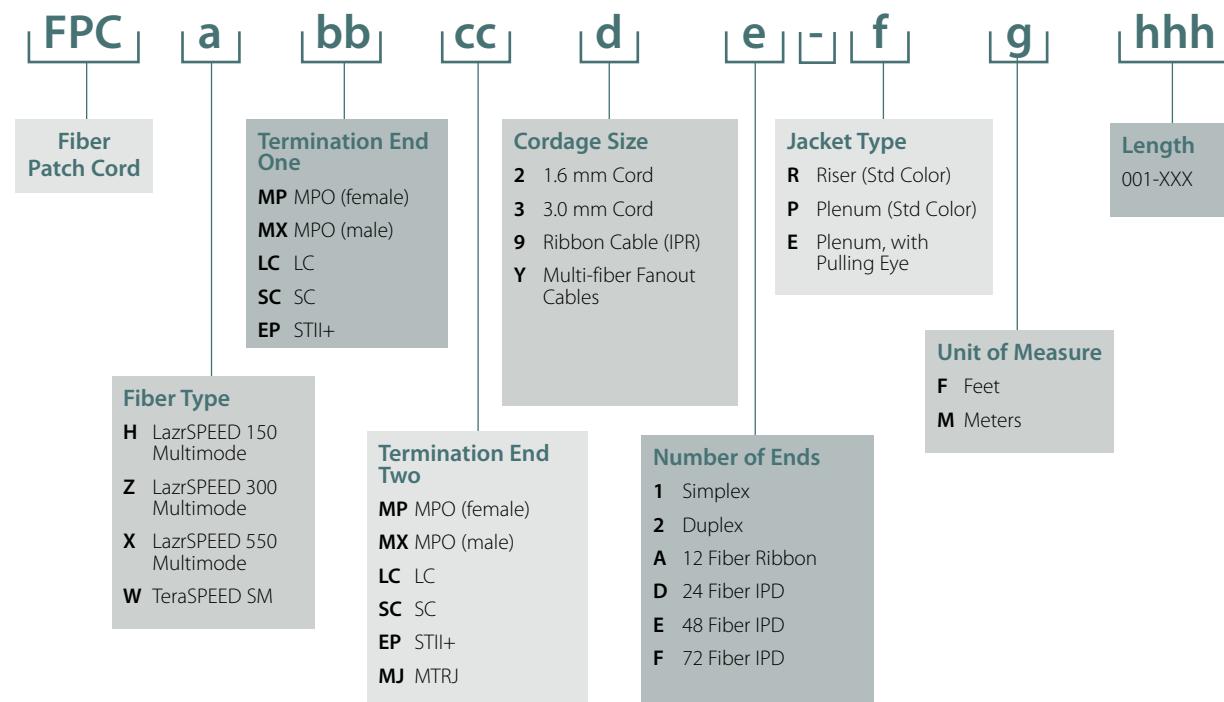
Detailed Description	FPC Code
LazrSPEED 300 72 Fiber IPD MPO(m)-SC, Plenum	FPCZMXSCYF-P
LazrSPEED 300 72 Fiber IPD MPO(m)-SC, Plenum, with Pulling Eye	FPCZMXSCYF-E
LazrSPEED 300 12 Fiber IPR MPO(m)-STII+, Plenum	FPCZMXEPYA-P
LazrSPEED 300 12 Fiber IPR MPO(m)-STII+, Plenum, with Pulling Eye	FPCZMXEPYA-E
LazrSPEED 300 24 Fiber IPD MPO(m)-STII+, Plenum	FPCZMXEPYD-P
LazrSPEED 300 24 Fiber IPD MPO(m)-STII+, Plenum, with Pulling Eye	FPCZMXEPYD-E
LazrSPEED 300 48 Fiber IPD MPO(m)-STII+, Plenum	FPCZMXEPYE-P
LazrSPEED 300 48 Fiber IPD MPO(m)-STII+, Plenum, with Pulling Eye	FPCZMXEPYE-E
LazrSPEED 300 72 Fiber IPD MPO(m)-STII+, Plenum	FPCZMXEPYF-P
LazrSPEED 300 72 Fiber IPD MPO(m)-STII+, Plenum, with Pulling Eye	FPCZMXEPYF-E
TeraSPEED 12 Fiber IPR MPO(m)-LC, Plenum	FPCWMXLCYA-P
TeraSPEED 12 Fiber IPR MPO(m)-LC, Plenum, with Pulling Eye	FPCWMXLCYA-E
TeraSPEED 24 Fiber IPD MPO(m)-LC, Plenum	FPCWMXLCYD-P
TeraSPEED 24 Fiber IPD MPO(m)-LC, Plenum, with Pulling Eye	FPCWMXLCYD-E
TeraSPEED 48 Fiber IPD MPO(m)-LC, Plenum	FPCWMXLCYE-P
TeraSPEED 48 Fiber IPD MPO(m)-LC, Plenum, with Pulling Eye	FPCWMXLCYE-E
TeraSPEED 72 Fiber IPD MPO(m)-LC, Plenum	FPCWMXLCYF-P
TeraSPEED 72 Fiber IPD MPO(m)-LC, Plenum, with Pulling Eye	FPCWMXLCYF-E
TeraSPEED 12 Fiber IPR MPO(m)-SC, Plenum	FPCWMXSCYA-P
TeraSPEED 12 Fiber IPR MPO(m)-SC, Plenum, with Pulling Eye	FPCWMXSCYA-E
TeraSPEED 24 Fiber IPD MPO(m)-SC, Plenum	FPCWMXSCYD-P
TeraSPEED 24 Fiber IPD MPO(m)-SC, Plenum, with Pulling Eye	FPCWMXSCYD-E
TeraSPEED 48 Fiber IPD MPO(m)-SC, Plenum	FPCWMXSCYE-P
TeraSPEED 48 Fiber IPD MPO(m)-SC, Plenum, with Pulling Eye	FPCWMXSCYE-E
TeraSPEED 72 Fiber IPD MPO(m)-SC, Plenum	FPCWMXSCYF-P
TeraSPEED 72 Fiber IPD MPO(m)-SC, Plenum, with Pulling Eye	FPCWMXSCYF-E
TeraSPEED 12 Fiber IPR MPO(m)-STII+, Plenum	FPCWMXEPPYA-P
TeraSPEED 12 Fiber IPR MPO(m)-STII+, Plenum, with Pulling Eye	FPCWMXEPPYA-E
TeraSPEED 24 Fiber IPD MPO(m)-STII+, Plenum	FPCWMXEPPYD-P
TeraSPEED 24 Fiber IPD MPO(m)-STII+, Plenum, with Pulling Eye	FPCWMXEPPYD-E
TeraSPEED 48 Fiber IPD MPO(m)-STII+, Plenum	FPCWMXEPPYE-P
TeraSPEED 48 Fiber IPD MPO(m)-STII+, Plenum, with Pulling Eye	FPCWMXEPPYE-E
TeraSPEED 72 Fiber IPD MPO(m)-STII+, Plenum	FPCWMXEPPYF-P
TeraSPEED 72 Fiber IPD MPO(m)-STII+, Plenum, with Pulling Eye	FPCWMXEPPYF-E



InstaPATCH™ Plus Trunk Cables



InstaPATCH Plus Patch Cords



600G2 Fiber Optic Modular Shelf

The SYSTIMAX 600G2 System is a series of low-profile Fiber Optic Combination Shelves that are used for a combination of splicing and termination of fiber optic building cable or outside plant (OSP) cables. The 600G2 modular shelves system is available in both 1U and 2U height fully enclosed shelves, with integrated front cable management trough included. It features either a fixed tray, or slide-out tray for easy access.



The 600G2 modular shelf system features interchangeable G2 modules, which are ordered separately. The G2 modules are available in SC, ST and LC for LazrSPEED, OptiSPEED and TeraSPEED Solutions. The 1U shelf accepts up to 4 and the 2U shelf accepts up to 8 G2 fiber modules, which are pre-populated with fiber optic adapters. The fiber modules are offered either fiberless or equipped with pre-terminated pigtails ready for splicing. In addition, a multimedia outlet bezel can be used interchangeably with the G2 module to facilitate multimedia applications. (For more information on this please refer to the SYSTIMAX G2 module).

Completing the 600G2 modular shelf offer is the patent pending RoloSplice kit, which provides easy access and administration of two individual splice trays for either fusion or mechanical splices, for the 1U shelf, and 4 splice trays for the 2U shelf. Each 600G2 modular shelf accommodates up to two RoloSplice kits.

Features and Benefits:

- Hinged front doors for easy access
- Front cable management trough
- Top cover panel
- Standard water-tight cable entry conduit connectors for OSP cable, cable diameter 0.25 in to 0.50 in (6.35 mm to 12.70 mm)
- Blank labels for identifying fiber splices and terminations

Additional 600G2 modular shelf accessories include:

- Water-tight connector kit for smaller diameter cable, cable diameter 0.08 in to 0.275 in (2.03 mm to 6.99 mm)
- Universal mounting bracket kit to adapt shelf for ETSI frames or 23" frames

Physical Specifications

Weight: 1U: 7.2 lbs (3.3 kg) – fixed

2U: 10.2 lbs (4.2 kg) – fixed

1U: 9.0 lbs (4.1 kg) – sliding

2U: 12.0 lbs (5.4 kg) – sliding

Overall Height: 1U: 1.75 in (4.45 cm)

2U: 3.5 in (8.90 cm)

Overall Width: (including mounting brackets) 19 in (48.26 cm)

Tray Depth: 10 in (25.4 cm)

Overall Shelf Depth: (including trough) 14 in (35.56 cm) – fixed

18 in (45.72 cm) – sliding

OSP Cable Capacity: 1U: 2

2U: 4



Shelf System Capacity:

Application	Connection Type	Capacity 600G2-1U-MOD	Capacity 600G2-2U-MOD
Termination Only	LC	48	96
	SC	24	48
	ST	24	48
Termination + Fusion Splicing	LC	48	96
	SC	24	48
	ST	24	48
Termination + Mechanical Splicing	LC	48	96
	SC	24	48
	ST	24	48

G2 Shelf

Product Number	Description	Material ID
600G2-1U-MOD-SD	600G2 Modular Shelf, 1U, Slide	760028324
600G2-1U-MOD-FX	600G2 Modular Shelf, 1U, Fixed	760028332
600G2-2U-MOD-SD	600G2 Modular Shelf, 2U, Slide	760032086
600G2-2U-MOD-FX	600G2 Modular Shelf, 2U, Fxed	760032094

Splice Kits

Product Number	Description	Material ID
RS-00	RoloSplice, Accept 4 Splice Trays (not included)	760027516
RS-2AM-12SF	RoloSplice Kit E/W 2x Mech Splice Tray for 1U Shelf	760039859
RS-2AF-16SF	RoloSplice Kit E/W 2x Fusion Splice Tray for 1U Shelf	760039867
RS-4AM-12SF	RoloSplice Kit E/W 4x Mech Splice Tray for 2U Shelf	760031849
RS-4AF-16SF	RoloSplice Kit E/W 4x Fusion Splice Tray for 2U Shelf	760031856
1AM1-12LG	Mechanical Splice Organizer, Holds 12 Splices, Pack of 10	700006240
1AMF1-16LG	Fusion Splice Organizer, Holds 16 Splices, Pack of 10	700006257
1AMF1-6LG	Mass Fusion Splice Organizer, Holds 6 Splices, Pack of 10	700006281

Accessories

Product Number	Description	Material ID
600-SRF	Small-Diameter-Cable Fitting Kit	760039875
600-23BRKT	Mounting Bracket Kit for 23" Frame	760039883



1000G2 Fiber Optic Modular Shelf

The SYSTIMAX 1000G2 Modular Shelf is the next generation (G2) high capacity, high density fiber optic shelf, used for a combination of splicing and termination of fiber optic building cable or outside plant (OSP) cables. The shelf can be used for combined termination and splicing for up to 192 fibers with LC and for up to 144 fibers with SC or ST connections. It has a unique patent pending design that combines both splicing and termination in a sliding format, which in turn provides both rear and full front access.



This 4U combination shelf is 14 inches deep, featuring an additional 3 inches of depth for better incoming fiber management, when used with 6 inch deep equipment mounting rails. It provides double density versus separate shelves for splicing and termination and improves slack fiber management. The new white internal structure improves visibility for the installer and slides out completely, providing easy access to all terminations.

The 1000G2 modular shelf system features interchangeable G2 modules, available in SC, ST and LC for LazrSPEED, OptiSPEED and TeraSPEED Solutions. G2 modules are offered with or without pre-assembled and factory-terminated pigtailed. In addition, a multi-media outlet bezel can be used interchangeably with the G2 module to facilitate multimedia applications. (For more information on this please refer to the SYSTIMAX G2 modules documentation).

Completing the 1000G2 modular shelf offer is the patent pending "Splice Wallet", which provides easy access and administration of six individual splice trays. Each 1000G2 modular shelf will accommodate up to 12 G2 modular cartridges and two "Splice Wallets".

Each 1000G2 modular shelf is equipped with:

- Hinged front and rear doors constructed of black polycarbonate and equipped (rear door) with knockouts for optional lock mechanism
- Universal shelf mounting brackets for 19", 23" or ETSI frame mounting
- Cable entry protectors for incoming building fiber or OSP fiber
- Fiber jumper bend limiters
- Blank labels for identifying fiber splices and terminations
- Articulated splicing/termination panel that slides out and pivots for easy access

Physical Specifications:

Weight: 12 lbs (5.4 kg)

Height: 7 in (17.8 cm)

Width: 17 in (43.2 cm)

Depth: 14 in (35.6 cm)

OSP Cable Capacity: 4



Shelf System Capacity:

Application	Connection Type	1000G2 Modular System Capacity
Termination Only	LC	144
	SC	72
	ST	72
Termination + Fusion Splice	LC	144
	SC	72
	ST	72
Termination + Mechanical Splice	LC	144
	SC	72
	ST	72

G2 Shelf

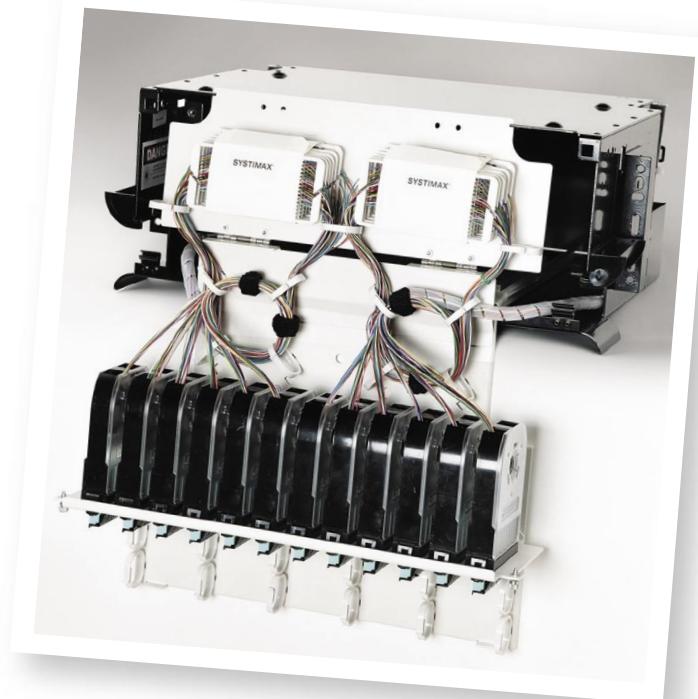
Product Number	Detailed Description	Material ID
1000G2-4U-MOD-SD	1000G2 Modular Combo Shelf, 4U, Sliding	760023200

Splice Kits

Product Number	Detailed Description	Material ID
SW-00	Splice Wallet, Accepts 6x Splice Trays (not Included)	760027342
SW-6AM-12SF	Mechanical Splice Wallet Kit for up to 144 Splices, Include 6 Splice Trays	760031047
SW-6AF-16SF	Fusion Splice Wallet Kit for up to 192 Splices, Include 6 Splice Trays	760031054
1AM1-12LG	Mechanical Splice Organizer, Holds 12 Splices, Pack of 10	700006240
1AMF1-16LG	Fusion Splice Organizer, Holds 16 Splices, Pack of 10	700006257
1AMF1-6LG	Mass Fusion Splice Organizer, Holds 6 Splices, Pack of 10	700006281

Accessories

Product Number	Detailed Description	Material ID
1000G2-CPB	Cable Protector Kit for 1000G2 Shelf	160026674

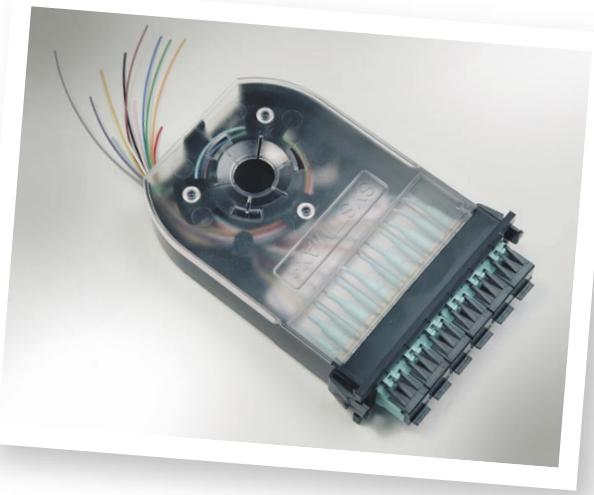


G2 Fiber
Connectivity

G2 Modules

The SYSTIMAX G2 Fiber Optic Shelf is the next generation (G2) high capacity, high-density fiber optic shelf. The G2 shelf can be used for a combination of splicing and termination of fiber optic building cable or outside plant (OSP) cables.

The 600G2 and 1000G2 modular shelf systems feature interchangeable G2 modules available in SC, ST and LC for LazrSPEED, OptiSPEED and TeraSPEED Solutions. All G2 modules are pre-populated with fiber optic adapters, and are offered with or without pre-assembled and factory-terminated pigtails.



Features and options of the un-terminated fiber modules include:

- LazrSPEED modules with twelve LC, six SC, or six ST adapters
- OptiSPEED modules with twelve LC, six SC, or six ST adapters
- TeraSPEED modules with twelve LC, six SC, or six ST adapters
- All modules can be used on all SYSTIMAX G2 series shelves, including 600G2 and 1000G2

Features and options of the pre-terminated fiber modules include:

- LazrSPEED modules with twelve LC, six SC, or six ST adapters, include 2-meters long pre-terminated LazrSPEED 550 pigtailed
- OptiSPEED modules with twelve LC, six SC, or six ST adapters, include 2-meters long pre-terminated pigtailed
- TeraSPEED modules with twelve LC, six SC, or six ST adapters, include 2-meters long pre-terminated pigtailed
- One type of LC module is offered, containing 12 pigtailed with colorized 0.9 mm tight-buffered cordages, following color sequence as defined by TIA standard
- Two types (type A and B) of SC or ST module are offered and should be ordered in pairs. Each module contains 6 pigtailed with colorized 0.9 mm tight-buffered cordages
- Type A SC/ST modules include colorized pigtailed in Blue, Orange, Green, Brown, Slate and White. Type B SC/ST modules include colorized pigtailed in Red, Black, Yellow, Violet, Rose and Aqua
- All modules can be used on all SYSTIMAX G2 series shelves, including 600G2 and 1000G2

G2 optional modular panel include:

- Blank panel with the same footprint as the fiber G2 module, and can be used in all SYSTIMAX G2 modular shelves including 600G2 and 1000G2
- Multimedia outlet bezel panel with the same footprint as the fiber G2 module, which accepts up to four M-Series jacks for multimedia applications



Product Number	Detailed Description	Material ID
MODG2-12LC-LS-PT	G2 Module with 12LC LazrSPEED 550 Pigtailed	760027748
MODG2-6SC-LS-PT-A	G2 Module with 6SC LazrSPEED 550 Pigtailed, Type A	760032227
MODG2-6SC-LS-PT-B	G2 Module with 6SC LazrSPEED 550 Pigtailed, Type B	760034082
MODG2-6ST-LS-PT-A	G2 Module with 6ST LazrSPEED 550 Pigtailed, Type A	760032235
MODG2-6ST-LS-PT-B	G2 Module with 6ST LazrSPEED 550 Pigtailed, Type B	760034058
MODG2-12LC-MM-PT	G2 Module with 12LC OptiSPEED MM Pigtailed	760031021
MODG2-6SC-MM-PT-A	G2 Module with 6SC OptiSPEED MM Pigtailed, Type A	760032243
MODG2-6SC-MM-PT-B	G2 Module with 6SC OptiSPEED MM Pigtailed, Type B	760034090
MODG2-6ST-MM-PT-A	G2 Module with 6ST OptiSPEED MM Pigtailed, Type A	760032250
MODG2-6ST-MM-PT-B	G2 Module with 6ST OptiSPEED MM Pigtailed, Type B	760034066
MODG2-12LC-SM-PT	G2 Module with 12LC TeraSPEED Pigtailed	760031039
MODG2-6SC-SM-PT-A	G2 Module with 6SC TeraSPEED Pigtailed, Type A	760032268
MODG2-6SC-SM-PT-B	G2 Module with 6SC TeraSPEED Pigtailed, Type B	760034108
MODG2-6ST-SM-PT-A	G2 Module with 6ST TeraSPEED Pigtailed, Type A	760032276
MODG2-6ST-SM-PT-B	G2 Module with 6ST TeraSPEED Pigtailed, Type B	760034074

Product Number	Detailed Description	Material ID
MODG2-12LC-LS	G2 Module, E/W 12 LazrSPEED LC Adapters	760032136
MODG2-6SC-LS	G2 Module, E/W 6 LazrSPEED SC Adapters	760032144
MODG2-6ST-LS	G2 Module, E/W 6 LazrSPEED ST Adapters	760032151
MODG2-12LC-MM	G2 Module, E/W 12 OptiSPEED MM LC Adapters	760032169
MODG2-6SC-MM	G2 Module, E/W 6 OptiSPEED MM SC Adapters	760032177
MODG2-6ST-MM	G2 Module, E/W 6 OptiSPEED MM ST Adapters	760032185
MODG2-12LC-SM	G2 Module, E/W 12 TeraSPEED LC Adapters	760032193
MODG2-6SC-SM	G2 Module, E/W 6 TeraSPEED SC Adapters	760032201
MODG2-6ST-SM	G2 Module, E/W 6 TeraSPEED ST Adapters	760032219
MODG2-Blank	G2 Blank Panel for G2 Modular Shelf	760032102
MODG2-MOB	G2 Multimedia Outlet Bezel for Modular Shelf, Accept 4x Outlets with M-Series Openings, Outlet not Included	760032110



**G2 Fiber
Connectivity**

600G2 Fiber Optic Panel Shelf

The SYSTIMAX 600G2 System is a series of low-profile fiber optic combination shelves that are used for a combination of splicing and termination of fiber optic building cable or outside plant (OSP) cables. The shelf is designed for use as a termination shelf only (direct connector termination) or as a splice and termination shelf for up to 48 individual fibers.

The 600G2 panel shelf system is available in a 1U height fully enclosed shelf, with integrated front cable management trough included. It features either a fixed tray, or slide-out tray for easy access. A front faceplate of different configuration is required and can be ordered separately. The front faceplates accept standard simplex or duplex fiber optic adapters to provide flexibility.

Completing the 600G2 shelf offer is the patent pending "RoloSplice kit," which provides easy access and administration of two individual splice trays for either fusion or mechanical splices, for the 1U shelf.



Each 600G2 panel shelf is equipped with:

- Hinged front doors for easy access
- Front cable management trough
- Top cover panel
- Standard water-tight cable entry conduit connectors for OSP cable, cable diameter 0.25 in to 0.50 in (6.35 mm to 12.70 mm)
- Blank labels for identifying fiber splices and terminations

Additional 600G2 panel shelf accessories include:

- Water-tight connector kit for smaller-diameter cable, cable diameter 0.08 in to 0.275 in (2.03 mm to 6.99 mm)
- Universal mounting bracket kit to adapt shelf for ETSI frames or 23 in frames

Physical Specifications:

Weight: 7.2 lbs (3.3 kg) – fixed

9.0 lbs (4.1 kg) – sliding

Overall Height: 1.75 in (4.45 cm)

Overall Width: 19 in (48.26 cm) (including mounting brackets)

Tray Depth: 10 in (25.4 cm)

Overall Shelf Depth: (includes trough) 14 in (35.56 cm) – fixed
18 in (45.72 cm) – sliding

OSP Cable Capacity: 2



Shelf System Capacity:

Application	Connection Type	Capacity
Termination Only	LC	48
	SC	48
	ST	24
Termination + Fusion Splicing	LC	48
	SC	48
	ST	24
Termination + Mechanical Splicing	LC	48
	SC	48
	ST	24

G2 Shelf

Product Number	Detailed Description	Material ID
600G2-1U-UP-FX	600G2 Panel Shelf, 1U, Fixed	760033928
600G2-1U-UP-SD	600G2 Panel Shelf, 1U, Sliding	760033936

600G2 Panels

Product Number	Detailed Description	Material ID
600-48LC-DPLX-00	600G2 Panel, Accepts 24 Duplex LC Adapters	760033845
600-24LC-SPLX-00	600G2 Panel, Accepts 24 Simplex LC Adapters	760033852
600-48SC-DPLX-00	600G2 Panel, Accepts 24 Duplex SC Adapters	760033860
600-24SC-DPLX-00	600G2 Panel, Accepts 12 Duplex SC Adapters	760033878
600-24SC-SPLX-00	600G2 Panel, Accepts 24 Simplex SC Adapters	760033886
600-12SC-SPLX-00	600G2 Panel, Accepts 12 Simplex SC Adapters	760033894
600-24ST-SPLX-00	600G2 Panel, Accepts 24 Simplex ST Adapters	760033902
600-12ST-SPLX-00	600G2 Panel, Accepts 12 Simplex ST Adapters	760033910

Splice Kits

Product Number	Detailed Description	Material ID
RS-00	RoloSplice, Accept 4 Splice Trays	760027516
RS-2AM-12SF	RoloSplice Kit, E/W 2x Mech Splice Tray	760039859
RS-2AF-16SF	RoloSplice Kit, E/W 2x Fusion Splice Tray	760039867
1AM1-12LG	Mechanical Splice Organizer, Holds 12 Splices, Pack of 10	700006240
1AMF1-16LG	Fusion Splice Organizer, Holds 16 Splices, Pack of 10	700006257
1AMF1-6LG	Mass Fusion Splice Organizer, Holds 6 Splices, Pack of 10	700006281

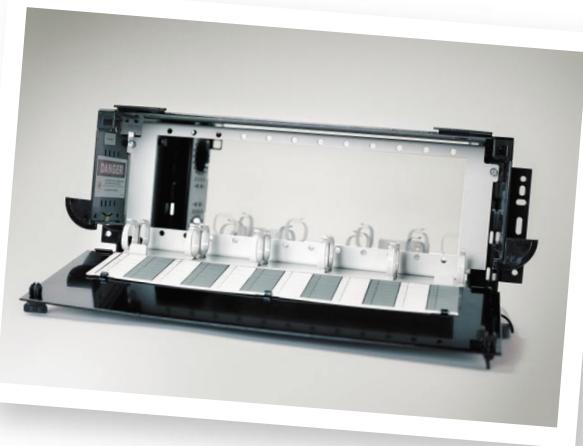
Accessories

Product Number	Detailed Description	Material ID
600-SRF	Small-Diameter-Cable Fitting Kit	760039875
600-23BRKT	Mounting Bracket Kit for 23" Frame	760039883



1000G2 Fiber Optic Panel Shelf

The SYSTIMAX 1000G2 Panel Shelf is the next generation (G2) high capacity, high-density fiber optic shelf, used for a combination of splicing and termination of fiber optic building cable or outside plant (OSP) cables. The shelf can be used for combined termination and splicing for up to 192 fibers and for up to 288 fibers if used for termination only (LC connections). It has a unique patent-pending design that combines both splicing and termination in a sliding format, which in turn provides both rear and full front access.



The 4U combination shelf is 14 inches deep, featuring additional 3 inches of depth for better incoming fiber management when used with 6 inch deep equipment mounting rails. It provides double density versus separate shelves for splicing and termination and improves slack fiber management. The new white internal structure improves visibility for the installer and slides out completely, providing easy access to all terminations.

The 1000G2 panel shelf system accepts up to twelve 1000-type panels or SYSTIMAX InstaPATCH Plus modules (For more information on this, please refer to the SYSTIMAX InstaPATCH Plus Modules Documentation). The 1000-type panels accept LC, SC or ST adapters, except for the high-density panels which include pre-populated adapters, 1000 type panels are in general offered unpopulated.

Completing the 1000G2 shelf offer is the patent pending "Splice Wallet", which provides easy access and administration of six individual splice trays. Each 1000G2 shelf will accommodate up to 12 G2 InstaPATCH modules/1000 series panels, and two "Splice Wallets".

Each 1000G2 panel shelf is equipped with:

- Hinged front and rear doors constructed of black polycarbonate and equipped (rear door) with knockouts for optional lock mechanism
- Universal shelf mounting brackets for 19 in, 23 in or ETSI frame mounting
- Cable entry protectors for incoming building fiber or OSP fiber
- Fiber jumper bend limiters
- Blank labels for identifying fiber splices and terminations
- Articulated splicing/termination panel that slides out and pivots for easy access

Physical Specifications:

Weight: 12 lbs (5.4 kg)

Height: 7 in (17.8 cm)

Width: 17 in (43.2 cm)

Depth: 14 in (35.6 cm)

OSP Cable Capacity: 4



Shelf System Capacity:

Application	Connection Type	1000G2 Modular System Capacity
Termination Only	LC	288
	SC	144
	ST	144
Termination + Fusion Splice	LC	192
	SC	144
	ST	144
Termination + Mechanical Splice	LC	192
	SC	144
	ST	144

G2 Shelf

Product Number	Detailed Description	Material ID
1000G2-4U-UP-SD	1000G2 Panel Shelf, Accepts 12 1000-Type Panels	760026245

1000G2 Panels

Product Number	Detailed Description	Max. Qty per Shelf	Material ID
1000-24LC-DPLX-LS	1000 Panel, E/W 12x LazrSPEED Duplex Adapters (Aqua)	12	760028209
1000-24LC-DPLX-MM	1000 Panel, E/W 12x MM Duplex Adapters (Beige)	12	760027441
1000-24LC-DPLX-SM	1000 Panel, E/W 12x SM Duplex Adapters (Blue)	12	760027433
1000-12SC-DPLX-MM	1000 Panel, E/W 6x MM Duplex Adapters (Beige)	12	760021790
1000-12SC-DPLX-SM	1000 Panel, E/W 6x SM Duplex Adapters (Blue)	12	760027714
1000-12ST-SPLX-MM	1000 Panel, E/W 12x MM Simplex Adapters	12	760021832
1000-12ST-SPLX-SM	1000 Panel, E/W 12x SM Simplex Adapters	12	760027722
1000-12LC-DPLX-00	1000 Panel, Accepts 6x Duplex LC Adapters	12	700011414
1000-8LC-SPLX-00	1000 Panel, Accepts 8x Simplex LC Adapters	12	760026369
1000-12SC-DPLX-00	1000 Panel, Accepts 6x Duplex SC Adapters	12	760024372
1000-6SC-DPLX-00	1000 Panel, Accepts 3x Duplex SC Adapters	12	700010952
1000-6SC-SPLX-00	1000 Panel, Accepts 6x Simplex SC Adapters	12	700011398
1000-8SC-SPLX-00	1000 Panel, Accepts 8x Simplex SC Adapters	12	700168966
1000-12ST-SPLX-00	1000 Panel, Accepts 12x Simplex ST Adapters	12	760024380
1000-6ST-SPLX-00	1000 Panel, Accepts 6x Simplex ST Adapters	12	700011406
1000-6ST-SPLX-00	1000 Panel, Accepts 6x Simplex ST Adapters, 12/pk	As needed	700011109
1000-Blank-BK	1000 Blank Panel, Black, 6/pk	As needed	760016063
1000-Blank-WH	1000 Blank Panel, White, 6/pk	As needed	700162936

Splice Kits

Product Number	Detailed Description	Max. Qty per Shelf	Material ID
SW-00	Splice Wallet, Accepts 6x Splice Trays (not included)	As needed	760027342
SW-6AM-12SF	Mechanical Splice Wallet Kit for up to 144 Splices, Include 6 Splice Trays	2	760031047
SW-6AF-16SF	Fusion Splice Wallet Kit for up to 192 Splices, Include 6 Splice Trays	2	760031054
1AM1-12LG	Mechanical Splice Organizer, Holds 12 Splices, Pack of 10		700006240
1AMF1-16LG	Fusion Splice Organizer, Holds 16 Splices, Pack of 10		700006257
1AMF1-6LG	Mass Fusion Splice Organizer, Holds 6 Splices, Pack of 10		700006281

Accessories

Product Number	Detailed Description	Material ID
1000G2-CPB	Cable Protector Kit for 1000G2 Shelf	760026674



Fiber Optic LIUs: 100A3, 200A, 200B, 400A2, 100LS and 200LS

The Fiber Optic LIU's are modular enclosures that provide cross-connect and/or inter-connect, splicing and terminating capabilities for outside plant, building and riser cables.

The 100A3 LIU terminates a maximum of 24 fibers using LC connectors and 12 fibers using STII+ or SC connectors. With an optional splicing kit, it can accommodate up to 12 mechanical or fusion splices. The 100A3 is made of an engineered polycarbonate material and can accommodate two connector panels or one splice unit. The 100A3 LIU is both wall and frame mountable (with an optional frame mounting bracket), and feature five retainer rings arranged in a circular configuration to hold slack while not violating minimum bend radius requirements.

The 200A LIU has similar features as the 100A3 except that it is made of aluminum and has two additional windows for connector panels. The 200A LIU terminates 48 fibers using LC connectors and 12 fibers using STII+ or SC connectors. With an optional splicing kit, it can accommodate up to 24 splices.

The 200B LIU is used to terminate 32 fibers or splice 24 fibers. It is a National Electrical Manufacturers Association (NEMA) four-rated cabinet. The 200B is a steel enclosure designed for industrial applications. The right side is designed to allow rearrangement of jumpers or inter-connection to building cable. It comes with a removable outer door and an inner door for securing the network section. The 200B is both wall and frame mountable.

The 400A2 LIU directly terminates 64 fibers or accommodates 24 splices plus 48 terminations. The 400A may be ordered with or without key locks.

The wall mountable 100LS LIU terminates up to 24 fibers using LC connectors and up to 12 fibers using STII+ or SC connectors. With an optional splicing kit it can accommodate up to 12 mechanical or fusion splices. The 100LS holds two 10P panels.

The wall mountable 200LS LIU terminates up to 48 fibers using LC connectors and up to 24 fibers using STII+ or SC connectors. It can accommodate up to 12 mechanical or fusion splices, using an optional splicing kit. The 200LS can accommodate up to 24 mechanical or fusion splices with optional splicing kits, but the fiber termination capacity is decreased to 12 STII+ or SC connections, or 24 LC connections. The 200LS holds four 10P panels.

The LIU adapter panels can be ordered separately and are detailed in the LST and LIU panel section.

The 742A mounting panel allows up to two 100 or 200 LIUs or one 400 LIU to be mounted in an inter-connection or cross-connect fashion. The panel may be mounted on either a 19 or a 23 in (48.3 or 58.4 cm) frame.

The 1A1 adapter includes a 10 in (25.4 cm) conduit, a T-section, a 90-degree bend, two guides and two mounting screws. The adapter is used to guide and protect fibers running from a 12A-type clamp into two adjacent columns of LIUs. Each 100A3/200A LIU requires one 1A1 adapter. The 12A clamp must be ordered separately.

Physical Specifications:

Height: 100A3, 200A, 100LS, 200LS: 8.75 in (22.22 cm)

200B: 12.6 in (32.0 cm)

400A2: 11 in (27.94 cm)

Width: 100A3, 200A, 100LS, 200LS: 7.5 in (19 cm)

200B, 400A2: 17 in (43.18 cm)

Depth: 100A3, 100LS: 3 in (7.62 cm)

200A, 400A2, 200LS: 4 in (10.16 cm)

200B: 5.25 in (13.34 cm)



Additional
Fiber
Connectivity

LIU Termination and Splice Configuration and Capacity:

LIU	No. of Terminations	No. of Splices	Additional Parts Needed
100A3	12 SC/ST (24 LC)	0	2 Panels with Adapters
100LS	12 SC/ST (24 LC)	12	2 Panels with Adapters and 1 Splice Kit
	0	24	2 Blank Panels and 1 Splice Kit + 1 Suppl. Kit
200A	24 SC/ST (48 LC)	0	4 Panels with Adapters
200LS	24 SC/ST (48 LC)	12	4 Panels with Adapters and 1 Splice Kit
200B	12 SC/ST (48 LC)	24	2 Panels with Adapters + 2 Blank Panels, and 1 Splice Kit + 1 Suppl. Kit
	0	36	4 Blank Panels, 2 Splice Kits + 1 Suppl. Kit
	48 SC/ST (96 LC)	0	8 Panels with Adapters
400A	48 SC/ST (96 LC)	12	8 Panels with Adapters and 1 Splice Kit
	36 SC/ST (72 LC)	24	6 Panels with Adapters + 2 Blank Panels, and 1 Splice Kit + 1 Suppl. Kit
	0	36	8 Blank Panels, 2 Splice Kits + 1 Suppl. Kit

Product Number	Material ID
100A3 LIU	106896947
200A LIU	105535926
200B2 LIU	106939564
400A1 LIU w/o locks	106266901
400A2 LIU w/ locks	106414170
100LS LIU	108548868
200LS LIU	108548876
742A	105483218
1A1 Adapter	105034482

1A4 and 2A4 Vertical Fiber Optic Trough

The 1A4 and 2A4 Fiber Optic Troughs are vertical aluminum troughs, used to arrange fiber patch cords vertically from one LIU to another in a multi-unit fiber cross-connect. The 1A4 trough is used with a 100A3 LIU. The 2A4 vertical trough is used with the 200A LIU. Two mounting screws are included.

Physical Specifications:

Height: 8.75 in (22.2 cm)

Width: 4.0 in (10.2 cm)



Product Number	Detailed Description	Material ID
1A4	For use with 100A3 LIU	104141866
2A4	For use with 200A LIU	106497753

1A6 and 2A6 Horizontal Fiber Optic Trough

The 1A6 and 2A6 Fiber Optic Troughs are horizontal aluminum troughs used to arrange patch cords so they run horizontally between Fiber Optic Interconnection Units (LIUs) or 1A4 or 2A4 Troughs. The 1A6 Fiber Optic Troughs may be used with 100A3 LIUs and 1A4 Fiber Optic Troughs. The 2A6 Fiber Optic trough is used to connect vertical columns of 200A LIUs and 1A6 Jumper Troughs. The 2A6 Trough should be specified with single columns when protection and retention of cross-connect jumper cable slack is needed. Two mounting screws are included.



Physical Specifications:

Height: 1A6: 4.0 in (10.2 cm)

2A6: 5.0 in (12.7 cm)

Width: 11.5 in (29.2 cm)

Depth: 1A6: 4.0 in (10.2 cm)

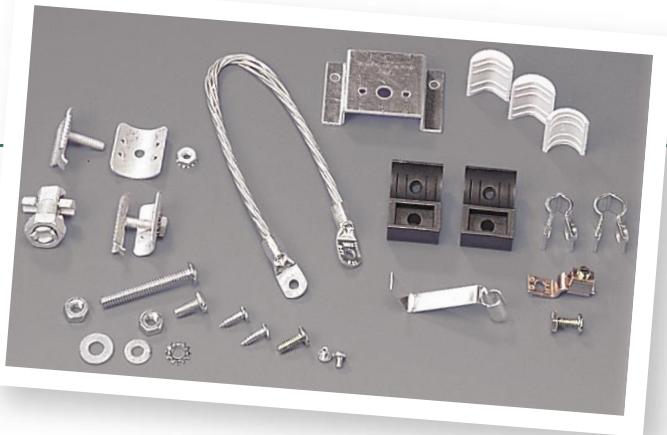
2A6: 5.0 in (12.7 cm)

Product Number	Detailed Description	Material ID
1A6	For use with 100A3 LIU	104141874
2A6	For use with 200A LIU	106497761

12A Clamp

The 12A1 Clamp is used to secure and ground one fiber optic metallic sheath cable. The clamp consists of a mounting bracket, two plastic half-clamps and suitable grounding hardware.

The 12A2 Clamp is similar to the 12A1 Clamp, but it does not include bonding and grounding hardware. The 12A2 Clamp is intended for use on non-metallic sheath fiber optic cables.



Additional
Fiber
Connectivity

Product Number	Detailed Description	Material ID
12A1 Clamp	Clamp for Metallic Sheath Cable	700025513
12A2 Clamp	Clamp for Dielectric Sheath Cable	700025653

Fiber Optic Splice and Termination Shelves

The LST and LSTS Fiber Optic Termination Shelves are used for termination of buffered fiber optic building cables or direct termination of outside plant fibers.

The LSTS OptiSPEED Termination Shelf can be equipped with adapter panels to terminate up to 144 fibers using LC connectors, or 72 fibers using ST or SC connectors. The adapter panels can be found under the LST and LIU panel section.

The LSTS Termination Shelf accommodates 12 multiport adapters, which can be found in the fiber connector and adapter section. Cable slack is maintained behind each adapter panel.

The LSTS termination shelf comes equipped with color-coded LazrSPEED adapter strips for convenient ordering, and is available with LC, STII+ and SC adapters. This shelf is designed for mounting in a 19 inch frame for enterprise applications.

The Fiber Optic Shelf Splice (LSS) is generally used with two termination shelves or in splice-only applications to store individual mechanical or fusion splices.

The Fiber Optic Shelf Combination (LSC) is used for a combination of splicing and termination of outside plant cables or Fiber Optic Building Cable. The shelf is designed to be used as a termination shelf only (direct connector termination) or used as a splice and termination shelf by using pigtails.

The Fiber Optic Shelf Jumper Storage (LSJ) is used to store slack in pre-assembled cross-connect or inter-connect jumpers or take up slack in buffered cables routed from equipment or outside plant cables.

The Fiber Optic Shelf Terminating Unit is a 2.5 inch (6.35 cm) high shelf assembly that can be mounted into a 23 inch (48.3 or 58.4 cm) frame. This shelf has a total of two pivoting trays that each will accommodate termination of up to 24 fibers using ST connectors. Two bend limiting drums are included with each tray to prevent bending fibers less than 3 inch (7.62 cm) diameter.

Physical Specifications:

Height: LST1U-072/7 and LST1F-072/7: 7 in (17.8 cm)

LST1U-144/9: 9 in (22.9 cm)

LSC and LSJ: 5 in (12.7 cm)

LSTIP: 2.5 in (6.3 cm)

Width: 17 in (43.2 cm)

Depth: 11 in (27.9 cm)

OSP Cable Capacity: 4



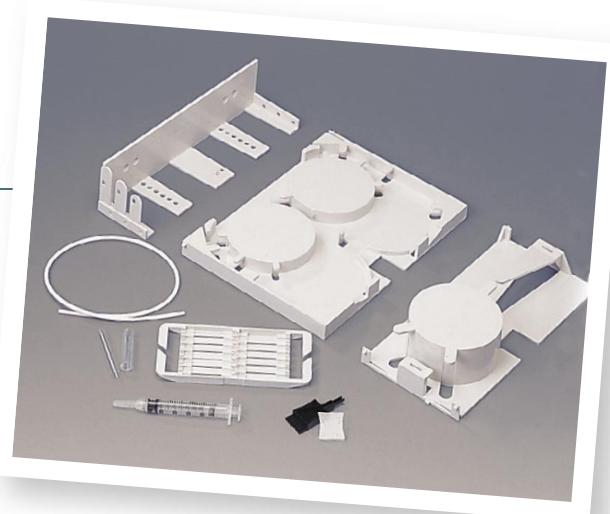
Product Number	Detailed Description	Material ID
LST1U-072/7	Direct Termination of 72 Individual Fibers	700007289
LST1U-144/9	Direct Termination of 144 Individual Fibers	700007214
LST1F-072/7	Direct Termination of 72 Individual Fibers, Front Access Only	700007271
LST1U-144/9-B	Direct Termination of 144 Individual Fibers, Black	760010207
LSTSY	Termination Shelf	700011166
LSTLS/MM/LC-144/7	Equipped with 144 LC Adapters	108565631
LSTLS/MM/SC-072/7	Equipped with 72 SC Adapters	108565649
LSTLS/MM/ST-072/7	Equipped with 72 ST Adapters	108565656
LSS1U-144/7	Splice Shelf for Splicing Only, up to 144 Individual Fibers, 4U	700007222
LSS1U-072/5-S	Side Access Splice Shelf for Splicing Only, up to 72 Individual Fibers, 3U	700225790
LSS1U-072/5	Splice Shelf for Splicing Only, up to 72 Individual Fibers, 3U	700007230
LSC2U-024/5	Splicing and/or Direct Termination of 24 Individual Fibers	700007255
LSJ1U-072/5	Storage of Jumper Cable Slack	700007248
LST1P-48ST/2.5	Direct Termination of 48 Fibers Using ST Connectors.	700007263
	Door, LST, 9 in, Metal	700233000

D-181706 and D-181707 Mechanical and Fusion Splice Adapter Kits

The D-181706 and D-181707 Splice Adapter Kits adapt the 100, 200, and 400 LIUs for mechanical and fusion splicing, respectively. One D-Kit is required for the first 12 fibers and one supplemental kit per unit is required for each additional set of 12 fibers.

D-181706 And D-181707 include Bracket Support with Screws (1), Drum Adapter (1), Splice Tray (1), PVC Tubing (1), Mechanical or Fusion Splice Organizer (1), Instruction Sheet (1).

Supplemental Kits include Splice Tray (1), PVC Tubing (1), Mechanical or Fusion Splice Organizer (1).

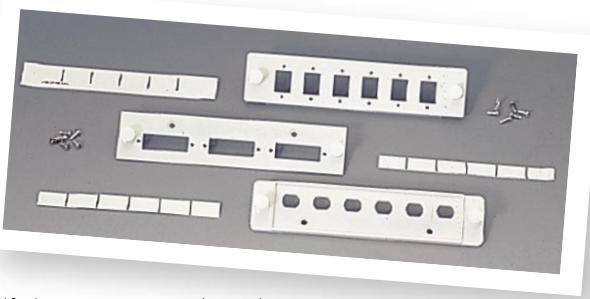


Additional
Fiber
Connectivity

Product Number	Detailed Description	Material ID
D-181706	Mechanical Splice Kit	105289656
	Supplemental Mechanical Splice Kit	106726714
D-181707	Fusion Splice Kit	105289664
	Supplemental Fusion Splice Kit	106726706
LT1A-F/F	Fusion Splice Organizer (Retains 32 Splices)	700025588
LT1A-M/M	Mechanical Splice Organizer (Retains 24 Splices)	700217045
	Splice Tray Holder	700005069

Fiber Optic Panels for LST and LIU Shelves

The fiber optic panels are used to hold ST, SC and LC adapters. They can be mounted on various fiber optical shelves. Adapters are not included unless otherwise noted. The 1000 series panels work with the LST1U 72/7, LST1F 72/7, 400 LIU, and the LSC2U 24/5 shelves. The 1200 series panels work with the LST1U 144/9 shelf. The 10 series panels work with the 100 and 200 LIU.



Physical Specifications:

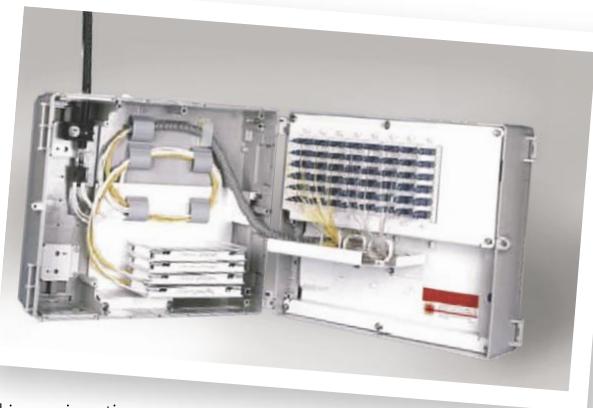
Height:	10-Type: 3.8 in (9.7 cm)	Width:	10-Type: 1.5 in (3.8 cm)
1000-Type:	5.1 in (13.0 cm)	1000-Type:	1.1 in (2.8 cm)
1200-Type:	7.1 in (18.0 cm)	1200-Type:	1.1 in (2.8 cm)
2200-Type:	7.1 in (18.0 cm)	2200-Type:	2.2 in (5.6 cm)

Product Number	Detailed Description	Material ID
1000-12LC-DPLX	Panel for 6 Duplex LC Adapters (4U)	700011414
1000-8LC-SPLX	Panel for 8 Simplex LC Adapters (4U)	760026369
1000-6SC-DPLX	Panel for 3 Duplex SC Adapters (4U)	700010952
1000-6SC-SPLX	Panel for 6 Simplex SC Adapters (4U)	700011398
1000-6ST-SPLX-00	Panel for 6 Simplex ST Adapters (4U)	700011406
1000-6ST-SPLX-00	Panel for 6 Simplex ST Adapters, Pack of 12 (4U)	700011109
1000-Blank-WH	Blank Panel (4U), Pack of 6	700162936
1200-18LC-DPLX	Panel for 9 Duplex LC Adapters (5U)	700208762
1200-12SC-SPLX	Panel for 12 Simplex SC Adapters (5U)	700162910
2200-24SC-DPLX-WH	Panel for 12 Duplex SC Adapters, Double Width (5U)	760006197
2200-24SC-DPLX-BK	Panel for 12 Duplex SC Adapters, Double Width (5U), Black	760010199
12-12ST-SPLX	Panel for 12 Simplex ST Adapters, (5U)	700208754
1200-Blank-WH	Blank Panel (5U), Pack of 6	700209653
10PLC-LS	Panel includes 12 LC Adapters, LazrSPEED	108627266
10PLC-MM	Panel includes 12 LC Adapters, OptiSPEED MM	108491697
10PLC-SM	Panel includes 12 LC Adapters, Singlemode	700025984
10PSC-LS	Panel includes 6 SC Adapters, LazrSPEED	108627274
10PSC-MM	Panel includes 6 SC Adapters, OptiSPEED	108259458
10PSC-LS	Panel includes 6 SC Adapters, Singlemode	700011430
10PST-LS	Panel includes 6 ST Adapters, LazrSPEED	108627282
10PST-MM	Panel includes 6 ST Adapters, OptiSPEED	108259466
10PST-SM	Panel includes 6 ST Adapters, Singlemode	700011422
10LC1-DPLX	Panel for 6 Duplex LC Adapters	107783755
10SC1-DPLX	Panel for 3 Duplex SC Adapters	107025835
10A (ST)	Panel for 6 Simplex ST Adapters	104141858
10 Blank	Blank Panel for 100LIU/200LIU	105276570

Additional
Fiber
Connectivity

489 Fiber Optic Interconnection Unit

The 489 Fiber Optic Interconnection Unit (FIU) complete family of modular enclosures is designed to provide a solution for terminating, splicing, managing and protecting fiber optic cables. The units are designed to be installed in building entrances, equipment rooms, or any place where fiber optic cables interconnect or terminate in a protective area.



The 489 FIU product line features four different units. Each can be used in conjunction with the others while preserving its own specific function.

The 489 Termination Unit provides housing for front facing fiber optic connectors. Optical jumpers are routed into integrated jumper raceways and organized at the side of the unit.

The 489 Splice Unit provides storage for multiple fiber optic splices.

The 489 Combination Unit provides for both splicing and termination of optical fibers in one unit. This unit is configured by ordering the appropriate termination unit and the 489FC1A-4RACK splice organizer. The 489FC1A-4RACK can be mounted in a termination unit to hold (4) organizers, thereby forming a combination unit.

The 489 Interconnection Unit is a side facing termination unit that provides for interconnection of both incoming and outgoing cables within the same enclosure.

Physical Specifications:

Weight: Termination Unit: 6.2 lbs (2.8 kg)

Splice Unit: 6.4 lbs (2.9 kg)

Combination Unit: 7.6 lbs (3.5 kg)

Interconnection Unit: 4.0 lbs (1.8 kg)

Height: 12.5 in (31.8 cm)

Width: 15.0 in (38.1 cm)

Depth: Termination Unit and Combination Unit: 8.30 in (21.1 cm)

Splice Unit and Interconnection Unit: 5.30 in (13.5 cm)

Material: UL approved, flame retardant, polycarbonate

Color: Ultra light gray

Additional
Fiber
Connectivity

Product Number	Description	Material ID
489FT1-048SC	Termination Unit E/W 48 SC Simplex Adapters	108314196
489FT1-048SCD	Termination Unit E/W 24 SC Duplex Adapters	108314204
489FT1-048ST-MM	Termination Unit E/W 48 ST MM Adapters	108314212
489FT1-048ST-SM	Termination Unit E/W 48 ST SM Adapters	108314220
489FT1-096LCD-MM	Termination Unit E/W 48 LC Duplex MM Adapters	108314279
489FT1-096LCD-SM	Termination Unit E/W 48 LC Duplex SM Adapters	108314287
489FT1-1000	Termination Unit Accepts (8) 1000-Type Panels	108314238
489FS1-144	Splice Unit E/W Organizer Rack that Accepts (12) Splice Organizers	108314378
489FS1-12FS	Splice Organizer Kit—Holds (4) 12-Fiber Fusion Splice Organizers	108314345
489FC1A-4RACK	Splice Organizer Rack	108314295
489FI1-024SC	Interconnection Unit E/W 24 SC Simplex Adapters	108314311
489FI1-024ST-MM	Interconnection Unit E/W 24 ST MM Adapters	108314329
489FI1-024ST-SM	Interconnection Unit E/W 24 ST SM Adapters	108314337

1100 Fiber Distribution Panel

The LazrSPEED 1100 Fiber Distribution Panel is a high-quality panel for terminating or inter-connecting fibers in a premise wiring system. The shallow panel depth makes the 1100 ideal for wall-mounted racks. Front access to the connectors behind the adapter strip is possible simply by removing the adapter bezel from the panel. The trim design and front access make the 1100 panel an excellent solution for cramped and crowded telecommunications rooms.



The 1100LS Distribution Panel is equipped with adapters for 48 LC, 24 SC or 24 ST termination for LazrSPEED Solution. The 1100SY panel requires four multiport adapters, which can be found in the fiber connector and adapter section.

Physical Specifications:

Height: 1.72 in (4.37 cm)–1U rack space
Width: 19 in (48.26 cm)
Depth: 4.75 in (12.07 cm)

Product Number	Detailed Description	Material ID
1100SY	Distribution Panel	700006364
1100LS/MM/LC-48 LC	LazrSPEED Panel	108565557
1100LS/MM/SC-24 SC	LazrSPEED Panel	108565573
1100LS/MM/ST-24 ST	LazrSPEED Panel	108565581
MOD-G2-cover	Modular Cover, Pack of 12	760041897

Additional
Fiber
Connectivity

LC Connectors

The LC Connector is a revolutionary fiber optic connector. This small form factor connector is only half the size of ST or SC connectors yet it has superior optical performance and reduced installation time. It uses the familiar insertion release mechanism similar to an RJ45 plug and has a pull-proof design. Fast becoming the connector of choice, the physical and optical performance of the LC allows engineers to design optical fiber infrastructures suited to the low loss needs of the High-Speed Data Networks. The LC connector offers a complete connection solution with a product range designed for field termination onto 0.9 mm fiber, 1.6 mm fiber cordage, multimode and singlemode fiber.



The high-performance LC connector is the recommended connector for all SYSTIMAX installations. The superior insertion loss performance offered by the LC connector makes it the ideal connector for gigabit applications including all proposed 10 gigabit ethernet specifications for multimode and singlemode fiber. The 0.9 mm fiber connector is designed to allow for the simple and speedy termination of the connector onto 0.9 mm fiber. So, whether terminating a cable into a patch panel, connection box or outlet, the LC connector offers the best-in-class solution.

The LC fiber optic simplex and duplex jumper connectors can be used to terminate simplex and duplex 1.6 mm jumper cords. It is intended for use in central offices, local area networks (LANs), and in patch cords for premises distribution systems. The connector can also be used in computer backplane connections, computer peripheral interconnections, device terminations, and other applications where quality, small-size, high-density, low-loss and a low-cost infrastructure are required.

The D-182959 upgrade kit (700005853) used in conjunction with tool kits 1032B5 or 1032F1, provides the necessary tools to terminate LC connectors to 0.9 mm buffered fiber or 1.6 mm cordage. For termination to 0.9 mm buffered fiber only, the D-182905 upgrade kit (700005895) may be used with the 1032B5 or 1032F1 kits. The 1032H mini tool kit (700005838) may be used to terminate LC connectors to 0.9 mm buffered fiber using the EZ anaerobic adhesive method. Additionally, the appropriate consumable kits are required to complete terminations.

Physical Specifications:

Length: 1.259 in (3.2 cm)

Tip Material: Ceramic

Optical Specifications:

Multimode: Average Loss: 0.1 dB Standard deviation 0.1 dB

Singlemode: Average Loss: 0.2 dB Standard deviation 0.1 dB

Insertion Loss Change: <0.3 dB Mating durability for 500 reconnect

<0.3 dB Temperature stability -40°F to 167°F (-40°C to 75°C)

Cable Retention: 2 lbs for buffered fiber, 10 lbs for 1.6 mm cordage

Behind the Wall (BTW) LC Connectors

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
P1001A-Z-125	BTW LC Connector for 0.9 mm Buffered Fiber	MM	Beige	1	700007008
P1001A-Z-125/100	BTW LC Connector for 0.9 mm Buffered Fiber	MM	Beige	100	700006299
P1001A-Z-125R	BTW LC Connector, Pre-radiusied, for 0.9 mm Buffered Fiber	MM	Beige	1	760341181
P1001A-Z-125R/100	BTW LC Connector, Pre-radiusied, for 0.9 mm Buffered Fiber	MM	Beige	100	760031393
P1101A-Z-125	BTW LC Connector for 0.9 mm Buffered Fiber	SM	Blue	1	700011372
P1101A-Z-125R	BTW LC Connector for 0.9 mm Buffered Fiber, Pre-radiusied	SM	Blue	1	760034199
P1101A-Z-125R/100	BTW LC Connector for 0.9 mm Buffered Fiber, Pre-radiusied	SM	Blue	100	760031401

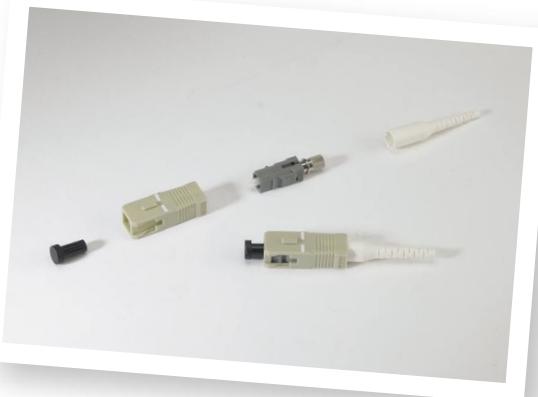
Jumper Connector

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
P1000A-Z-125	LC Connector for 1.6 mm Cordage, Simplex	MM	Beige	1	700004260
P1000A-Z-125R	LC Connector for 1.6 mm Cordage, Simplex, Pre-radiusied	MM	Beige	1	760034140
P1002A-Z-125	LC Connector for 1.6 mm Cordage, Duplex	MM	Beige	1	700006992
P1002A-Z-125/100	LC Connector for 1.6 mm Cordage, Duplex	MM	Beige	100	700006307
P1002A-Z-125R	LC Connector for 1.6 mm Cordage, Duplex, Pre-radiusied	MM	Beige	1	760034157
P1002A-Z-125R/100	LC Connector for 1.6 mm Cordage, Duplex, Pre-radiusied	MM	Beige	100	760034165
P1100A-Z-125	LC Connector for 1.6 mm Cordage, Simplex	SM	Blue	1	700071830
P1100A-Z-125R	LC Connector for 1.6 mm Cordage, Simplex, Pre-radiusied	SM	Blue	1	760034173

Fiber
Connectors
& Adapters

SC Connectors

The SC Multimode Fiber Optic Connector is a field mountable, tuneable connector which utilizes a domed zirconia ferrule for fiber alignment, and push-pull hardware that provides easier connections as well as high optical stability. The connector can be used in high-density applications while not being affected by axial cable loads. The cable is crimped to the outer hardware and therefore prevents momentary disconnect when axial load is placed on the cable. Available in multimode and singlemode versions.



There are two series of SC connectors. Both have equivalent performance in general. While the SC-B series connectors offers lower cost to customers, the SC-A series connector can achieve improved performance when tuned in the field.

SC connector plugs can be mounted on fibers in the field using the 1032B5, 1032B6 or 1032F1 Tool Kit. When mounting to only 0.9 mm buffered fiber, the 1032H Tool Kit may be used. The D-181919 Kit can be used when mounting jumper SC connectors onto 1.6 mm cordages.

Physical Specifications:

Length: A Series: 2.2 in (5.6 cm)

B Series: 2.05 in (5.2 cm) for 900 µm application

B Series: 2.2 in (5.6 cm) for 3 mm application

Operating Temperature: -40°F to 185°F (-40°C to 85°C)

Min. Axial Load: Cable: 29.92 lbs (13.6 kg)

Buffer: 1.98 lbs (0.9 kg)

Optical Specifications:

Average Loss: Multimode: 0.3 dB

Singlemode: 0.2 dB (tuned), 0.3 dB (untuned) for

A-series SC connectors

Maximum Loss: MM and SM: 0.5 dB

Mating Durability: **Insertion loss change for 200 reconnects:**

<0.3 dB (test per Telcordia GR326)

Temperature Stability -40°F to 167°F (-40°C to 75 °C): = < 0.3 dB increase

SC-B Series Connectors

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
P6201B-Z-125	BTW SC-B Connector for 0.9 mm Buffered Fiber	MM	Beige	1	760070070
P6201B-Z-125-100	BTW SC-B Connector for 0.9 mm Buffered Fiber	MM	Beige	100	760007088
P6200B-Z-125	SC-B Connector for 3.0 mm Cordage, Simplex	MM	Beige	1	760007047
P6200B-Z-125-100	SC-B Connector for 3.0 mm Cordage, Simplex	MM	Beige	100	760007054
P6200B-Z-125-1000	SC-B Connector for 3.0 mm Cordage, Simplex, Bulk	MM	Beige	1000	760007062
P6001B-Z-125	BTW SC-B Connector for 0.9 mm Buffered Fiber	SM	Blue	1	760007112
P6001B-Z-125-100	BTW SC-B Connector for 0.9 mm Buffered Fiber	SM	Blue	100	760019562
P6000B-Z-125	SC-B Connector for 3.0 mm Cordage, Simplex	SM	Blue	1	760007096
P6000B-Z-125-100	SC-B Connector for 3.0 mm Cordage, Simplex	SM	Blue	100	760019554
P6000B-Z-125-1000	SC-B Connector for 3.0 mm Cordage, Simplex, Bulk	SM	Blue	1000	760007104
2A2	Duplex Clip for SC-B Connectors		Black	10	760005132

SC-A Series Connectors

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
P6201A-Z-125	BTW SC-A Connector for 0.9 mm Buffered Fiber	MM	Beige	1	700007024
P6201A-Z-125-100	BTW SC-A Connector for 0.9 mm Buffered Fiber	MM	Beige	100	700004278
P6200A-Z-125	SC-A Connector for 3.0 mm Cordage, Simplex	MM	Beige	1	700007024
P6200A-Z-125-100	SC-A Connector for 3.0 mm Cordage, Simplex	MM	Beige	100	700004278
P6001A-Z-125	BTW SC-A Connector for 0.9 mm Buffered Fiber	SM	Blue	1	700006976
P6000A-Z-125	SC-A Connector for 3.0 mm Cordage, Simplex	SM	Blue	1	700006984
2A1	Duplex Clip for SC-A Connectors		Black	1000	700005358

BTW-Behind the Wall

STII Connectors

The STII Connector is a keyed ceramic fiber optic connector that uses a bayonet-type "ramped-latching" mounting arrangement. The STII Connectors feature either domed zirconia or flat alumina ferrules. STII Connectors will accept 125 micron outside diameter multimode fiber.

The design of the STII provides high optical performance and easy mounting in a rugged, compact connector plug.

The STII can mount on either 0.9 mm buffered fiber, 2.4 mm or 3.0 mm cordage (or equivalent). The STII is available in both singlemode and multimode.

STII Connector plugs can be mounted on fibers in the field using the 1032B5, 1032B6 or 1032F1 Tool Kits. The 1032H Tool Kit may be used when mounting connectors on 0.9 mm fiber.

Physical Specifications:

Length: 2.2 in (5.6 cm)

Temperature Stability -40°F to 185°F (-40°C to 85°C): <0.1 dB increase

Loss Repeat (500 Reconnectors): <0.2 dB

Min. Axial Load: Cable: 35 lbs (15.9 kg)

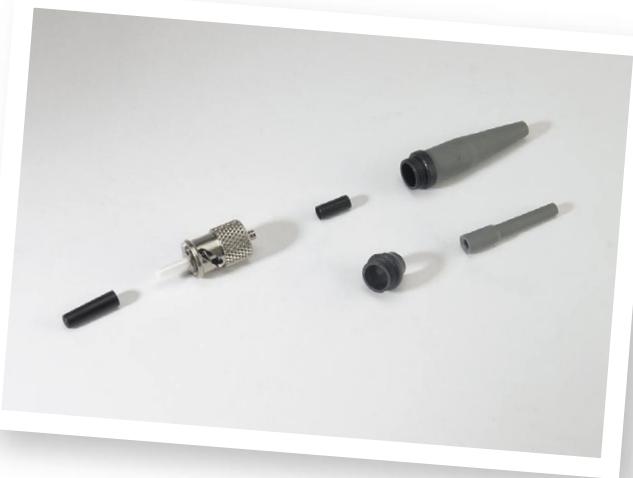
Optical Specifications:

Multimode Average Loss: 0.3 dB

Singlemode Average Loss: 0.3 dB

STII Connector

Product Number	Detailed Description	Fiber Type	Cordage OD(mm)	Qty/Pkg	Material ID
P2020C-Z-125	STII Connector, Domed Zirconia Ferrule	MM	0.9/2.4/3.0	1	700004328
P2020C-Z-125-100	STII Connector, Domed Zirconia Ferrule	MM	0.9/2.4/3.0	100	700004310
P2020C-C-125	STII Connector, Flat Alumina Ferrule	MM	0.9/2.4/3.0	1	700004583
P2020C-C-125-100	STII Connector, Flat Alumina Ferrule	MM	0.9/2.4/3.0	100	700004336
P3020A-Z-125	STII Connector, Domed Zirconia Ferrule	SM	0.9/2.4/3.0	1	700011067



Fiber
Connectors
& Adapters

STII+ Connectors

The STII+ Connector is a keyed fiber optic connector that uses a bayonet-type "ramped-latching" mounting arrangement. The STII+ has a patented enhanced hardware design which provides high performance and easy field mounting. It features a domed zirconia ferrule and utilizes a PC polish to ensure fiber-to-fiber physical contact for low loss and low reflections. Its enhanced hardware and pull proof design provides high mechanical stability.

STII+ Connector plugs can be mounted on fibers in the field using the 1032B5, 1032B6 or 1032F1 Tool Kit. When mounting to only 0.9 mm buffered fiber, the 1032H Tool Kit may be used. These connectors can be used on a 1.6 mm cordage or mini-breakout cable with the addition of tool kit D-182918 tool.



Physical Specifications:

Length: 2.2 in (5.6 cm)

Loss Repeatability: (500 insertions) < 0.30 dB

Min. Axial Load: Cable: 15.9 kg (35.0 lbs)

Buffer: 0.9 kg (1.98 lbs)

Average Loss: 0.3 dB

Operating Temperature: -40°F to 167°F (-40°C to 75°C)

STII+ Connector

Product Number	Detailed Description	Fiber Type	Cordage OD(mm)	Qty/Pkg	Material ID
P2071A-Z-125	STII+ Connector for 0.9 mm Buffered Fiber Only	MM	0.9	1	700002363
P2071A-Z-125-100	STII+ Connector for 0.9 mm Buffered Fiber Only	MM	0.9	100	700005549
P2070A-Z-125	STII+ Connector	MM	0.9/3.0	1	700002389
P2070A-Z-125-100	STII+ Connector	MM	0.9/3.0	100	700005556
P3071A-Z-125	STII+ Connector, for 0.9 mm Buffered Fiber Only	SM	0.9	1	700002223
P3070A-Z-125	STII+ Connector	SM	0.9/3.0	1	700002231

Fiber Optic Adapters

Fiber optic adapters are used in conjunction with the fiber optic panels to ensure proper alignment of the fibers when mating two connectors. The adapters are offered in multimode and singlemode, and are color-coded for easy fiber identification. The adapters are generally offered as individually packed with dust cap included. For selected adapters, packages of 100 adapters are offered.

Two series of adapters are offered, C series and A series. The C series adapters are designed to be used with the 600, 1000, and 12/24 series panels, while the A series adapters are intended to be used with the 1200 series panel.



LC Adapters

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
C1001B-2-LS	LC Duplex Adapter, LazrSPEED	MM	Aqua	1	108622887
C1001B-1-LS	LC Simplex Adapter, LazrSPEED	MM	Aqua	1	760025338
C1001B-2	LC Duplex Adapter, OptiSPEED	MM	Beige	1	700002355
C1001B-1	LC Simplex Adapter, OptiSPEED	MM	Beige	1	700002173
C1101A-2	LC Duplex Adapter, TeraSPEED	SM	Blue	1	700002215
C1101A-1	LC Duplex Adapter, TeraSPEED	SM	Blue	1	700002132
C1201B-1	LC-APC Simplex Adapter, TeraSPEED	SM	Green	1	760036293

SC Adapters

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
C6061A-4-LS	SC Duplex Adapter, LazrSPEED	MM	Aqua	1	108622895
C6061A-4	SC Duplex Adapter, OptiSPEED	MM	Beige	1	700004880
C6061A-4-100	SC Duplex Adapter, OptiSPEED	MM	Beige	100	700004872
C6001A-4	SC Simplex Adapter, OptiSPEED	MM	Beige	1	108223181
C6060A-4	SC Duplex Adapter, TeraSPEED	SM	Blue	1	700004815
C6000A-4	SC Simplex Adapter, TeraSPEED	SM	Blue	1	700004807
C6000A-5	SC Simplex Adapter, TeraSPEED, Flangeless	SM	Blue	1	700004799
C6800A-4	SC-APC Simplex Adapter, TeraSPEED	SM	Green	1	760036277
C6868A-4	SC-APC Duplex Adapter, TeraSPEED	SM	Green	1	760036285

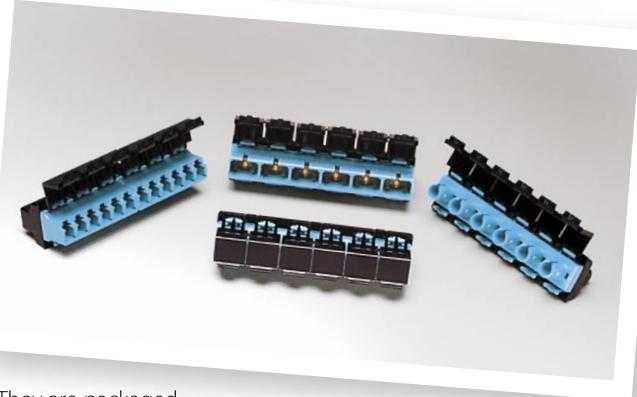
ST Adapters

Product Number	Detailed Description	Fiber Type	Qty/Pkg	Material ID
C2000A-2	ST Adapter with Hex Mounting Nut	MM	1	700004864
C2000A-2-100	ST Adapter with Hex Mounting Nut	MM	100	700004906
A2000	ST Adapter with Circular Mounting Nut	MM	1	700004914
C3000A-2	ST Adapter with Hex Mounting Nut	SM	1	700011133
A3000	ST Adapter with Circular Mounting Nut	SM	1	760000638

Multiport Adapter

Multiport adapters are designed to use with the LSTSY and 1100SY shelves to provide proper alignment of the mating fiber optic connectors. They are offered in a strip of 12 LC, 6 SC or 6 ST adapters, and are equipped with the hinged dust caps, which can be mounted on both top and bottom side of the adapter strip.

The multiport adapters are offered in multimode or singlemode, and are color-coded for easy fiber identification. They are packaged either as individual or as 10 per pack.



Multiport Adapters

Product Number	Detailed Description	Fiber Type	Color	Qty/Pkg	Material ID
C12-MM-LC-LS	LC Multiport Adapter, LazrSPEED	MM	Aqua	1	700207004
C12MM-LC-LS-10	LC Multiport Adapter, LazrSPEED	MM	Aqua	10	108626243
C6-MM-SC-LS	SC Multiport Adapter, LazrSPEED	MM	Aqua	1	700207012
C6-MM-SC-LS-10	SC Multiport Adapter, LazrSPEED	MM	Aqua	10	108626250
C6-MM-ST-LS	ST Multiport Adapter, LazrSPEED	MM	Aqua	1	700207020
C6-MM-ST-LS-10	ST Multiport Adapter, LazrSPEED	MM	Aqua	10	108626268
C12-MM-LC	LC Multiport Adapter, OptiSPEED	MM	Beige	1	700206949
C12-MM-LC-10	LC Multiport Adapter, OptiSPEED	MM	Beige	10	108168824
C6-MM-SC	SC Multiport Adapter, OptiSPEED	MM	Beige	1	700206956
C6-MM-SC-10	SC Multiport Adapter, OptiSPEED	MM	Beige	10	108168774
C6-MM-ST	ST Multiport Adapter, OptiSPEED	MM	Beige	1	700206964
C6-MM-ST-10	ST Multiport Adapter, OptiSPEED	MM	Beige	10	108168808
C12-SM-LC	LC Multiport Adapter, TeraSPEED	MM	Blue	1	700206972
C12-SM-LC-10	LC Multiport Adapter, TeraSPEED	MM	Blue	10	700007891
C6-SM-SC	SC Multiport Adapter, TeraSPEED	MM	Blue	1	700206980
C6-SM-SC-10	SC Multiport Adapter, TeraSPEED	MM	Blue	10	700007917
C6-SM-ST	ST Multiport Adapter, TeraSPEED	MM	Blue	1	700206998
C6-SM-ST-10	ST Multiport Adapter, TeraSPEED	MM	Blue	10	700007909

M81 Series Modular Fiber Optic Adapter with Mounting Module

The M81 M-Series Modular Coupling/Adapter modules are intended to be used as fiber optic outlets for FTTX applications.

The M81LS duplex adapters include an integrated fiber management spool that provide a duplex LC connection with fiber management. The adapters can be used in modular faceplates as shown in the picture. They are color-coded for ease of fiber type identification, and provide slack management to maintain proper bend radius behind the wall.

The M81ST-B adapter module comes packaged with an M81 type mounting module with a circular opening and an ST fiber optic Coupling/Adapter (A2000 multimode). The ST Coupling/Adapter is mounted on the module via a locking washer and nut. The assembly mates two STII fiber optic connectors.

The M81SC-B adapter module comes packaged with an M81 type mounting module with a rectangular opening and a simplex SC fiber optic Coupling/Adapter (C6000A-5). The SC Coupling/Adapter snaps into the rectangular opening of the M81 type mounting module. The assembly mates two simplex SC fiber optic connectors.

The M81ST-B and the M81SC-B contain four collars: black, ivory, white and gray. The M81LC-029 is clear.

The M81LC-029 adapter module comes packaged with an M81 type mounting module with a rectangular opening and an LC adapter. The LC Coupling/Adapter snaps into the rectangular opening of the M81 type mounting module. A minimum 1.5 inch diameter fiber bend radius behind the adapter is recommended.

Once assembled, the coupling/adapter modules can be mounted in any of the M-Series faceplates, surface mount boxes, consolidation point boxes, M1000 MULTIMAX panels, frames, or mounting collars.

Physical Specifications:

Height: M81ST-B, M81SC-B: 0.69 in (17 mm)

M81LC-029: 0.69 in (17 mm)

Width: M81ST-B, M81SC-B: 0.73 in (18 mm)

M81LC-029: 0.65 in (16 mm)

Depth: M81ST-B, M81SC-B: 0.39 in (9.6 mm)

M81LC-029: 0.3 in (7.4 mm)



Product Number	Detailed Description	Fiber Type	Color	Material ID
M81LS-MM Spool	LC Duplex Adapter w/ Fiber Spool	MM	Beige	108562174
M81LS-SM Spool	LC Duplex Adapter w/ Fiber Spool	SM	Blue	700007420
M81LS-LS Spool	LC Duplex Adapter w/ Fiber Spool	MM	Aqua	108623109
M81SC-B	SC Coupling/Adapter with Mounting Module	SM/MM	Blue	108009416
M81ST-B	ST Coupling/Adapter with Mounting Module	MM		108009408
M81LC-029	LC Adapter with Clear Collar	MM	Beige	107782641
M81LC-029-Collar	Clear Plastic Collar for LC, Pack of 25			760010090



1032B5, 1032B6 and 1032F1 Tool Kits for STII, STII+, SC and LC Connectors

The 1032B5 Tool Kit contains all the tools needed to assemble ST, SC and LC connectors on cordage or buffered fiber using EZ or epoxy methods. A 200A 120 VAC Curing Oven is included.

The 1032B6 Tool Kit is for international use, where the only difference from the 1032B5 is that the 200A Curing Oven is replaced by the 200A1 220 VAC Curing Oven.

The 1032F1 does not contain a Curing Oven. It is used with the STII+ EZ and SC EZ Installation Kits where no oven is required.

Connectors and consumable kits must be ordered separately.



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
200A 120VAC Curing Oven (1032B5 only)	1	1	700008055
200A1 220VAC Curing Oven (1032B6 only)	1	1	700008048
1510B Crimping Tool	1	1	700008220
1510A1 Polishing Tool (Plastic)	1	1	700008162
300B Microscope	1	1	700008063
700A Stripping Tool	1	1	700008261
600B1 ST Connector Holders	12	12	700005143
1026A Heat Strip Tool	1		Unable to order individually
971-1-2 Holder Blocks	2	1	700008139
975A Cleaving Tools	1	1	700008287
Scissors	1	2	700008022
Alcohol Bottle	1	2	700008105
1510C Curing Fixture, SC	12	12	700008212
Acrylic Plate	1		Unable to order individually
Stripping Tool (R4366)	1	1	7000011158
Rubber Polishing Pad	1	10	700005564
1039B Cut Length Template (STII+ & SC)	1	5	700008204
Micro Clips (1043A)	15		Unable to order individually
Instruction Manual	1		Unable to order individually
Instruction Sheet (STII+ EZ)	1		Unable to order individually
Instruction Sheet (STII+ Epoxy) (1032B5 and 1032B6 only)	1		Unable to order individually
Instruction Sheet (SC Epoxy) (1032B5 and 1032B6 only)	1		Unable to order individually
Instruction Sheet (SC EZ)	1		Unable to order individually
1039A Cut Length Template (STII & Biconic)	1		Unable to order individually

Product Number	Detailed Description	Material ID
1032B5	Epoxy SC/ST/LC Connector Tool Kit (North American)	700006026
1032B6	Epoxy SC/ST/LC Connector Tool Kit (International)	700005960
1032F1	EZ SC/ST Tool Kit (Curing Oven Not Included)	700005929

1032H Mini Tool Kit for LC, SC and ST Connectors

The 1032H Mini Tool Kit is intended for connectorization of buffered fiber with LC, SC and ST multimode or singlemode connectors using the anaerobic (EZ) method.

The kit does not contain the crimp tool for cordage connectorization.

Crimp tool must be ordered separately. Adhesive must be ordered separately.



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
Polishing Plate	1		Unable to order individually
Rubber Pad	1		Unable to order individually
Stripping Tool (R4366)	1	1	105114581
1510A Polishing Tool	2	1	700011158
600B1 ST Connector Holders	12	12	700005143
LC Connector Holders	12	12	700005135
Scissors	1	1	700008022
LC/ST/SC Instructions	1		Unable to order individually
LC Microscope with Adapter	1	1	700005887
Universal Microscope Adapter		1	700002157
LC Cut Length Template	1	5	700007974
T2001A Polishing Tool (Plastic)	1	1	700008170
1510C SC Curing Fixture	12	1	700008212
975A Cleaving Tool	1	1	700008287
Eye Loupe	1		Unable to order individually

Product Number	Detailed Description	Material ID
1032H Mini Tool Kit	Kit for Terminating BTW ST/SC + LC Connectors EZ Method	700005838



D-182737 Tool Upgrade Kit for STII+ and SC Connectors

This upgrade kit, when added to the 1032B, 1032B1 or 1032F Tool Kit, provides the necessary tools and instructions to field-assemble STII+ and SC multimode or singlemode connectors on 3.0 mm cordage.



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
1039B Cut Length Template (STII+ & SC)	1	5	700008204
Universal Microscope Adapter	1	1	700002157
Modified SM/MM SC Grips	2	10	107480022
1510B Crimping Tool	1	1	700008220
1510A1 Polishing Tool, Plastic	1	1	700008162
600B1 ST Connector Holders	12	12	700005143
1510C Curing Fixture	12	12	700008212
Rubber Polishing Pad	1	10	700005564
Instruction Sheet (STII+ EZ)	1		Unable to order individually
Instruction Sheet (SC EZ)	1		Unable to order individually
Instruction Sheet (SC Epoxy) (1032B5 and 1032B6 only)	1		Unable to order individually
Instruction Sheet (STII+ Epoxy)	1		Unable to order individually

Product Number	Detailed Description	Availability	Material ID
D-182737	Upgrades 1032B, 1032B1 and 1032F Tool Kits	Non-stock	700005952

D-182905 LC Connector Termination Upgrade Tool Kit

This upgrade kit, when added to the 1032B5 or 1032F1 Tool Kit, provides the necessary tools and instructions to field assemble LC multimode or singlemode connectors on 900 micron buffered fiber.



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
LC Polishing Fixture	1	1	700008196
LC Microscope with Adapter	1	1	700005887
LC Connector Holder	12	12	700005135
Plastic Polishing Pad	1		Unable to order individually
Instruction Sheet	1		Unable to order individually
Product Number	Detailed Description		Material ID
D-182905 KIT	LC Upgrade Kit, BTW only		700005895

D-182959 LC Connector Termination Upgrade Tool Kit

The D-182959 Tool Upgrade Kit for LC connectors provides the tools such as crimp jaws, heater pipes, and a polishing puck to terminate the LC connector onto either 900 micron buffered fiber or 1.6 mm cordage. The D-182959 Kit is to be used in concert with the 1032B5 and 1032F1 Tool Kits.



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
T2001A Polishing Tool	1	1	700008170
LC Microscope	1	1	700005887
LC BTW Connector Holders	12	12	700005135
LC Jumper Connector Holders	12	12	700005846
971A-2 Holder Block	1	1	700008139
LC Cut Length Template	1	5	700007974
LC Instructions	1		Unable to order individually
1510LC Crimping Tool	1	1	700008154
LC Stripper Guide Tube for 1026A	1	1	700008147
Ultra-Fine-Point Permanent Pen	1		Unable to order individually
Heat Tube Assemblies	6	6	700002330
C1001B-2 Multimode LC Adapter	1	1	700002355
Product Number	Detailed Description		Material ID
D-182959 KIT	LC Upgrade Kit		700005853

Fiber Tools & Consumables

Tool Kit Components

Replacement kit components for the following tool kits: 1032B5, 1032B6, 1032F1, D-182737, D-182905 and 1048B.

Detailed Description	Replacement Quantity	Material ID
Wire Stripper	1	700008014
1039B Cut Length Template/Scale	5	700008204
Universal Microscope Adapter	1	700002157
1510B Crimping Tool	1	700008220
200A 120 VAC Curing Oven (1032B5 Only)	1	700008055
700A Stripping Tool	1	700008261
600B1 ST Connector Holders	12	700005143
971A-1 Holder Blocks	1	700008279
975A Cleaving Tool	1	700008287
Scissors	2	700008022
6 in Scale	5	700008030
Alcohol Bottle	2	700008105
1510C SC Curing Fixture	12	700008212
Stripping Tool (R4366)	1	700011158
Rubber Polishing Pad	10	700005564
LC Microscope with Adapter	1	700005887
LC BTW Connector Holders	12	700005135
T2001A Polishing Tool (Plastic)	1	700008170
LC Jumper Connector Holders	12	700005846
LC Cut Length Template	5	700007974
1510LC Crimp Tool	1	700008154
LC Stripper Guide Tube for 1026A	1	700008147
Heat Tube Assemblies for 200A Oven	6	700002330
LC Adapter Brush	6	700008089
LC BTW Connector Holder - Bulk Pack		700005101
LC BTW Connector Holder		700005093
LC Connector Holder w/o Adapter		700005077
LC Plug Housing, Beige		700005168

Fiber Tool Kit

Miscellaneous Kits for Fiber Optic Connector Cable Assembly/Terminations.

Product Number	Detailed Description	Material ID
KIT-1049A Tool ST Type C	Wrench for ST Adapter Circular Nut	700006059
KIT-5.00 EA Grip UC-55		700005770
KIT-D181618 Parts 1 EA L		700006141
KIT-D181622 Parts 25 FT		700006133
KIT-D182037		700006091
KIT-D182038		105501415
KIT-D182610 CLNG SM ST M		700006042
KIT-D182611 CLNG MM ST M		700006034
KIT-D-182709 Parts ST CO	Consumable Kit with Adhesive	106736937
KIT-D182847 Parts	250-pc. STII + and SC Consumable Kit	700005903
KIT-D183017 FBR Optic LC		700005820
KIT-DS-1 FBR Optic LIU K		106626682
KIT-I Cap Plug, CONN P20		700005804
KIT-LazrSPEED Product Sample Kit		108684416
KIT-P2020C-C-Parts		700005911
KIT-ST Extender Cap Part		700005978

Fiber Tools

Miscellaneous Kits for Fiber Optic Connector Cable Assembly/Terminations.

Detailed Description	Material ID
LC SM Tuning Tool	700008113
LC SM Tuning Wrench	700008121
TOOL-102A, STII Crimp Tool	700008253
TOOL-F-62161 Curing	700008246



Breakout Kits

The Breakout Kit prepares loose tube fiber optic cable quickly and reliably when premise network installations require indoor field connectorization. Available in 6 fiber and 12 fiber units, the kit transitions optical fiber from 2.5 mm and 3.0 mm buffer tubes to 900 µm protective tubing. The Breakout Kit is simple to use since no epoxy or special tools are required.

Features and Benefits:

- 6 fiber and 12 fiber units available
- 24 inch, 900 µm tubing length
- Simple, snap-together housing
- Flexible, yet rugged, 900 µm tubing for easy routing and fiber protection
- Color-coded tubing for easy fiber identification
- Allows fast, reliable breakout of loose tube cable
- Simple to assemble, no epoxy or special tools needed
- Easy fiber identification
- ISO 9001 and ISO 14001 certified manufacturer; TL 9000 registered quality management system



Detailed Description

Material ID

6 Fiber Breakout Kit	760018820
12 Fiber Breakout Kit	760018838

Unit Splitters

The Unit Splitter is a pitchfork-shaped apparatus used for gel-blocking and organizing fibers when prepping outside plant cable. It is the ideal device to split bundled fibers into separate groups for routing to locations for shelves and cabinets.



Product Number

Detailed Description

Material ID

D-181781	6 to 1 Unit Splitter for Outdoor Cable Diameter of 0.41 inch	700011125
D-181683	8 to 1 Unit Splitter for Outdoor Cable Diameter of 0.41 inch	700006125
D-182806	6 to 1 Unit Splitter Fits 0.16 in (4.1 mm) and 0.20 in (5.1 mm) Core Tubes	700010960

D-181755 PVC Buffer Tubing Consumable Kit

The PVC Buffer Tubing Kit contains buffer tubing and cable end prep materials for direct termination of connectors on outside plant cable. This kit will buffer approximately 100 outside plant fibers. Order B sealant separately.



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
201 in (64 mm) Buffer Tube (900 micron)	1 Reel	5 Reels	700008300
Syringes	5	10	700007982
Wire Marker Book	1	1	700007966
Rosin Bag	1	5	700002405
0.166 in (4.2 mm) ID Clear PVC Tubing	2 in (61 cm)		Unable to order individually
0.234 in (6 mm) ID Clear PVC Tubing	1 in (30.5 cm)		Unable to order individually
0.294 in (7.5 mm) ID Clear PVC Tubing	1 in (30.5 cm)		Unable to order individually
0.095 in (2.9 mm) ID x 0.016 in (0.4 mm) Wall White PVC Tubing	25 in (7.6 cm)		Unable to order individually
0.187 in (4.8 mm) ID Heat Shrinkable Tubing	2 in (61 cm)		Unable to order individually
D-181683 Eight Unit Splitter (Re-orderable in Unit Splitter Family)	1		700006125
D-181781 Six Unit Splitter (Re-orderable in Unit Splitter Family)	1		700011125
Instruction Sheet	1		Unable to order individually

Product Number	Detailed Description	Material ID
D-181755	PVC Buffer Tubing Kit	700006117

D-183016 Splitter Kit

The Splitter Kit contains components and consumables for blocking the gel in central core tubing common in outside plant cable. It also contains components for buffering bare fibers with 900 micron tubing for termination onto fiber optic connectors. Order B sealant separately.

The D-183016 Splitter Kit contains the following components:

- | | |
|---|--------|
| • Clear Tygon Tubing | Qty 2 |
| • Cable Ties | Qty 10 |
| • Syringes (3 cc) | Qty 2 |
| • Syringe Tips | Qty 2 |
| • White PVC Tubing (0.095 Diameter) | 25 ft |
| • Splitter Kit with TALC Bag | Qty 2 |
| • D183016 Kit Installation Instructions | Qty 1 |



Fiber Tools & Consumables

Product Number	Detailed Description	Material ID
D-183016	Splitter Kit	108459488

Fiber Optic Connector - Consumable Kits

The Epoxy and EZ Fiber Optic Apparatus (FOA) field assembly kits contain consumable supplies used to terminate connectors using the Epoxy and EZ method.

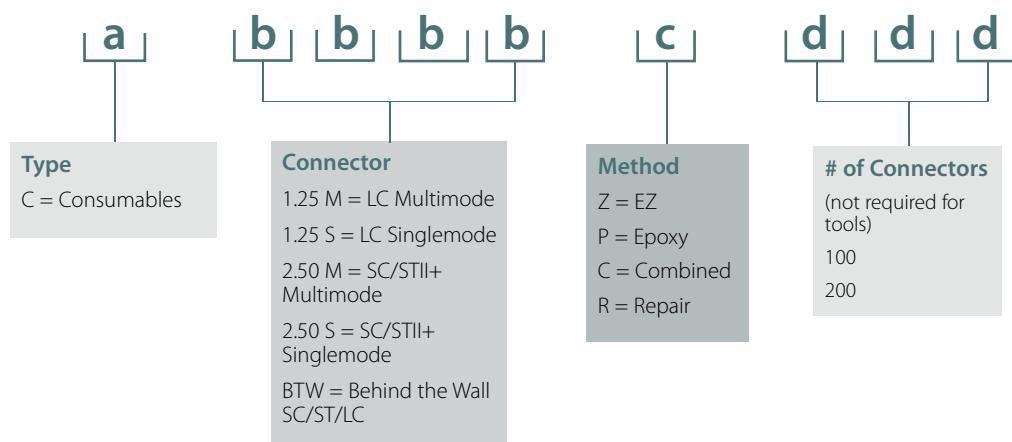
EZ adhesives (760000810) kit will include all adhesives required to complete EZ field installation of SC/STII+/LC connectors. The kit will consist of Loctite Super Bonder 495, 7090 Solvent-less Primer and Loctite 648 Retaining Compound.



Field Installation Kits

Adhesives and epoxy must be ordered separately.

Construct the product code from the following options:



Product Number	Detailed Description	Application	Material ID
Kit-C-2.50M-Z-100	Consumable Kit to Install 100 SC/STII+ Multimode Connectors Using the EZ Method	Multimode STII+/SC EZ Method	700218035
Kit-C-2.50M-P-100	Consumable Kit to Install 100 SC/STII+ Multimode Connectors Using the Epoxy Method	Multimode STII+/SC Epoxy Method	700218043
Kit-C-2.50S-Z-100	Consumable Kit to Install 100 SC/STII+ Singlemode Connectors Using the EZ Method	Singlemode STII+/SC EZ Method	700218050
Kit-C-2.50S-P-100	Consumable Kit to Install 100 SC/STII+ Singlemode Connectors Using the Epoxy Method	Singlemode STII+/SC Epoxy Method	700218068
Kit-C-1.25M-C-100	Consumable Kit to Install 200 LC Multimode Connectors Using the Epoxy or EZ Method	Multimode LC Epoxy/EZ Combined	700218084
Kit-C-1.25S-C-200	Consumable Kit to Install 200 LC Singlemode Connectors Using the Epoxy or EZ Method	Singlemode LC Epoxy/EZ Combined	700233638
EZ Adhesives	Loctite 7090 Solvent-less Primer/495 Super Bonder/648 Retaining Compound	Primer/Bonder/Retaining Compounds	760000810
Kit-C-2.50 M-R-100	Consumable Kit for Repairing ST & SC Connectors	Consumable Kit	700218076

D-182977 Singlemode Epoxy LC Consumable Kit

The D-182977 Consumable Kit contains enough supplies to mount approximately 200 singlemode flat endface LC connectors using the heat-cured epoxy method. This kit can also be used to terminate multimode LC connectors (epoxy method).



Detailed Description	Kit Quantity	Replacement Quantity	Material ID
Wipes	10	250	700006166
Music Wire	5	4	700008394
Syringes	75	10	700007982
Dispensing Tips	125	125	700011141
Epoxy	1	15	700006109
Clear Spacers	10		Unable to order individually
Foam Pad (white)	10		Unable to order individually
Type J Polishing Paper (purple)	20	20	700006661
Type F Polishing Paper	5	5	700006703
Type K Polishing Paper	5	5	700006687
Type L Polishing Paper	10	10	700006679
LC Adapter Brush	6	6	700008089

Product Number	Detailed Description	Material ID
D-182977	SM Epoxy LC Consumable Kit	700005317



Consumable Kit Components

Replacement kit components for the following Consumable Kits: D-182804, D-182720, D-181755, D-182738, D-182739.

Detailed Description	Replacement Quantity	Material ID
Type A Polishing Paper	100	700006737
Type D Polishing Paper	100	700006711
Buffer Tube Reel 900 micron 210 ft (64.1 m)	5	700008360
Wire Marker Book	1	700007966
Rosin Bag	5	700002405
Wipes	250	700006166
Music Wire	4	700008394
Syringes	10	700007982
Dispensing Tips	125	700011141
Type F Polishing Paper (Yellow Round)	10	700006703
Type J Polishing Paper (Purple)	20	700006661
Type G Polishing Paper (Green)	25	760006205
Type L Polishing Paper	10	700006679
Type K Polishing Paper	5	700006687
B Sealant 3 oz		700010911
Bottled Adhesive	1	700002181
D182985 SM EZ Consumable Kit	1	700005309
D182984 MM EZ Consumable Kit	1	108340829

Advanced Connectivity Solutions

iPatch® System	220
AirSPEED/Wireless	224
Power over Ethernet (PoE)	230



iPatch® Intelligent Patching System

The SYSTIMAX iPatch System integrates copper and fiber hardware and software to provide real-time information and control of the telecommunications infrastructure. The iPatch System provides the network administrator greater vision, the cabling administrator complete management and the cabling technician intelligence to optimize physical layer management and network efficiency, improve reliability and reduce downtime. The iPatch System adds real-time monitoring of both copper and fiber patch connections and integration with network management software. The iPatch System continually monitors and verifies patch panel port connections and logs changes in a central database. Electronic work orders eliminate tedious paper based administration and improve productivity. Work is guided at each patch panel by electronic visual and audio prompts to virtually eliminate patching errors. The user is instantly alerted to critical changes or conditions that require immediate attention and resolution.



The iPatch System Brings Order to Chaos

Data and voice connections live or die in crowded telecommunications rooms where a single misplaced patch cord can wreak havoc and increase downtime. The iPatch System provides one touch patch cord tracing, with both visual and audio prompts to guide every connection. It continuously monitors, verifies and logs port connections to keep your system running smoothly and instantly alert you to problems.

Vision

Provides the network administrator greater vision into and control over the entire communication network with the integration of network management applications and physical layer management capabilities over the Simple Network Management Protocol (SNMP) platform.

Management

Provides the cabling administrator the ability to manage critically important horizontal and backbone connections.

Intelligence

Provides the cabling technician straightforward connectivity intelligence for error-free and greater efficiency when executing move, add, change (MAC) work orders and tracing operations.

How the iPatch System Works

Each rack is equipped with a Rack Manager *Plus* device, which monitors every port in every patch panel. This information is sent to a central database, where the System Manager Software shows a continuously updated view of cabling connectivity information.

(MAC) Work orders can be scheduled with point-and-click ease. Utilizing the service provisioning algorithm, System Manager will identify the optimal cabling path, and issue an electronic work order.

At the scheduled time, the order is sent electronically to the appropriate iPatch Rack Manager *Plus* in the telecommunications room where the "jobs" label will appear on LCDs and the "jobs" green indicator will be lit to help the technician instantly identify the racks where a change must be made.

When the softkey under the "jobs" label is pressed, the work order details are displayed on the LCD screen of the appropriate racks and two bright red LEDs light up, one above each patch panel port, to guide the technician in executing each (MAC) work order.

When the (MAC) work order is executed, the change is verified by a confirmation tone and logged into the database. If an error is encountered while executing the (MAC) work order, a loud warning buzz instantly calls attention to the error so it can be corrected on the spot.

iPatch® System Components

iPatch Panels

The iPatch Copper Panels are built on the reliable, high-performance SYSTIMAX 1100 GigaSPEED patch panel platform.

The iPatch Fiber Shelves are SYSTIMAX 600-type fiber shelves, and come equipped with 12 duplex SC couplers (24 fibers) or 24 duplex LC couplers (48 fibers) that support the SYSTIMAX fiber portfolio—LazrSPEED, TeraSPEED and OptiSPEED applications. The iPatch Fiber shelves support both simplex and duplex patch connections.

Each iPatch Panel on a rack is connected to the iPatch Rack Manager *Plus* via a panel bus. The iPatch Panel monitors patch connections by sensing the insertion and removal of patch cord plugs. It relays this information to the Rack Manager *Plus*, which then records it in the database. The iPatch Panel features a trace button and an LED above each port to help guide technicians performing patching activities.



Advanced Connectivity

iPatch Rack Manager *Plus*

The universal Rack Manager *Plus* replaces and combines all features of the previous generation of Rack and Network Managers. The iPatch Rack Manager *Plus* is installed on each rack in the telecommunications equipment room. It communicates with and manages up to 40 1U iPatch panels installed on the rack. The Rack Manager *Plus* monitors patch connection changes at its rack and records them in its database. It reports the changes to the iPatch System Manager software database via a LAN connection. The Rack Manager *Plus* is also equipped with an LCD display. Information provided on the display assists the technician with performing scheduled moves, adds and changes, as well as patch cord tracing. In addition, the Rack Manager *Plus* has three LED indicators to alert the user of an active trace, jobs and alarms.



Technical Specifications:

Microprocessor: 16-bit, 16 MHz 18LF8720 processor

Downloadable Software: From host software via LAN

Program Storage: Flash memory

Data Storage: EEPROM

Program Data Retention Without Power: Minimum 10 years

Number of Panel Connections per Rack: Maximum 40

Number of Rack Manager *Plus* Units per Rack Manager LAN:

Maximum 100

Height: 3.375 in (8.6 cm) (2U)

Width: 19 in (48.3 cm)

Depth: 0.65 in (1.7 cm)

Recommended Mounting Height: Approximately 65 in (165 cm) above the floor, measured from the top edge of the Rack Manager *Plus* (the 11th 1U slot down from the top of a 7 foot rack)

Display Type: LCD graphics display

Display Size: 5.2 in (13.2 cm) measured diagonally; 240 x 64 pixels

Display Backlighting: White LED

Operational Environment: 14°F to 158°F (-10°C to 70°C),

95% non-condensing humidity

Network: Ethernet

Network Protocol: Transmission Control Protocol/Internet Protocol (TCP/IP)

Network Platform: 10BASE-T or 100BASE-T

Standards:

Safety:

CAN/CSA-C22.2 No. 950-95. Safety of information technology equipment (Canada)

UL 1950 Third Edition (USA)

EN 60 950 Second Edition (EU)

IEC 60 950 Second Edition with in-country deviations (Pacific Rim)

IEC 60 950 Second Edition with in-country deviations (Caribbean and Latin America)

AS/NZ 3260 (Australia and New Zealand)

Emissions:

FCC Part 15, Subpart B, Sections 15.107b & 15.109b for Class A Information Technology Equipment (USA)

EN 55022:1994 (C.I.S.P.R. 22, 1993) for Class A Information Technology Equipment (EU)

Immunity:

EN 55024:1998 Information Technology Equipment (EU)

iPatch System Manager Software

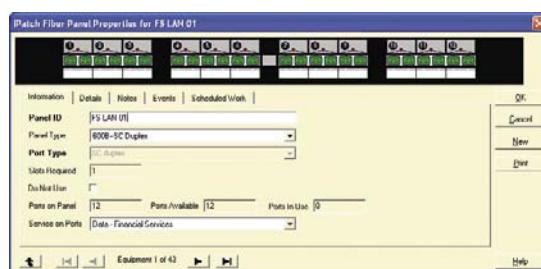
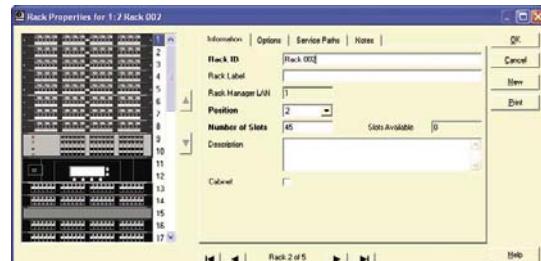
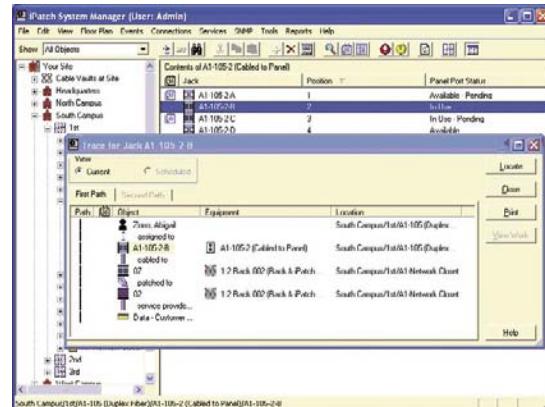
The iPatch System Manager software allows network administrators to manage voice and data patch connections from a remote location using a point-and-click graphical user interface. Through a point-and-click graphical user interface, the network administrator schedules work orders for moves, adds and changes, tracks their fulfillment, and receives alerts when unauthorized patching changes are made.

The iPatch System Manager database provides a connectivity map of the voice and data network, including network equipment, patch panels, faceplates, devices connected to the faceplates' jacks, and the people using such devices. The network administrator at the PC and the technician in the telecommunications equipment room can view the connectivity map at any time. They can use this map to trace the complete connectivity path all the way from the service-providing equipment to a person's workstation.

iPatch System Manager Version 4.0 provides greater vision and control over the entire communication network. It adds links to Network Management Systems (NMS) such as HP OpenView, that allow Network Managers to receive alarms from the iPatch System, to query iPatch System Manager to view CAD floor plans showing the location of network equipment, and to obtain physical-layer circuit traces. iPatch System Manager uses the industry standard SNMP to report alarms to the customer's NMS, ensuring that these alarms will appear in the NMS standard alarm browser window. iPatch System Manager allows customers to specify on a per-circuit basis whether or not SNMP alarms will be generated when a cabling change occurs, thus ensuring that IT Managers receive alarms only for those circuits that they have deemed critically important. In addition, Version 4.0 supports 3 additional languages on the Rack Manager *Plus* display—German, Spanish and French—with additional languages scheduled for later release.

iPatch System Manager Version 4.0 includes the critical features of automatically discovering IP devices connected to a managed switch, adding security features to control switches, and vastly improving the iPatch interconnect feature. The System Manager software will be able to determine the configuration of the managed network switches (*) populate that information into the database. It also allows for discovery of the IP devices that are connected to switch ports. The discovered devices will be placed in the database with respect to its physical location within the network and can be shown on a floor plan drawing.

(*)Please contact your local SYSTIMAX Solutions representative or BusinessPartner for the list of supported hardware.



Requirements for Running iPatch System Manager

To run System Manager, the following equipment configuration is recommended:

- **personal computers (PCs) equipped with:**

- Pentium 1.6 GHz or higher speed processor
- for the server PC, at least 512 MB of RAM; for each client PC, at least 256 MB of RAM
- for the server PC, at least 1 GB of free hard disk space; for each client PC, at least 200 MB of free hard disk space
- a network card and a LAN connection
- for the server PC, a CD-ROM drive
- one of the following Microsoft Windows operating systems—

Windows 98, Windows 2000, Windows NT Workstation or Server 4.0 or later, Windows XP

Note: Windows 2000 Server or Windows XP is recommended for the server PC. Windows 2000 or Windows XP is recommended for client PCs.

Note: When installing System Manager Software, the setup program automatically installs Microsoft Data Engine (MSDE) unless the server is already running Microsoft SQL Server 7.0 or a later version. For large sites, running SQL Server 8.0 or a later version on the server is recommended. Install SQL Server on the server PC before installing System Manager.

- **for each PC, a color 17 inch or larger monitor**

Note: The recommended display settings are:

Colors: High Color (16 bit)

Screen Area: at least 1024 by 768 pixels.

Note: The minimum display settings are:

Colors: 256 Colors

Screen Area: 800 by 600 pixels.

- **for each PC, a mouse or other pointing device**

- **a printer**

The use of a backup (uninterruptible) power supply for the server PC is strongly recommended. A backup power supply prevents power failures from interrupting communications between System Manager and the iPatch equipment.

For improved performance of the server PC, a PC with a second processor and 1 GB of RAM is recommended.

Product Number	Detailed Description	Material ID
iPRCKMGR-PLUS	iPatch Rack Manager Plus	760024588
iP1100GS24	iPatch 1100GS3 24-Port Panel	700213028
iP1100GS48	iPatch 1100GS3 48-Port Panel	700213036
iPF600A12MS	iPatch 600A 12-Port MM SC-SC	760005595
iPF600B12MS	iPatch 600B 12-Port MM SC-SC	760005629
iPF600A12SS	iPatch 600A 12-Port SM SC-SC	760010777
iPF600B12SS	iPatch 600B 12-Port SM SC-SC	760010785
iPF600A24LC	iPatch 600A 24-Port LC	760017848
iPF600B24LC	iPatch 600B 24-Port LC	760017855
iPSYSMGR2V40	iPatch System Mgr. 2 User V4.0 Std. Pkg.	760036368
iPSYSMGRA2V40	iPatch System Mgr. 2 User V4.0 Adv. Pkg. (Device Discovery)	760033795
iPSYSMGRUP5V40	iPatch System Mgr. 25 User Upgrade V4.0	760033803
iPSYSMGRUP5V40	iPatch System Mgr. 5 User Upgrade V4.0	760033811
iPSYSMGRUPBAV40	iPatch System Mgr. Upgrade V4.0 Std. to Adv. (Device Discovery)	760036871

SYSTIMAX® AirSPEED AP542 Access Points

The SYSTIMAX AirSPEED AP542 access point (AP) is a high performance 802.11 wireless AP with robust features and security for demanding enterprise networks. With an intuitive and simple design, the SYSTIMAX AirSPEED AP542 is simple to install, configure and manage. The SYSTIMAX AirSPEED AP542 provides the reliability and quality expected by enterprise IT managers.



SYSTIMAX Solutions Meets the Performance Demands of the Enterprise

The SYSTIMAX AirSPEED AP542 access point offers a feature-rich, standards-based wireless LAN solution consistent with the product quality and performance that is synonymous with SYSTIMAX Structured Connectivity Solutions.

- 40 Mb/s throughput with concurrent 802.11g and 802.11a operation
- WMM™ and 802.11e ready for the quality of service (QoS) required for wireless voice and video
- Twice the memory of AP's currently in the market allowing for remote software upgrade capacity
- Multiple external antenna connectors to provide enhanced RF signals where coverage is critical

Industry-Leading WLAN Security Features

Reducing the risk of security breaches and unauthorized, rogue connections to your network, the SYSTIMAX AirSPEED AP542 security features enable long-term enterprise security, giving enterprises peace of mind.

- 802.11i, including the government approved Advanced Encryption Standard (AES)—the latest in encryption technology
- Advanced security protocols support WPA2™ including IEEE 802.1x user authentication and dynamic per-user, per-session rotating keys
- Up to 16 separate VLANs per radio each able to support multiple security settings
- Secure management interfaces—SNMPv3, SSL and SSH—protect against unauthorized AP changes
- Intelligent rogue AP and client, detection and notification

Easy to Install, Configure and Manage

The SYSTIMAX AirSPEED AP542 was designed to simplify installation and integration within the cabling and network infrastructure. The SYSTIMAX AirSPEED AP542 provides features that decrease the time the enterprise network manager spends on the installation and management of the wireless LAN solution.

- Unique SYSTIMAX Solutions cable management design to provide a clean look and quick installation
- Universal mounting bracket to deploy in the ceiling, on the ceiling or on the wall
- Support for PoE 802.3af technology—bringing power to the AP through the Ethernet cable
- Automatic channel selection to ease WLAN configuration
- Multiple interface options for remote AP management

Exceptional Quality Assurance and Reliability

The SYSTIMAX AirSPEED AP542 access point is backed by SYSTIMAX Labs to ensure that enterprises receive the excellence and reliability their mission critical systems demand.

- Plenum-rated for safe installation in ventilation spaces
- Auto-reconfiguration of network settings and security policies in the event of power outage
- Dual image support confirms new AP configuration is valid before deleting current image

Compatibility with All Things Wi-Fi

The SYSTIMAX AirSPEED AP542 access point, automatically supports client devices that adhere to the 802.11 standard and is upgradeable to support future wireless LAN technology.

- Dual-band, tri-mode concurrent support of the 802.11b, 802.11g and 802.11a
- Wi-Fi Certified™, ensuring interoperability between wireless certified devices
- Scalable platform protects network investment
- Remote software upgrades to support new 802.11 standards

Specifications:

Interface: Wired Ethernet: 10/100BASE-T Ethernet (RJ-45)
 RS-232: Unit Configuration

Hardware: Memory: 32 MB SDRAM; 8 MB Flash

Dimensions: 7.7 x 6.7 x 1.1 in (19.6 x 16.4 x 2.8 cm)

Weight: 0.8 lbs (0.36 kg)

Temperature: Operating: 32°F to 131°F (0°C to 55°C)
 Storage: 14°F to 158°F (-10°C to 70°C)

Humidity: 95% (non-condensing)

Power Supply: Integrated Module
 Autosensing 100/240 VAC; 50/60 Hz
 IEEE 802.3af for Power over Ethernet (PoE)

LEDs: Power
 Ethernet LAN Activity
 Wireless 802.11a Activity or Wireless 802.11b/g Activity

Management:

Remote Interfaces:

SNMPv1, SNMPv2c and secure SNMPv3 management, Telnet, TFTP

AP542 MIB, Etherlike MIB, 802.11 MIB, Bridge MIB, MIB-II

Standard & AP542 traps

Serial Port CLI (no proxy required)

HTTPS (SSL) server for secure web-based management

Advanced filtering capabilities including:

- IEEE 802.1d bridging with static MAC address filtering

- Network protocol filtering

- Proxy ARP, multicast/broadcast storm threshold filtering

- TCP/UDP port filtering

- Intra-cell traffic filtering

- Spanning Tree support

Product Number	Detailed Description	Application Notes	Material ID
SYSTIMAX AirSPEED AP542 US 9	Dual-radio, Tri-mode 802.11 a & b/g, 9 Channels	US & Canada	760028431
SYSTIMAX AirSPEED AP542 US13	Dual-radio, Tri-mode 802.11 a & b/g, 13 Channels	US & Canada	760028449
SYSTIMAX AirSPEED AP542 EU 4	Dual-radio, Tri-mode 802.11 a & b/g, 4 Channels	Most European Union Countries	760028456
SYSTIMAX AirSPEED AP542 EU 8	Dual-radio, Tri-mode 802.11 a & b/g, 8 Channels	Finland, Germany, Netherlands	760028472
SYSTIMAX AirSPEED AP542 UK	Dual-radio, Tri-mode 802.11 a & b/g	United Kingdom	760028464
SYSTIMAX AirSPEED AP542 MX 9	Dual-radio, Tri-mode 802.11 a & b/g, 9 Channels	Mexico	760031732
SYSTIMAX AirSPEED AP542 MX13	Dual-radio, Tri-mode 802.11 a & b/g, 13 Channels	Mexico	760031740
SYSTIMAX AirSPEED AP542 BR	Dual-radio, Tri-mode 802.11 a & b/g	Brazil	760031336
SYSTIMAX AirSPEED AP542 AR	Dual-radio, Tri-mode 802.11 a & b/g	Argentina	760031906
SYSTIMAX AirSPEED AP542 SA	Dual-radio, Tri-mode 802.11 a & b/g	Saudi Arabia	760031898
SYSTIMAX AirSPEED AP542 JP	Dual-radio, Tri-mode 802.11 a & b/g	Japan	760028480
SYSTIMAX AirSPEED AP542 CHN	Dual-radio, Tri-mode 802.11 a & b/g	China	760028506
SYSTIMAX AirSPEED AP542 SK	Dual-radio, Tri-mode 802.11 a & b/g	South Korea	760028514
SYSTIMAX AirSPEED AP542 HK	Dual-radio, Tri-mode 802.11 a & b/g	Hong Kong	760031724
SYSTIMAX AirSPEED AP542 TW	Dual-radio, Tri-mode 802.11 a & b/g	Taiwan	760028522
SYSTIMAX AirSPEED AP542 SG	Dual-radio, Tri-mode 802.11 a & b/g	Singapore	760028498
SYSTIMAX AirSPEED AP542 AU 9	Dual-radio, Tri-mode 802.11 a & b/g, 9 Channels	Australia, New Zealand	760033993
SYSTIMAX AirSPEED AP542 AU13	Dual-radio, Tri-mode 802.11 a & b/g, 13 Channels	Australia, New Zealand	760028423

SYSTIMAX® AirSPEED AP541 Access Points

The SYSTIMAX AirSPEED AP541 access point (AP) is a cost effective 802.11 wireless AP delivering enterprise-class security and management features for installations in environments that do not require a high degree of client diversity. With an intuitive and simple design, the SYSTIMAX AirSPEED AP541 is simple to install, configure and manage. The SYSTIMAX AirSPEED AP541 provides the reliability and quality expected by enterprise IT managers.

SYSTIMAX Solutions Meets the Performance Demands of the Enterprise

The SYSTIMAX AirSPEED AP541 access point offers a cost-effective, feature-rich, standards-based wireless LAN solution consistent with the product quality and performance that is synonymous with SYSTIMAX Structured Connectivity Solutions.

- 24 Mb/s actual throughput in standard 802.11 modes
- Twice the memory of APs currently in the market allowing for remote software upgrade capacity
- Two internal antennas and two external antenna connectors for antenna diversity and to provide enhanced RF signals where coverage is critical



Industry-Leading WLAN Security Features

Reducing the risk of security breaches the SYSTIMAX AirSPEED AP541 access point security features enable long-term enterprise security, giving enterprises peace of mind.

- 802.11i, including the government approved Advanced Encryption Standard (AES)—the latest in encryption technology
- Advanced security protocols support WPA2™ including IEEE 802.1x user authentication and dynamic per-user, per-session rotating keys
- Up to 16 separate VLANs each able to support a different security setting
- Secure management interfaces, SNMPv3, SSL and SSH protect against unauthorized AP changes

Easy to Install, Configure & Manage

The SYSTIMAX AirSPEED AP541 was designed to simplify installation and integration within the cabling and network infrastructure. The SYSTIMAX AirSPEED AP541 provides features that decrease the time the enterprise network manager spends on the installation and management of the wireless LAN solution.

- Unique SYSTIMAX Solutions cable management design to provide a clean look and quick installation
- Universal mounting bracket to deploy in the ceiling, on the ceiling or on the wall
- Support for PoE 802.3af technology—bringing power to the AP through the Ethernet cable
- Automatic channel selection to ease WLAN configuration
- Multiple interface options for remote AP management

Exceptional Quality Assurance and Reliability

The SYSTIMAX AirSPEED AP541 access point is backed by SYSTIMAX Labs to ensure enterprises receive the excellence and reliability their systems demand.

- Plenum-rated for safe installation in ventilation spaces
- Auto-reconfiguration of network settings and security policies in the event of a power outage
- Dual image support confirms new AP configuration is valid before deleting current image

Compatibility with All Things Wi-Fi

The SYSTIMAX AirSPEED AP541 access point supports client devices that adhere to the 802.11 standard and is upgradeable to support future wireless LAN technology.

- User defined mode of operation supporting 802.11a or 802.11b/g clients
- Wi-Fi Certified™, ensuring interoperability between wireless certified devices
- Scalable platform protects network investment
- Remote software upgrades to support new 802.11 standards

Specifications:

Interface: Wired Ethernet: 10/100BASE-T Ethernet (RJ-45)
 RS-232: Unit Configuration

Hardware: Memory: 32 MB SDRAM; 8 MB Flash

Dimensions: 7.7 x 6.7 x 1.1 in (19.6 x 16.4 x 2.8 cm)

Weight: 0.8 lbs (0.36 kg)

Temperature: Operating: 32°F to 131°F (0°C to 55°C)
 Storage: 14°F to 158°F (-10°C to 70°C)

Humidity: 95% (non-condensing)

Power Supply: Integrated Module
 Autosensing 100/240 VAC; 50/60 Hz
 IEEE 802.3af for Power over Ethernet (PoE)

LEDs: Power
 Ethernet LAN Activity
 Wireless 802.11a Activity or Wireless 802.11b/g Activity

Management:

Remote Interfaces:

- SNMPv1, SNMPv2c and secure SNMPv3 management, Telnet, TFTP
- AP542 MIB, Etherlike MIB, 802.11 MIB, Bridge MIB, MIB-II
- Standard & AP542 traps
- Serial Port CLI (no proxy required)
- HTTPS (SSL) server for secure web-based management
- Telnet (SSH)

Advanced filtering capabilities including:

- IEEE 802.1d bridging with static MAC address filtering
- Network protocol filtering
- Proxy ARP, multicast/broadcast storm threshold filtering
- TCP/UDP port filtering
- Intra-cell traffic filtering
- Spanning Tree support

Product Number	Detailed Description	Application Notes	Material ID
SYSTIMAX AirSPEED AP541 US 9	Single Radio, 802.11 a or b/g, 9 Channels	US & Canada	760028548
SYSTIMAX AirSPEED AP541 US13	Single Radio, 802.11 a or b/g, 13 Channels	US & Canada	760028555
SYSTIMAX AirSPEED AP541 EU 4	Single Radio, 802.11 a or b/g, 4 Channels	Most European Union Countries	760028563
SYSTIMAX AirSPEED AP541 EU 8	Single Radio, 802.11 a or b/g, 8 Channels	Finland, Germany, Netherlands	760028589
SYSTIMAX AirSPEED AP541 UK	Single Radio, 802.11 a or b/g	United Kingdom	760028571
SYSTIMAX AirSPEED AP541 MX 9	Single Radio, 802.11 a or b/g, 9 Channels	Mexico	760031765
SYSTIMAX AirSPEED AP541 MX13	Single Radio, 802.11 a or b/g, 13 Channels	Mexico	760031773
SYSTIMAX AirSPEED AP541 AR	Single Radio, 802.11 a or b/g	Argentina	760031930
SYSTIMAX AirSPEED AP541 BR	Single Radio, 802.11 a or b/g	Brazil	760031344
SYSTIMAX AirSPEED AP541 CN	Single Radio, 802.11 a or b/g	China	760028613
SYSTIMAX AirSPEED AP541 HK	Single Radio, 802.11 a or b/g	Hong Kong	760031757
SYSTIMAX AirSPEED AP541 TW	Single Radio, 802.11 a or b/g	Taiwan	760028670
SYSTIMAX AirSPEED AP541 JP	Single Radio, 802.11 a or b/g	Japan	760028597
SYSTIMAX AirSPEED AP541 IN	Single Radio, 802.11 a or b/g	India	760028696
SYSTIMAX AirSPEED AP541 SK	Single Radio, 802.11 a or b/g	South Korea	760028662
SYSTIMAX AirSPEED AP541 SG	Single Radio, 802.11 a or b/g	Singapore	760028605
SYSTIMAX AirSPEED AP541 UAE	Single Radio, 802.11 a or b/g	United Arab Emirates	760031914
SYSTIMAX AirSPEED AP541 SA	Single Radio, 802.11 a or b/g	Saudi Arabia	760031922
SYSTIMAX AirSPEED AP541 AU 9	Single Radio, 802.11 a or b/g, 9 Channels	Australia, New Zealand	760034009
SYSTIMAX AirSPEED AP541 AU13	Single Radio, 802.11 a or b/g, 13 Channels	Australia, New Zealand	760028530

SYSTIMAX® AirSPEED Signal Enhancing Antennas

The SYSTIMAX AirSPEED Dual Band Signal Enhancing Antenna (SEA) is an omni-directional external antenna that enhances the performance of the wireless network. The Dual Band SEA simultaneously supports 802.11a and 802.11b/g clients for greater deployment flexibility and infrastructure investment protection.

The SYSTIMAX AirSPEED SEA represents a key component of the SYSTIMAX AirSPEED Wireless LAN Solution. Combining the SYSTIMAX AirSPEED AP542, dual-radio, access point with SEAs creates a powerful solution to meet enterprise wireless LAN requirements.

Enhances the Wireless Network Performance

- Ensures a clear signal for SYSTIMAX AirSPEED Access Points installed in the ceiling (or plenum) and other RF unfriendly environments*
- Omni-directional antenna delivers 360° coverage
- Install access points and move the antenna around to optimize placement



Simple to Install

- Universal mounting bracket to deploy on the ceiling or on the wall
- Built-in magnet provides for a quick and sturdy installation on a dropped or T-bar ceiling
- Support for all 802.11 clients

Protects Infrastructure Investment

- Compatible with 802.11a and 802.11b/g clients
- Allows APs to be installed in the ceiling to prevent theft and tampering without impeding wireless LAN coverage

*Note: The SYSTIMAX AirSPEED Dual Band Signal Enhancing Antenna is not plenum-rated and should not be installed in the ceiling (or plenum). The antenna cable is plenum-rated and is safe for installation in the ceiling (or plenum).

Specifications:

Dimensions: 3.0 x 2.3 x 7.6 in (7.6 x 5.8 x 19.4 cm)

Weight: 3.9 oz (110 g)

Frequency Range: 2400 MHz-2500 MHz
5150 MHz-5875 MHz

Peak Gain (including cable loss): 2.5 dBi for 2400 MHz-2500 MHz
3.5 dBi for 5150 MHz-5875 MHz

Polarization: Linear, vertical

Power Handling: 2 W (cw)

Impedance: 50 Ohms

Connector: Proprietary

Cable: ULA100PL: 1.5 m
Plenum-Rated

Cable Loss: 2.0 dB for 2400 MHz-2500 MHz
3.5 dB for 5150 MHz-5875 MHz

Temperature: Operating 14°F to 131°F (-10°C to 55°C)

Humidity: Operating 95% @ 77°F (25°C)

Random Material: ABS + PC

Color: White

Product Number	Detailed Description	Material ID
AirSPEED Dual Band SEA	Dual-band Omni Directional Antenna	760033217

Wavelink Management Software

Centralized management allows IT to remotely configure, secure, update and monitor large numbers of access points and mobile devices. Automated maintenance allows customers to take the costs out of ongoing support -- configurations stay in place, are easily modified, and devices are supported in the field. Increased security enables policies to easily be set and modified across large numbers of mobile devices and access points, in addition to rogue client and AP detection.

Wavelink WLAN Management is a perfect complement to SYSTIMAX leading edge portfolio of wireless products, which include enterprise-class access points, signal enhancing antennas, and rack-mounted Power over Ethernet devices.



Wavelink Mobile Manager is the flagship WLAN management software in the market that provides Wi-Fi access point configuration, management, monitoring, reporting, maintenance and troubleshooting from a centralized location.

Wavelink Avalanche is the mobile device management software platform that provides the ability to manage, configure, and upgrade mobile devices from a centralized location.

Product Number	Detailed Description	Material ID
W-MMSTDF-025	WL MM (25 APs)	760040501
W-MMSTMF-025	WL MM Maintenance (25 APs)	760040519
W-MMSTDF-001	WL MM AP License (1 AP)	760040527
W-MMSTMF-001	WL MM AP License Maintenance (1 AP)	760040535
W-MMSTDU-025	WL MM Upgrade (25 APs)	760040543
W-MMSTDU-001	WL MM AP License Upgrade (1 AP)	760040550
W-MMSBDF-010	WL MM Small Business (10 APs)	760040568
W-MMSBMF-010	WL MM Small Business Maintenance (10 APs)	760040576
W-MMSBDF-001	WL MM SMB AP License (1 AP)	760040584
W-MMSBMF-001	WL MM SMB AP License Maintenance (1 AP)	760040592
W-MMEDDF-500	WL MM Education (500 APs)	760040600
W-MMEDMF-500	WL MM Education Maintenance (500 APs)	760040618
W-MMEDDF-001	WL MM Ed AP License (1 AP)	760040626
W-MMEDMF-001	WL MM Ed AP License Maintenance (1 AP)	760040634
W-AVSTDF-025	WL Avalanche (25 Dev)	760040683
W-AVSTMF-025	WL AV Maintenance (25 Devices)	760040691
W-AVSTDF-001	WL AV Device License (1 Device)	760040709
W-AVSTMF-001	WL AV Device License Maintenance (1 Device)	760040717
W-AVSTDU-025	WL AV Upgrade (25 Devices)	760040808
W-AVSTDU-001	WL AV Device License Maintenance (1 Device)	760040816
W-MMEPDF-025	WL MM Enterprise (25 AP & 25 Device)	760040444
W-MMEPMF-025	WL MM Enterprise Main 25 AP & 25 Device	760040451
W-MMEPDF-001	WL MM Enterprise AP License (1 AP)	760040469
W-MMEPMF-001	WL MM Enterprise AP License Maintenance (1 AP)	760040477
W-AVEPDF-001	WL AV Enterprise MD License (1 Device)	760040485
W-AVEPDF-001	WL AV Enterprise MD License Maintenance (1 Device)	760040493
W-OPSTDF-001	WL MM HP OpenView	760040642
W-OPSTMF-001	WL MM HP OpenView Maint	760040659
W-OPSTDU-001	WL MM HP OpenView Upgrade	760040667
W-OPSTMU-001	WL MM HP OpenView Upgrade Maintenance	760040675

PoE Non-Managed Devices

SYSTIMAX midspan Power over Ethernet (PoE) devices offer an effective method for powering enterprise applications by eliminating the need for costly electrical wiring and providing maximum installation flexibility.

Saves Time and Money

- Leveraging SYSTIMAX cabling solutions, the midspan PoE devices allows network end-points to receive both data and power over existing Category 5e or Category 6 cabling
- Protects your network investment by offering a lower total cost of ownership than alternative PoE solutions
- Installations savings by deploying all your LAN infrastructure at the same time: cabling, wireless and now power



Scalable

- Quick, cost-effective expansion of the network as enterprise requirements evolve
- Broad range of solutions fit different types of installations—6-, 12-, or 24-Port midspan PoE devices
- Simultaneous power for up to 24 Ethernet end-points

Simple to Install, Integrate and Manage

- Eliminates the need for AC outlets and power cords at locations where network end-points are installed
- Automatically detects all PoE-ready devices
- Front panel accessible ports with easy to read LED displays
- IEEE 802.3af compliancy ensures compatibility with future power over ethernet devices
- Mounted within SYSTIMAX racks—occupies minimal space in the telecommunications closet

Continuous, Reliable Performance and Back-up Power

- Enhanced power management allows enterprises to designate power levels per port to ensure sufficient power to all end-point devices
- Safe-powering assures safety with advanced line terminal detection
- Automatic detection and protection of legacy, non-powered, ethernet end-points
- Distributes back up power and ensures uninterrupted operation of business critical systems during power failures when deployed with an Uninterruptible Power Supply (UPS)

Specifications:

Connectors: RJ-45, EIA 568A and 568B
DB-9, Female (Management)

Dimensions: 1.75 x 17.0 x 11.9 in (4.4 x 43.3 x 30.2 cm)

Weight: 8.8 lbs (4 kg)

Temperature: Operating: 32°F to 104°F (0°C to 40°C)

Storage: -4°F to 167°F (-20°C to 75°C)

Humidity: Operating: Maximum 90% (non-condensing)

Altitude: Operating: -1,000 to 10,000 ft (-304.8 to 3048 m)

Thermal Rating: 285 BTU

Data Rate: 10/100 Mb/s

LEDs: System Indicator: AC Power (Green/Orange)
User Indicator: Channel Power (Green/Orange)

Management: Local LED Display

Power: Pin Assignment and Polarity: 4/5 (+), 7/8 (-)

Output Power Voltage: -48V

User Port Power: 15.4W maximum Power Management

Aggregate Power: 2400 / 1200 200W; 600 100W

AC Input Voltage: 88 to 264 Vac

AC Frequency: 47 to 63 Hz

AC Input Current: 3.5 A at 110 Vac, 1.8 A at 240 Vac

DC Input Current: 10 A at 48V

Volt Amperes Rating: 0.48 KVA (-48V); 0.30 KVA (110 VAC)

Product Options: 6-, 12-, or 24-Port midspan PoE Device Configurations

Product Number	Detailed Description	Material ID
PoE 600	6-Port PoE Device	760031567
PoE 1200	12-Port PoE Device	760031575
PoE 2400	24-Port PoE Device	760031583

PoE Managed Devices

SYSTIMAX PoE 2400G is the newest addition to the SYSTIMAX midspan Power over Ethernet device family. It offers an effective method for powering enterprise applications by eliminating the need for costly electrical wiring and providing maximum installation flexibility. The new midspan PoE device supports applications up to 1 Gbps performance and offers a unique web-based remote management solution giving enterprises more control of their LAN.



Advanced Connectivity

Saves Time and Money

- Leveraging SYSTIMAX cabling solutions, the PoE 2400G allows network end-points to receive both data and power over Category 5e or Category 6 cabling
- Protects your network investment by offering a lower total cost of ownership than alternative PoE solutions
- Installation savings by deploying all your LAN infrastructure at the same time - cabling, network end-point devices, and now power

Scalable

- Quick, cost effective expansion of the network as enterprise requirements evolve
- Supports up to 1 Gbps performance for bandwidth intensive applications requiring power at the device
- Simultaneous power for up to 24 Ethernet end-points
- IEEE 802.3af compliance ensures compatibility with future Power over Ethernet devices
- Automatically detects all PoE-ready devices

Simple to Install, Integrate, and Manage

- Eliminates the need for AC outlets and power cords at locations where network end-points are installed
- Web-based application for remote management of powered devices - no software installation required
- Real time monitoring, notification, and reset capabilities to troubleshoot devices from any PC
- Mounted within SYSTIMAX SCS racks—occupies minimal space (1U) in the telecommunications closet

Continuous, Reliable Performance and Back-up Power

- Enhanced power management allows enterprises to designate power levels per port to ensure sufficient power to all end-point devices
- Safe-powering assures safety with advanced line terminal detection
- Automatic detection and protection of legacy, non-powered, Ethernet end-points
- Distributes back up power and ensures uninterrupted operation of business critical systems during power failures when deployed with an Uninterruptible Power Supply (UPS)

Specifications:

Connectors: RJ-45, EIA 568A and 568B
DB-9, Female (Management)

Dimensions: 1.75 x 17.0 x 11.9 in (4.4 x 43.3 x 30.2 cm)

Weight: 8.8 lbs (4 kg)

Temperature: Operating: 32°F to 104°F (0°C to -40°C)
Storage: -4°F to 158°F (-20°C to 70°C)

Humidity: Operating: Maximum 90% (non-condensing)

Altitude: Operating: -1,000 to 10,000 ft (-304.8 to 3048 m)

Thermal Rating: 200 BTU

Data Rate: 10/100/1000 Mb/s

LEDs: System Indicator: AC Power (Green/Orange)
User Indicator: Channel Power (Green/Orange)

Management: Local LED Display, Remote Management

Power: Pin Assignment and Polarity: 4/5 (+), 7/8 (-)
Output Power Voltage: -48V
User Port Power: 15.4W maximum Power Management
Aggregate Power: -200W
AC Input Voltage: 90 to 264 Vac
AC Frequency: 47 to 63 Hz
AC Input Current: 4A at 110 Vac, 2A at 220 Vac

Product Options: 24-Port midspan PoE Device with Remote Management

Product Number	Detailed Description	Material ID
PoE 2400G	24-Port PoE Device with Remote Management	760031591

Advanced
Connectivity

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Flush Mounted Modular Faceplates

The SYSTIMAX Modular Faceplates are flush mounted multi-outlet faceplates designed for use with M-Series Modular Information Outlets.

The "LE" faceplates offer an aesthetically pleasing faceplate look with labeling features.

The "L" faceplates are flat faceplates that contain slots that cover the screws to house white labels and covers.

Two labels and covers are included with the faceplate. The faceplate outlet openings are numbered on both sides for installation and maintenance identification. Optional M20AP Dust Covers/Blanks may be used to cover any unused outlets or outlet openings.

The following models are available:

- The M10L and M10LE are single-outlet faceplates
- The M10LW is a single-outlet faceplate for use with wall-mounted telephones with a mounting distance of 3.280 inches
- The M12L and M12LE are duplex-outlet (two-hole) faceplates with side by side openings
- The M12AP is a duplex-outlet (two-hole) faceplate with vertically aligned openings



- The M13L and M13LE are triplex-outlet (three-hole) faceplates
- The M14L and M14LE are quadplex-outlet (four-hole) faceplates
- The M16L and M16LE are sixplex-outlet (six-hole) faceplates
- The M28L is a double gang eightplex-outlet (eight-hole) faceplate

Physical Specifications:

Width: MLE Series—2.84 in (7.2 cm)
M28L—4.61 in (11.7 cm)
All others—2.81 in (7.1 cm)

Height: MLE Series—4.81 in (12.2 cm)
All others—4.56 in (11.6 cm)

Depth: MLE Series—0.33 in (0.84 cm)
All others—0.29 in (0.7 cm)

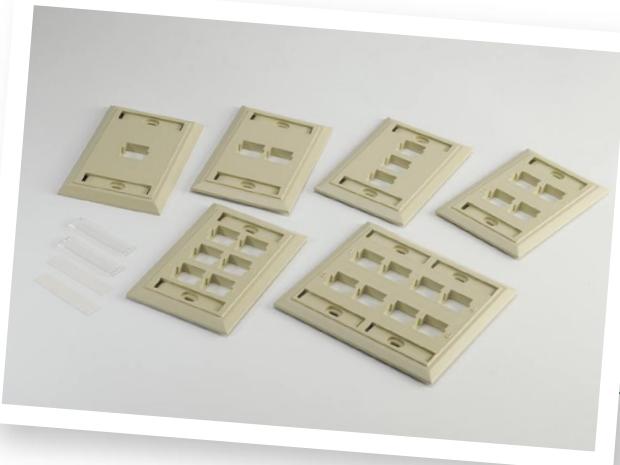
Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

LE-Type

Product Number	Detailed Description	Color	Material ID
M10LE-003	Simplex	Black	108332982
M10LE-215	Simplex	Creme	108332990
M10LE-246	Simplex	Ivory	108333006
M10LE-262	Simplex	White	108333014
M10LE-270	Simplex	Gray	108333022
M12LE-003	Duplex	Black	108333030
M12LE-215	Duplex	Creme	108333048
M12LE-246	Duplex	Ivory	108333055
M12LE-262	Duplex	White	108333063
M12LE-270	Duplex	Gray	108333071
M13LE-003	Triplex	Black	108333089
M13LE-215	Triplex	Creme	108333097
M13LE-246	Triplex	Ivory	108333105
M13LE-262	Triplex	White	108333113

**Faceplates
& Zone
Boxes**

Product Number	Detailed Description	Color	Material ID
M13LE-270	Triplex	Gray	108333121
M14LE-003	Quadplex	Black	108333139
M14LE-215	Quadplex	Creme	108333147
M14LE-246	Quadplex	Ivory	108333154
M14LE-262	Quadplex	White	108333162
M14LE-270	Quadplex	Gray	108333170
M16LE-003	Sixplex	Black	108333188
M16LE-215	Sixplex	Creme	108333196
M16LE-246	Sixplex	Ivory	108333204
M16LE-262	Sixplex	White	108333212
M16LE-270	Sixplex	Gray	108333220



L-Type

Product Number	Detailed Description	Color	Material ID
M10L-003	Simplex	Black	108258401
M10L-246	Simplex	Electrical Ivory	108258419
M10L-262	Simplex	Electrical White	108258427
M10L-270	Simplex	Electrical Gray	108258435
M10LW-246	Simplex (For wall mounting of telephones)	Electrical Ivory	108258450
M10LW-262	Simplex (For wall mounting of telephones)	Electrical White	108258468
M12L-003	Duplex	Black	108168485
M12L-246	Duplex	Electrical Ivory	108168477
M12L-262	Duplex	Electrical White	108168469
M12L-270	Duplex	Electrical Gray	108168451
M13L-003	Triplex	Black	108168527
M13L-246	Triplex	Electrical Ivory	108168519
M13L-262	Triplex	Electrical White	108168501
M13L-270	Triplex	Electrical Gray	108168493
M14L-003	Quadplex	Black	108168568
M14L-246	Quadplex	Electrical Ivory	108168550
M14L-262	Quadplex	Electrical White	108168543
M14L-270	Quadplex	Electrical Gray	108168535

Product Number	Detailed Description	Color	Material ID
M16L-003	Sixplex	Black	108168600
M16L-246	Sixplex	Electrical Ivory	108168592
M16L-262	Sixplex	Electrical White	108168584
M16L-270	Sixplex	Electrical Gray	108168576
M28L-003	Eightplex (Double Gang)	Black	108685009
M28L-246	Eightplex (Double Gang)	Electrical Ivory	108685017
M28L-262	Eightplex (Double Gang)	Electrical White	108685025
M28L-270	Eightplex (Double Gang)	Electrical Gray	108685033
Product Number	Detailed Description	Color	Material ID
M12AP-246	Duplex (Vertical Alignment)	Electrical Ivory	107276172
M12AP-262	Duplex (Vertical Alignment)	Electrical White	107276180

L-Type and LE-Type Faceplate Labels and Label Covers

Labels are on 8-1/2 x 11 inch sheets of paper that are to be used with a printer. The labels are easy to punch out since the paper is perforated in the shape of the labels. The label covers are the clear label covers that go on the faceplate.

Product Number	Package	Min. Order Qty.	Material ID
L Covers	100 covers	1 box, 5 pkgs, 500 covers	108492927
LE Covers	100 covers	1 box, 5 pkgs, 500 covers	108492935
L Labels	10 sheets/1,000 labels	1 box, 50 pkgs, 500 sheets	108492943
LE Labels	10 sheets/300 labels	1 box, 50 pkgs, 500 sheets	108492950

Flush Mounted Flexible Faceplate

SYSTIMAX Flexible Faceplate is a front access modular structure. This faceplate is universal and accommodates all M-Series jacks for copper and fiber. It is made up of a main frame and various types of adapters that snap into it. The design includes separate components: a single gang frame M13FP, a double gang frame M26FP, and various adapters: single, dual, blank, S-Video, and 3-Port RCA. All come in four colors: black, white, ivory and gray.

RCA and S-Video (SVHS) Adapters for the flexible faceplate are front access adapters, that will accommodate the flush mount S-Video Adapter and the 3-Port RCA Adapter. These adapters will easily snap into the flexible faceplate.

The RCA Adapter uses a 110 IDC (Insulation Displacement Contact) block to directly terminate the 4-pair building wiring. RCA outlets are used for connecting audio and video appliances to 24 AWG UTP SYSTIMAX wiring.

The S-Video Adapter uses a 110 IDC block to directly terminate to 4-pair building wiring. The S-Video or Super VHS (SVHS) Modular Adapter provides baseband video connectivity to 24 AWG UTP SYSTIMAX wiring. These outlets provide point-to-point transmission of analog baseband National Television System Committee (NTSC)/Phase-Alteration Line (PAL)/SECAM S-Video signals.

Physical Specifications:

Height: M13FP & M26FP—4.81 in (12.2 cm)

Width: M13FP—2.84 in (7.2 cm)

M26FP—4.61 in (11.7 cm)

Depth: M13FP—0.64 in (1.6 cm)

M26FP—0.67 in (1.7 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Faceplates
& Zone Boxes

Product Number	Detailed Description	Color	Material ID
M13FP-003	Single Gang Frame	Black	760010009
M13FP-246	Single Gang Frame	Ivory	760010017
M13FP-262	Single Gang Frame	White	760010025
M13FP-270	Single Gang Frame	Gray	760010033
M26FP-003	Double Gang Frame	Black	760008607
M26FP-246	Double Gang Frame	Ivory	760008615
M26FP-262	Double Gang Frame	White	760008623
M26FP-270	Double Gang Frame	Gray	760008631
M30FP-1RJ45-003	Single Port Adapter	Black	760009423
M30FP-1RJ45-246	Single Port Adapter	Ivory	760009431
M30FP-1RJ45-262	Single Port Adapter	White	760009449
M30FP-1RJ45-270	Single Port Adapter	Gray	760009456
M30FP-2RJ45-003	Double Port Adapter	Black	760008649
M30FP-2RJ45-246	Double Port Adapter	Ivory	760008656
M30FP-2RJ45-262	Double Port Adapter	White	760008664
M30FP-2RJ45-270	Double Port Adapter	Gray	760008672
M30FP-BLANK-003	Blank Adapter	Black	760009464
M30FP-BLANK-246	Blank Adapter	Ivory	760009472
M30FP-BLANK-262	Blank Adapter	White	760009480
M30FP-BLANK-270	Blank Adapter	Gray	760009498

Product Number	Detailed Description	Color	Material ID
M30FP-SVHS-110	Flush Mount S-VHS Adapter	Black	760013094
M30FP-SVHS-110	Flush Mount S-VHS Adapter	Ivory	760013102
M30FP-SVHS-110	Flush Mount S-VHS Adapter	White	760013110
M30FP-SVHS-110	Flush Mount S-VHS Adapter	Gray	760013128
M30FP-3RCA-110	3-Port RCA Adapter	Black	760017541
M30FP-3RCA-110	3-Port RCA Adapter	Ivory	760017558
M30FP-3RCA-110	3-Port RCA Adapter	White	760017566
M30FP-3RCA-110	3-Port RCA Adapter	Gray	760017574
M30FP-VGA-PT-262	M30FP VGA Adapter	White	760028720
M30FP-VGA-PT-270	M30FP VGA Adapter	Gray	760028738
M30FP-VGA-PT-003	M30FP VGA Adapter	Black	760028704
M30FP-VGA-PT-246	M30FP VGA Adapter	Ivory	760028712

Flush Mounted Stainless Steel Faceplates

These flush mounted stainless steel faceplates in 2-, 3-, 4- and 6-port size are designed to be used with the M-Series modular outlets mounted at a 90 or 45 degree angle. When mounted at the 90 degree angle, the front of the outlet is flush with the front of the stainless steel faceplate.

These faceplates include an adapter riveted to the stainless steel that accepts the M-Series outlets. The dimensions are approximately 2.75 in (7.0 cm) wide by 4.5 in (11.3 cm) high by 0.3 in (0.7 cm) deep fitting a NEMA box as small as 1.75 in (4.4 cm) wide by 4.125 in (10.5 cm) high by 1.75 in (4.4 cm) deep.

Individual packaging includes one faceplate and two combination head (Phillips/slot) mounting screws, for installation in a standard NEMA electrical box.

Physical Specifications:

Height: 4.50 in (11.4 cm)
Width: 2.75 in (7.0 cm)
Depth: 0.16 in (0.4 cm)



Product Number	Detailed Description	Material ID
M12SP	Duplex	108615188
M13SP	Triplex	108615196
M14SP	Quadplex	108615204
M16SP	Sixplex	108615212

Flush Mounted Multimedia Faceplate

The M10MMFP faceplate provides the opportunity to deploy copper and fiber media to the workstation for new and existing installations. The product enables you to fasten a flush mount faceplate (i.e. M12L, M14L, M12LE, M14LE, etc.) to the front of the unit—for installation of up to 6 copper M-Series modules, and provides alternatives for fiber connectors installed vertically at the base of the product. It may be configured with ST, SC or LC adapters in various densities.

Adapter plates are provided for use with the SC duplex, LC duplex or the high-density modular adapter strips available for ST, SC and LC connectors. The plates can be installed either right at the base (exposed) or recessed in unit providing additional protection for the fibers. Additionally, the fiber adapter strips provide high-density capability for customer applications. M10MMFP incorporates fiber slack storage to manage fiber termination.

The M10MMFP also features either rear (4) or side (2) entry ports for cabling providing flexibility for either wall-mount or raceway installs.

The attractive cover snaps onto the base, providing protection for the fiber connections. The cover also provides labeling features such as a paper label for circuit identification and plastic icon strips (in 9 colors). In addition, the cover may be attached to the base with the screws, affording tamper resistance.

The M10MMFP Multimedia Faceplate includes: 1 multimedia unit (cover and base); 3 Fiber Adapter Plates- SC Adapter Plate, LC Adapter Plate and Plate for SC, ST or LC adapter strips; 1-1/4 in truss head screws; K35 by 12 mm pan head Phillips PT® screws; label; clear plastic label cover; installation instructions; plastic icon strips in 9 colors (gray, blue, yellow, orange, red, white, brown and purple).

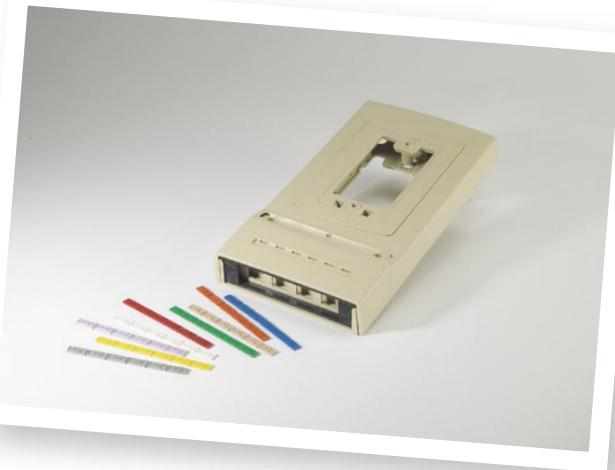
Physical Specifications:

Height: 8.76 in (22.2 cm)

Width: 4.50 in (11.4 cm)

Depth: 1.14 in (2.9 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Faceplates & Zone Boxes

Flush Mounted Modular Mounting Frames

The M105FR1, M106FR2, M108FR3 and M106FR4 Modular Mounting Frames are flush mounted multi-outlet modular mounting frames designed for use with the M-Type modular information outlets. The M105FR1 is a single outlet modular mounting frame. The M106FR2 is a duplex outlet modular mounting frame. The M106FR4 is a quadplex outlet modular mounting frame.



The M108FR3 is a triplex modular mounting frame. A standard DeCora in style faceplate fits over the frame.

Physical Specifications:

Height: M108FR3: 3.93 in (10.0 cm)

All others: 4.10 in (10.4 cm)

Width: M108FR3: 1.40 in (3.6 cm)

All others: 1.75 in (4.4 cm)

Depth: M108FR3: 0.29 in (0.7 cm)

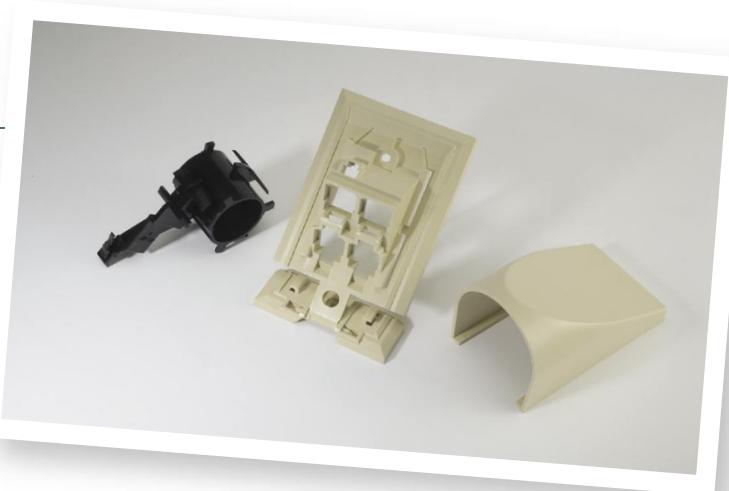
All others: 0.50 in (1.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Detailed Description	Color	Material ID
M105FR1-246	Simplex	Electrical Ivory	106622160
M105FR1-262	Simplex	Electrical White	106622178
M105FR1-270	Simplex	Electrical Gray	106688401
M106FR2-003	Duplex	Black	106628852
M106FR2-246	Duplex	Electrical Ivory	106622210
M106FR2-262	Duplex	Electrical White	106622251
M106FR2-270	Duplex	Electrical Gray	106688393
M108FR3-003	Triplex	Black	108265430
M108FR3-246	Triplex	Electrical Ivory	108265448
M108FR3-262	Triplex	Electrical White	108265455
M108FR3-270	Triplex	Electrical Gray	108265463
M106FR4-003	Quadplex	Black	106627763
M106FR4-246	Quadplex	Electrical Ivory	106622277
M106FR4-262	Quadplex	Electrical White	106622285
M106FR4-270	Quadplex	Electrical Gray	106688385

4-Port Flush Mount Outlet

The 4-Port Flush Mount Outlet is designed to mount on a wall surface, and will fit any standard National Electrical Manufacturers Association (NEMA) electrical box. The flush mounted faceplate has 45 degree angular ports for fiber and copper connectors and has a protective angled hood. The hinged base of the faceplate allows changes and maintenance to occur without reinstalling the faceplate. The fiber organizer spool bend-radius provides control and storage for fiber slack.



Faceplates & Zone Boxes

The 4-Port Flush Mount Outlet can be used in the following environments:

- In an ALL COPPER environment the 4-Port Flush Mount Outlet will support up to four M-Series connectors, four M81LC mounting modules, or up to two M-Series connectors, or M81C mounting modules. When fiber is introduced into the application the number of ports available for connectors is reduced by one
- In an ALL FIBER environment the M14MMO will support two simplex ST or SC connectors, four M81LC connectors, or two duplex SC connectors
- In an integrated FIBER/COPPER environment, the 4-Port Flush Mount Outlet will support one M-Series copper connector and two simplex SC or ST connectors, or one M-Series copper connector and one duplex SC connector

Physical Specifications:

Height: 5.69 in (14.5 cm)

Width: 3.28 in (8.30 cm)

Depth: 1.29 in (3.3 cm) faceplate, 2.77 in (7.00 cm) hood & faceplate, 5.30 in (13.5 cm) hood/faceplate/spool

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Detailed Description	Color	Material ID
M14MMO-003	Quadplex	Black	107655169
M14MMO-246	Quadplex	Electrical Ivory	107655177
M14MMO-262	Quadplex	Electrical White	107655185
M14MMO-270	Quadplex	Electrical Gray	107655193

4-Port Modular Furniture Faceplate

M4CA faceplate is designed for modular furniture applications requiring either fiber and/or copper connectivity. The M4CA has M-Series sockets with snap indentations orientated top and bottom to accommodate up to 4 M-Series jacks. The M4CA will also accommodate 4 fiber modular telecommunications outlets such as the "LC couplings and jumpers for modular furniture" within TIA standard cavity depth of 1.2 inch minimum. The LazrSPEED angle mount fiber jumper assembly may also be used with this faceplate.

Modular office furniture manufacturers have used a wide range of panel openings for their data and voice outlets. The M4CA will adjust to fit many of these. It may be mounted on any flat surface with a material thickness of 0.025 in to 0.125 in (0.63 mm to 3.18 mm). It may be easily installed in any rectangular opening size ranging from 1.7 in high by 2.792 in wide (4.32 cm x 7.09 cm) to 2.375 in high by 4.125 in wide (6.03 cm x 10.48 cm).

The surface finish is the same as that used on the LE series faceplates. Each M4CA kit includes frame, cover, latch bars (shipped attached to the frame) and a paper label that may be used for identification of each port, along with a protective clear plastic label cover.

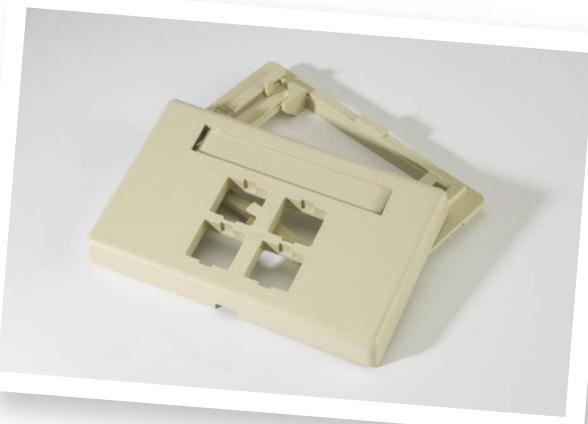
Physical Specifications:

Height: 2.98 in (7.6 cm)

Width: 4.73 in (12.0 cm)

Depth: 0.50 in (1.3 cm)

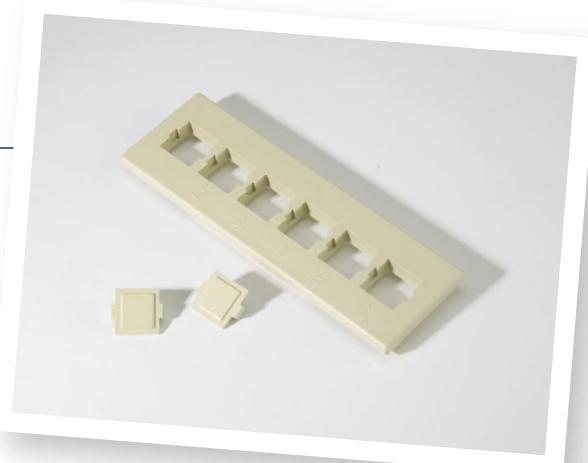
Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Product Number	Detailed Description	Color	Material ID
M4CA-003	Quadplex	Black	700189046
M4CA-262	Quadplex	White	700191588
M4CA-246	Quadplex	Ivory	700191570
M4CA-270	Quadplex	Grey	700191596

6-Port Modular Furniture Faceplate

The M26C Modular Furniture Sixplex Outlet Faceplate is a flush mounted faceplate designed to snap into modular furniture raceway covers. The M26C holds up to six M-Series or M-81 Series mounting modules. Both sides of the faceplate are numbered for easy installation and maintenance identification. The M20AP dust cover/blank can be used to protect unused outlets and cover unused faceplate openings. Fits modular furniture knock-out size 1.374 in (3.49 cm) high x 5.251 in (13.34 cm) wide.



Physical Specifications:

Height: M26C—1.9 in (4.8 cm)

Width: M26C—5.6 in (14.2 cm)

Depth: M26C—0.5 in (1.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Detailed Description	Color	Material ID
M26C-246	Sixplex	Electrical Ivory	107167496

3-Port Faceplate for SteelCase™ Furniture

The M13C and M13CLS Modular Furniture Triplex Outlet Faceplates are flush mounted triplex modular faceplates designed to fit modular furniture raceway covers for the following SteelCase furniture lines: (E)9000, Segment (with correct bezel), Answer, Montage, Avenir, Elective Elements, and Contex. The M13C holds up to three M-Series or fiber modular telecommunications outlets and has numbering on both sides of the faceplate for installation and maintenance identification. The M20AP dust cover/blank can be used to protect unused outlets and cover unused faceplate openings. The M13C Faceplate is used in an opening size of 1.38 in (35.1 mm) in height and 2.71 in (68.8 mm) in width (dimensions are +/- .01 in).

The M13CLS Faceplate is part of the LazrSPEED Solution and it holds M-Series modules that snap in horizontally and can also be angled. The M13CLS Faceplate is used in an opening size of 1.375 in +/- 0.025 in (34.93 mm +/- 0.64 mm) in height and 2.700 in +/- 0.050 in (68.58 mm +/- 1.27 mm) in width.

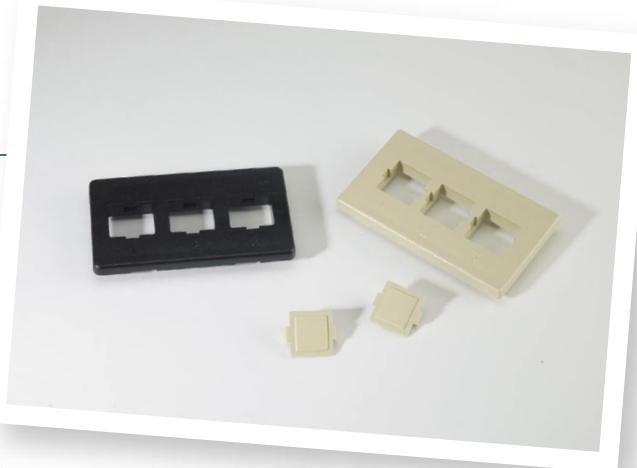
Physical Specifications:

Height: 1.84 in (4.7 cm)

Width: 3.13 in (7.9 cm)

Depth: 0.29 in (0.7 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Faceplates
& Zone Boxes

Product Number	Detailed Description	Color	Material ID
M13C-003	Triplex	Black	106650864
M13C-246	Triplex	Electrical Ivory	106650880
M13C-262	Triplex	Electrical White	106650898
M13C-270	Triplex	Electrical Gray	106701154
M13CLS-246	Triplex	Ivory	108564675
M13CLS-262	Triplex	White	108564683
M13CLS-270	Triplex	Gray	108564691
M13CLS-003	Triplex	Black	108564709
M13CLS-215	Triplex	Misty Creme	108564725

3-Port Faceplate for Herman Miller™ Action Furniture

The M13HM faceplate is designed to fit to the data communications opening in the Herman Miller Action Office System series of modular furniture.

The M13HM has M-Series sockets with snap indentations to accommodate three M-Series jacks. Above the M-Series openings is space for a paper label insert with a clear plastic label holder (included).

Mounting clips are molded within the M13HM faceplate. No screws required for mounting and securing the faceplate to the opening.

1 Kit of Parts = 25 M13HM Faceplates with label inserts and label holders.
Minimum Order Quantity (MOQ) = 1 Kit of Parts

Physical Specifications:

Height: 2.13 in (5.5 cm)

Width: 3.5 in (8.8 cm)

Depth: 0.25 in (0.65 cm)



Product Number	Detailed Description	Color	Material ID
M13HM-003	Triplex Faceplate Kit of Parts	Black	760045039
M13HM-246	Triplex Faceplate Kit of Parts	Ivory	760045047
M13HM-262	Triplex Faceplate Kit of Parts	White	760045054
M13HM-270	Triplex Faceplate Kit of Parts	Gray	760045062

4-Port Faceplate for Knoll™, SteelCase™ and Herman-Miller™

The M14 Modular Furniture Quadplex Outlet Faceplates hold up to four M-Series modular outlets or M81-Series Mounting Modules. Both sides of the faceplate are numbered for easy installation and maintenance identification.

The M14C Faceplate is a flush mounted modular faceplate designed to fit the Knoll, Inc. line of modular furniture raceway covers. Packaged with two color coordinated M20AP dust cover/blanks to cover unused ports. The M14C Faceplate is used in an opening size of 1.609 inches in height and 3.358 inches in width (dimensions are +/- .01 inch).

The M14CE faceplate is designed to fit SteelCase modular furniture and is used in an opening size of 1.38 in (3.51 cm) in height and 2.71 in (6.88 cm) in width.

The M14CH Faceplate is a flush mounted modular faceplate designed to fit the Herman-Miller-Ethospace beltline modular furniture raceway covers. The M14CH Faceplate is used in an opening of 1.750 inches in height and 2.832 inches in width (dimensions are +/- 0.005 in).

Physical Specifications:

Height: M14C: 2.11 in (5.4 cm)

M14CE: 2.16 in (5.5 cm)

M14CH: 2.0 in (5.1 cm)

Width: M14C: 4.07 in (10.3 cm)

M14CE: 4.07 in (10.3 cm)

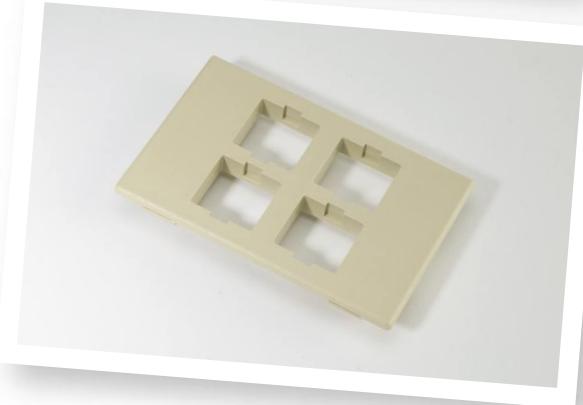
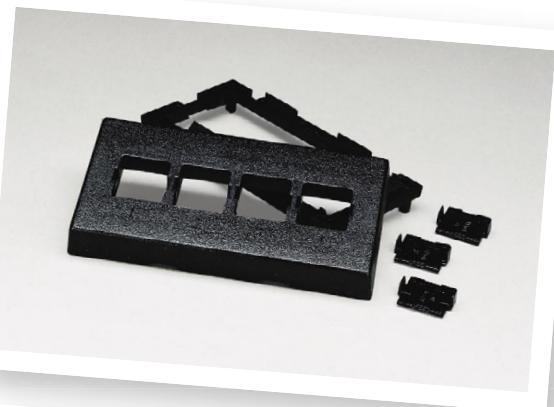
M14CH: 3.13 in (7.9 cm)

Depth: M14C: 0.53 in (1.3 cm)

M14CE: 1.27 in (5.5 cm)

M14CH: 0.38 in (1.0 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Faceplates & Zone Boxes

Product Number	Detailed Description	Color	Material ID
M14C-003	Quadplex	Black	106650849
M14C-270	Quadplex	Gray	107167462
M14C-148	Quadplex	Almond	107167488
M14CE-003	Quadplex	Black	108216151
M14CE-246	Quadplex	Ivory	108216144
M14CE-262	Quadplex	White	108216128
M14CE-270	Quadplex	Gray	108216136
M14CH-003	Quadplex	Black	108406414
M14CH-246	Quadplex	Ivory	108406422
M14CH-262	Quadplex	White	108406430
M14CH-270	Quadplex	Gray	108406448

Rectangular Mounting Collar for M-Series Outlets

The M30MC Universal Mounting Collar is designed to flush mount one M-Series modular jack or module into any flat surface with a rectangular opening of 0.785 in (2 cm) high by 0.763 in (1.94 cm) wide. It is designed to accommodate material from 0.03 in (0.06 cm) to 0.1 in (0.3 cm) thick.

Physical Specifications:

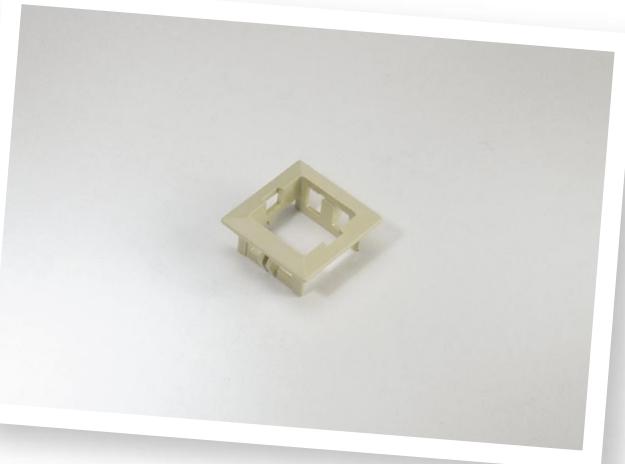
Height: 1.00 in (2.5 cm)

Width: 1.03 in (2.6 cm)

Depth: 0.46 in (1.2 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Color	Material ID
M30MC-003	Black	106664154
M30MC-246	Electrical Ivory	106664139
M30MC-262	Electrical White	106664147
M30MC-270	Electrical Gray	106697089



Circular Mounting Collar for M-Series Outlets

The M30CC Circular Collar is a plastic circular collar designed to support the M-Series modules. The M30CC can be used in furniture such as a desk or cabinet, on a flat wall panel, or on a flat metal panel. The supporting panel or wall structure must be between 0.04 in. and 0.13 in (0.1 cm and 0.32 cm) in thickness, inclusively.

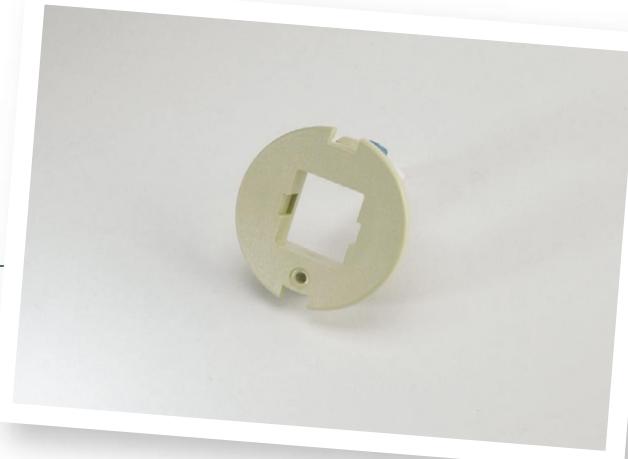
The M30CC collar supports a single telecommunications outlet such as the M-Series and can also support the M81-Series mounting modules.

Physical Specifications:

Outside Diameter: 1.60 in (4.1 cm)

Depth: 0.50 in (1.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Product Number	Color	Material ID
M30CC-246	Ivory	106986110

Modular Faceplates and Clips

Germany/Benelux Applications

The range of Benelux/German standard Information Outlets include the M18930 Surface Outlet, M18932 Flushmount Centerplate, M02714 Coverplate, and M81 Dustcovers.

The M18930 Outlet is a surface-mounted duplex M-Series Modular Information Outlet designed for use with two M-Series high-density modules. The outlet openings have provision for label identification.

The M18932 Centerplate is a flush mounted Centerplate which is also designed to accept two M-Series HDM's. The M18932 mounts in a German/Benelux standard electrical box with centerplate mounting dimensions of 60 mm center to center and with a minimum depth of 32 mm. The outlet openings have provision for label identification.

The M02714 flush mount coverplate is used with the M18932 centerplate to provide a frame around the mounting screws of the centerplate.

The M81 are dust covers designed for use with the M18930 and M18932 faceplates. The M81 is used in empty jack openings which are not populated with high-density modules.

Physical Specifications:

Height: M18930 and M02714 = 8.0 cm

M18932 = 5.0 cm

M81 = 1.8 cm

Width: M18930 = 6.5 cm

M18932 = 5.0 cm

M02714 = 8.0 cm

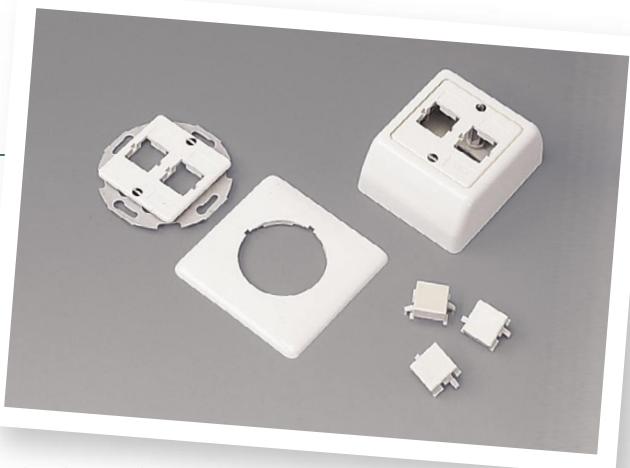
M81 = 2.6 cm

Depth: M18930 = 3.5 cm

M18932 = 0.73 cm

M02714 = 0.55 cm

M81 = 1.3 cm



Faceplates & Zone Boxes

Product Number	Detailed Description	Mounting	Color	Material ID
M02714-246	M18932-246 Coverplate	Flush	Ivory	106720212
M18930-246	Duplex	Surface	Ivory	106720196
M18932-246	Duplex	Flush	Ivory	106720204
M02714-262	M18932-262 Coverplate	Flush	White	107052359
M18930-262	Duplex	Surface	White	107052334
M18932-262	Duplex	Flush	White	107052326
M81-246	Blank		Ivory	106837222
M81-262	Blank		White	106837230

Modular Faceplates and Clips Scandinavian Applications

The MFUGA Scandinavian faceplate is a dual flush mount faceplate which mounts in a FUGA box (or equivalent) and accepts two high-density modules. It consists of the cover and baseplate.

The MFUGAS Scandinavian faceplate is a single flush mount faceplate which mounts in a FUGA box (or equivalent) and accepts one high-density module. It consists of the cover, baseplate and mounting plate.



The MTDL80 Universal faceplate is a dual semi-surface mounted faceplate which can be surface or flush mounted on a standard electrical box (60 mm mounting) and also mounted on any type of electrical trunking. It accepts two high-density modules. It comes complete (without HDM's) and ready to mount.

The M12D OPUS Faceplate is used in the OPUS, SENSIQ 66x66 and EPUS 66x66 switch and socket outlet system. It should be mounted together with mounting frames. It is suited for use in Denmark, East and North European markets.

The MCAN faceplate is a dual flush mount faceplate which mounts on a CAN/Clickline electrical box (or equivalent) and accepts two high-density modules. The MCAN Kit consists of a faceplate and an adapter frame for mounting in a standard IEC (c/c 60 mm) electric box. The MCAN Adapter Frame provides secure and tidy mounting for the MCAN Faceplate in a standard IEC wall box (c/c 60 mm).

Physical Specifications:

Height: MFUGA = 71 mm
MFUGAS = 45 mm
MTDL80 = 80 mm
M12D- OPUS = 58 mm
MCAN = 85 mm

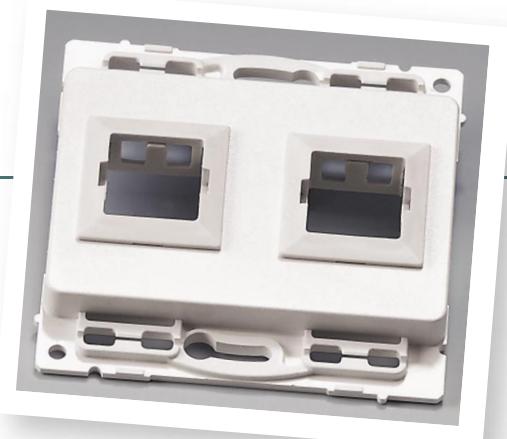
Width: MFUGA, MFUGAS = 45 mm
MTDL80 = 80 mm
M12D- OPUS = 58 mm
MCAN = 85 mm

Depth: MFUGA, MFUGAS = 8.5 mm
MTDL80 = 36 mm
M12D- OPUS = 12 mm
MCAN = 8.8 mm

Product Number	Detailed Description	Color	Material ID
MFUGA-262	Duplex	White	106790140
MFUGAS-262	Simplex	White	106969066
MCAN-DL-262	Duplex	White	106790165
MTDL-8D-262	Duplex	White	106790132
M12D-262 OPUS	Duplex	White	107818320

Modular Faceplates and Clips East and North European Applications

The M12E EPUS Faceplate is used in the SENSIQ 85x85 and EPUS 85x85 switch and socket outlet systems. It should be mounted in a standard IEC box and frame. It is suited for use in east and North European markets (Denmark excluded).



Physical Specifications:

Height: 7.2 cm
Width: 7.2 cm
Depth: 0.9 cm

Product Number	Detailed Description	Color	Material ID
M12E	Duplex	White	107818338

Modular Faceplates and Clips UK Applications

The range of UK Standard Information Outlets consists of the M12D & M14D Faceplates, and the LF80 & LF00 Clips. The M12D is a flush mounted, duplex, 2-gang UK/Ireland standard faceplate designed to accept two LF80 or LF00 clips (or any combination of the two). The M14D is a flush mounted, quadplex, 4-gang UK/Ireland standard faceplate designed to accept four LF80 or LF00 clips (or any combination of the two). The standard package for each includes the faceplate plus two mounting screws for installation in a UK standard 35 mm (for Mark V) or 32 mm (for Mark VI) electrical box.

The LF80 Clips (Mark V and Mark VI) fit into the M12D & M14D and accepts one high-density module. The Mark V is equipped with a spring-loaded shutter to protect the HDM from dust. It can be cabled through the faceplate and fits into minimum 35 mm depth boxes. There is a provision for port labeling. The Mark VI is angled and has a unique shutter design. It can be cabled through the faceplate and fits into minimum 32 mm depth boxes.

The LF00 Clip is a blank snap-in clip used in vacant slots of the M12D or M14D faceplate.

Physical Specifications:

Height: Faceplate: 8.50 cm

Clip: 3.8 cm

Width: Faceplate: M12D = 8.5 cm, M14D = 14.6 cm

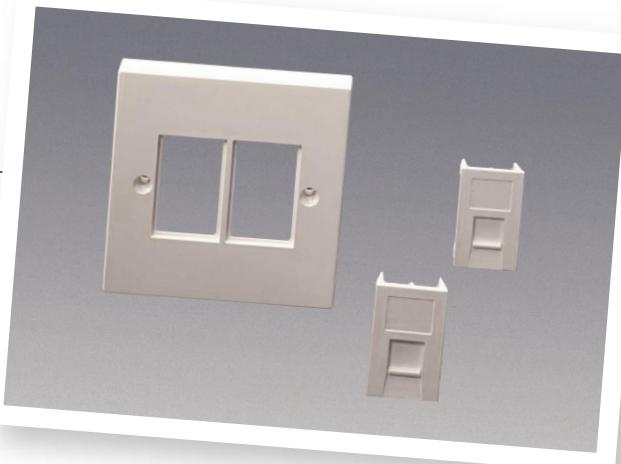
Clip: 2.5 cm

Depth: Faceplate: 0.90 cm

Mark V And LF00 Clip: 1.4 cm

Mark VI Clip: 2.0 cm

Product Number	Color	Material ID
M12D Faceplate	White	407900471
M14D Faceplate	White	407900463
LF80 Mark V Clip	White	407900422
LF80 Mark VI Clip	White	407901909
LF00 Blank Clip	White	407900448
M12D Back Box 32mm	White	999901701
M14D Back Box 32mm	White	999901703
M12D Back Box 37mm	White	999901706
M14D Back Box 37mm	White	999901704
M12D Back Box 45mm	White	999901702
M14D Back Box 45mm	White	999901705



Faceplates & Zone Boxes

Modular Faceplates and Clips

Italian Applications

The LF82 and LF83 Clips each accept one high-density module and are designed specifically for the Italian market. The LF82 Clip is black in color while the LF83 is ivory. The LF82 and LF83 Clips fit in a standard Italian faceplate which can then be mounted onto an Italian standard electrical box with a minimum depth of 32 mm. There is a provision for port labeling.

Physical Specifications:

Height: 4.39 cm

Width: 2.48 cm

Depth: 2.50 cm



Product Number	Color	Material ID
LF82 Clip	Black	106961311
LF83 Clip	Ivory	106961329
Faceplate—Living	White	108086638
Faceplate—Living	Black	108086646

Modular Faceplates and Clips

French Applications

The M12LG Clip accepts one (M12 Dual Clip accepts two) high-density module(s) and is equipped with a spring-loaded shutter to protect the HDM from dust. It is designed specifically for the French market and fits in the Legrand Mosaic faceplate. The clip (inserted in the faceplate) can be mounted into a French standard electrical box with a minimum depth of 32 mm. There is a provision for port labeling.

Physical Specifications:

Height: 4.50 cm

Width: 4.50 cm

Depth: 2.50 cm



Product Number	Color	Material ID
M12LG-262	White	107347080
M12-262	White	107991143

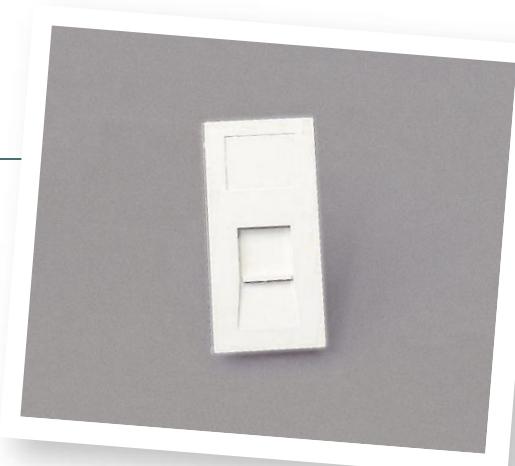
Modular Faceplates and Clips

French Applications

The LF81 Clip accepts one high-density module and is equipped with a spring-loaded shutter to protect the HDM from dust. It is designed specifically for the French market and fits in a standard 50 mm x 25 mm molded Legrand faceplate. The clip (while inserted in the faceplate) can be mounted into a French standard electrical box with a minimum depth of 32 mm. There is a provision for port labeling.

Physical Specifications:

Height: 5.0 cm
Width: 2.5 cm
Depth: 1.4 cm



Faceplates & Zone Boxes

Product Number	Color	Material ID
LF81 Clip	Ivory	108230632

Modular Faceplates

Asia Pacific Applications

The range of Asia Pacific Information Outlets consists of the M10CF, M12CF and M14CF Faceplates. All faceplates are flush mounted. The M12 and M14 are available in unshuttered and shuttered versions.



Product Number	Detailed Description	Material ID
M10CF-262	1-Port Faceplate Unshuttered, with Cover	760011593
M12CFNS-262	2-Port Faceplate Unshuttered, with Cover	760031518
M14CF-262	4-Port Faceplate Unshuttered, with Cover	760011916
M12CF-262	2-Port Faceplate Shuttered	760003038
M14CF/S-262	4-Port Faceplate Shuttered	760026203

Dust Covers for M-Series Faceplates and Outlets

The M20AP Covers are dual-purpose blank Dust Covers designed for used with the modular outlets and modular faceplate kits (except for the Shuttered clips and Benelux faceplates).

When the M20AP is used as a Dust Cover, it is inserted over the outlet opening and will protect the jack wires from dust. The M20AP can also be used with modular faceplates as a blank cover for empty jack openings which are not populated with modular outlets.

The M21A Dust Covers are for use with the M-Series modular outlets. The M21A installs over the Jack opening of the M-Series outlet, leaving the Icon area accessible.

The M20AP is packaged with 100 dust cover/blanks per box. The M21A is packaged 100 to a bag with 5 bags in a box.

The M81 is an M-Series modular blank with rear snap-in and used to fill empty ports in M-Series modular faceplates, surface mount boxes, or mounting collars.

Physical Specifications:

Height: 0.69 in (1.8 mm)

Width: 0.75 in (1.9 mm)

Depth: 0.20 in (0.05 mm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Product Number	Color	Material ID
M20AP-003	Black	107065583
M20AP-246	Electrical Ivory	107067860
M20AP-262	Electrical White	107067928
M20AP-270	Electrical Gray	107067951
M20AP-215	Cream	108481003
M21A-003	Black	108066325
M21A-112	Orange	108066333
M21A-123	Yellow	108066341
M21A-226	Green	108066358
M21A-246	Ivory	108066457
M21A-262	White	108066465
M21A-270	Gray	108066473
M21A-317	Red	108066481
M21A-318	Blue	108066499
M21A-361	Violet	108337692
M21A-215	Misty Cream	108480997
M81-246	Ivory	106837222
M81-262	White	106837230

Modular Information Outlet ICON Inserts

The M60 and M61 ICONS are small plastic inserts used to depict applications of specific jacks on the M-Series modular information outlet. The ICONS are packaged 25 in a polybag, and 20 polybags in a box. The M60 ICONS are etched with the following symbol word:

- Telephone - symbol representing a telephone application
- Computer - symbol representing a computer application
- DATA - word representing a data application
- VOICE - word representing a voice application
- Blank - has blank space for writing or denoting any application the user may designate or require



Product Number	Detailed Description	Color	Material ID
M60A-003	Telephone ICON	Black	107296386
M60A-112	Telephone ICON	Orange	107296402
M60A-123	Telephone ICON	Yellow	107296394
M60A-226	Telephone ICON	Green	107296410
M60A-246	Telephone ICON	Ivory	107296352
M60A-262	Telephone ICON	White	107296378
M60A-270	Telephone ICON	Gray	107296360
M60A-317	Telephone ICON	Red	107296428
M60A-318	Telephone ICON	Blue	107296436
M60B-003	Blank ICON	Black	107296485
M60B-112	Blank ICON	Orange	107296501
M60B-123	Blank ICON	Yellow	107296493
M60B-226	Blank ICON	Green	107296519
M60B-246	Blank ICON	Ivory	107296451
M60B-262	Blank ICON	White	107296477
M60B-270	Blank ICON	Gray	107296469
M60B-317	Blank ICON	Red	107296527
M60B-318	Blank ICON	Blue	107296444
M60C-112	Computer ICON	Orange	107296584
M60C-123	Computer ICON	Yellow	107296576
M60C-226	Computer ICON	Green	107296592
M60C-246	Computer ICON	Ivory	107296535
M60C-262	Computer ICON	White	107296550
M60C-270	Computer ICON	Gray	107296543
M60C-317	Computer ICON	Red	107296600
M60C-318	Computer ICON	Blue	107296618
M60D-003	DATA ICON	Black	107296659
M60D-112	DATA ICON	Orange	107296675
M60D-123	DATA ICON	Yellow	107296667
M60D-226	DATA ICON	Green	107296683
M60D-246	DATA ICON	Ivory	107296626
M60D-262	DATA ICON	White	107296642
M60D-270	DATA ICON	Gray	107296634
M60D-317	DATA ICON	Red	107296691
M60D-318	DATA ICON	Blue	107296709

Product Number	Detailed Description	Color	Material ID
M60E-003	VOICE ICON	Black	107296741
M60E-112	VOICE ICON	Orange	107296766
M60E-123	VOICE ICON	Yellow	107296758
M60E-226	VOICE ICON	Green	107296774
M60E-246	VOICE ICON	Ivory	107296717
M60E-262	VOICE ICON	White	107296733
M60E-270	VOICE ICON	Gray	107296725
M60E-317	VOICE ICON	Red	107296782
M60E-318	VOICE ICON	Blue	107296790
M61A-003	ICON for MGS400	Black	108065657
M61A-112	ICON for MGS400	Orange	108065673
M61A-123	ICON for MGS400	Yellow	108065707
M61A-215	ICON for MGS400	Misty Cream	108481011
M61A-226	ICON for MGS400	Green	108065731
M61A-246	ICON for MGS400	Electrical Ivory	108065756
M61A-262	ICON for MGS400	Electrical White	108065780
M61A-270	ICON for MGS400	Electrical Gray	108065806
M61A-317	ICON for MGS400	Red	108065814
M61A-318	ICON for MGS400	Blue	108065822
M61F-003	VOICE ICON Connector	Black	108066234
M61F-112	VOICE ICON Connector	Orange	108066242
M61F-123	VOICE ICON Connector	Yellow	108066259
M61F-226	VOICE ICON Connector	Green	108066267
M61F-246	VOICE ICON Connector	Ivory	108066275
M61F-262	VOICE ICON Connector	White	108066283
M61F-270	VOICE ICON Connector	Gray	108066291
M61F-317	VOICE ICON Connector	Red	108066309
M61F-318	VOICE ICON Connector	Blue	108066317
M61H-003	Computer ICON, MPSE, DATA	Black	108373515
M61H-112	Computer ICON, MPSE, DATA	Orange	108373523
M61H-123	Computer ICON, MPSE, DATA	Yellow	108373531
M61H-215	Computer ICON, MPSE, DATA	Misty Cream	108481029
M61H-226	Computer ICON, MPSE, DATA	Green	108373549
M61H-246	Computer ICON, MPSE, DATA	Ivory	108373564
M61H-262	Computer ICON, MPSE, DATA	White	108373572
M61H-270	Computer ICON, MPSE, DATA	Gray	108373580
M61H-317	Computer ICON, MPSE, DATA	Red	108373598
M61H-318	Computer ICON, MPSE, DATA	Blue	108373606
M61H-361	Computer ICON, MPSE, DATA	Violet	108373614

Flexible Surface Mount Outlet

The M40 Multimedia Information Outlet is a surface-mounted plastic enclosure designed to support a copper/fiber integrated environment, an all copper environment, or an all fiber environment.

The M40 design makes it versatile by utilizing removable panel inserts allowing termination of copper, fiber, or composite cables. Panels are available to hold RJ45, ST, SC, and LC adapters.

The M40 outlet comes equipped with one M40RJ4A and one M40ST8 panel. Other panels must be ordered separately.

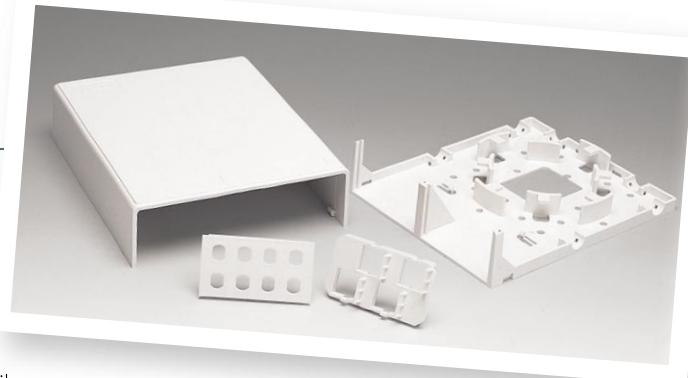
Physical Specifications:

Height: M40A1-B 6.88 in (17.5 cm)

Width: M40A1-B 5.79 in (14.7 cm)

Depth: M40A1-B 1.70 in (4.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Faceplates
& Zone Boxes

Product Number	Detailed Description	Color	Material ID
M40A1-B-262	Basic Outlet w/ M40RJ4A and M40ST8	Electrical White	107992927
M40ST8-B-262	Insert Panel holds 8 ST Couplings	Electrical White	107239485
M40DSC4-B-262	Insert Panel holds 4 Duplex SC Couplings	Electrical White	107239493
M40R-J2-246	Insert Panel holds 4 RJ45 Jacks	Electrical Ivory	106669278
M40RJ4A-262	Insert Panel holds 4 RJ45 Jacks, 4 M81 Mounting Modules	Electrical White	108004268
M40ST4-262	Insert Panel holds 4 ST Couplings	Electrical White	107800658

24-Port Consolidation Point Box

The new low profile M224CPN Consolidation Box is introduced as an enhancement to the zone wiring architecture.

This product provides a connection and distribution point for data and telecom cables in installations requiring a consolidation point. The slim design permits installation in a variety of non-plenum spaces such as under floors, limited space closets, inside paneled furniture, on walls in plain view and on shelves. The box can be mounted, with additional support, to single- or dual-gang electrical type boxes. For best results, the box is mounted on a flat surface, horizontally or vertically. The new M224CPN is substantially smaller than the M36PA (36-Port plenum) box—only 27% of the box volume and 36% of the box area.



The box design utilizes four removable panels that can accommodate a variety of copper and fiber based connectors. Each panel will hold up to six connectors each. The box has a capacity of 24 dual SC connectors, single SC connectors, dual LC connectors, STII+ & ST connectors, M-Series type copper connectors, S-Video, RCA, BNC and F-type video connectors, or any combination thereof. Connector types can be mixed and matched within the box by using two different panels. The box comes equipped with four 6-port inserts, two blank inserts, 12 dust covers for M-Series outlet holes, closing screws, wire ties, and instructions. The M-Series panel has the most variety in connector options; it accommodates all but the dual SC connectors. Three fiber optic splice organizers are available which will accommodate fusion, mechanical or mass fusion splices. The M224CPN consolidation box is part of the SYSTIMAX SCS family of products.

Features and Benefits:

- Non-metallic housing
- 24-Port capacity
- Accommodates copper M-Series outlets, fiber connectors and copper and fiber terminations
- Can be populated with any M-Series voice, data or video outlet
- Expandable/Stackable features
- Easy access for terminations and moves, adds and changes
- Designed for mounting in various non-plenum environments (i.e., on the floor, under floor tile, surface-mount, wall, furniture, inside cabinets)
- Supports cable/port labeling
- Equipped with removable cover section for cord/label access that does not expose horizontal cables/terminations

Physical Specifications:

Height: 12.14 in (30.8 cm)

Width: 8.45 in (21.5 cm)

Depth: 1.44 in (3.7 cm)

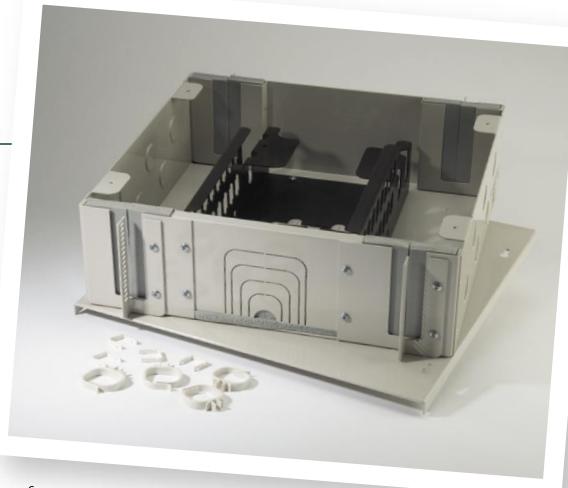
Burn Rating: Non plenum

Product Number	Detailed Description	Color	Material ID
M224CPN	Box Base Cover, 4 M-Series Panels, 2 Blank Panels	Black	700016462
M224CPN	Box Base Cover, 4 M-Series Panels, 2 Blank Panels	Ivory	700016470
M224CPN	Box Base Cover, 4 M-Series Panels, 2 Blank Panels	Gray	700016496
M224CPN	Box Base Cover, 4 M-Series Panels, 2 Blank Panels	White	700016488
M224MSP	Panel Kit Includes 4 M-Series Panels of One Color	Black	700016504
M224MSP	Panel Kit Includes 4 M-Series Panels of One Color	Ivory	700016512
M224MSP	Panel Kit Includes 4 M-Series Panels of One Color	White	700016520
M224MSP	Panel Kit Includes 4 M-Series Panels of One Color	Gray	700016538
M224SCP	Panel Kit Includes 4-Dual SC Panels of One Color	Black	700019482
M224SCP	Panel Kit Includes 4-Dual SC Panels of One Color	Ivory	700019490
M224SCP	Panel Kit Includes 4-Dual SC Panels of One Color	White	700019508
M224SCP	Panel Kit Includes 4-Dual SC Panels of One Color	Gray	700019516
M224FOS	Fiber Optic Spool Kit Includes 2 White Spools	White	700016553

32-Port Zone Wiring Box

The 32-Port Zone Wiring Box provides a connection and distribution point for data and telecom cables in installations requiring a consolidation point. The design includes a 3.35 in X 2.566 in (85.04 mm X 65.18 mm) rectangular bottom knockout to be used in conjunction with a standard dual-gang electrical box, in addition to twelve $\frac{3}{4}$ inch (19.05 mm) knockouts for use with conduit.

The size of the M32CPP/100HCP design will allow installation in a variety of plenum spaces such as under floors and above ceilings. The design has 32 positions that accommodate a variety of M-Series type copper, fiber, and video connectors and an area for a 100-Pair 110 IDC block. The M32CPP/100HCP has one fire foam entrance and four fire foam exit areas for plenum-rated cable (4-Pair & 25-Pair).



Faceplates
& Zone Boxes

Physical Specifications:

Height: 13.08 in (33.2 cm)

Width: 14.00 in (35.6 cm)

Depth: 4.25 in (10.8 cm)

Product Number	Detailed Description	Material ID
M32CPP	32-Port Zone Wiring Box	700188931
110C Connecting Block	110C Connecting Block Kit for Plenum Box	760006395

36-Port Zone Wiring Box

The M36CPP Data/Communication Distribution Box is a zone wiring box (i.e. consolidation point(CP)) that provides for the distribution of data and telecommunication signals throughout the work area environment. The box has 36 positions for M-Series copper and/or fiber connectors. It is intended to mount above ceilings or below floors in open office buildings.



The key benefit is that it saves costs in moves, adds and changes (MACs) when zone cabling is required in a plenum environment.

The Box is UL Listed to meet the stringent plenum requirements. The National Electric Code allows locating this type of zone box in space used for environmental air.

The M36CPP Distribution Box Assembly comes with: connector bracket, plenum cover, plenum box, foam fence, fiber reel (optional to use), foam retainer, bushing (optional to use), fire foam, interconnection label, installation instructions, hex nut (No. 4-40), long pan-head screw (No. 8-32 by 3/38 in [9.5 mm]) and plenum cable tie.

Physical Specifications:

Height: 19.12 in (48.6 cm)

Width: 14.14 in (35.9 cm)

Depth: 1.82 in (4.6 cm)

Product Number	Detailed Description	Material ID
M36CPP DATA	36-Port Zone Wiring Box	108482845

48-Port Zone Wiring Box

The 48-Port Plenum Zone Wiring Box provides a connection and distribution point for data and telecom cables in installations requiring a consolidation point. The design includes a 3.35 in X 2.566 in (85.04 mm X 65.18 mm) rectangular bottom knockout to be used in conjunction with a standard dual-gang electrical box, in addition to twelve 0.75 inch (19.05 mm) knockouts for use with conduit.

The size of the M48CCP design will allow installation in a variety of plenum spaces such as under floors and above ceilings. The design has 48 positions that accommodate a variety of M-Series type copper, fiber and video connectors. It also has one fire foam entrance and four fire foam exit areas for plenum-rated cable (4-Pair and 25-Pair).

Features and Benefits:

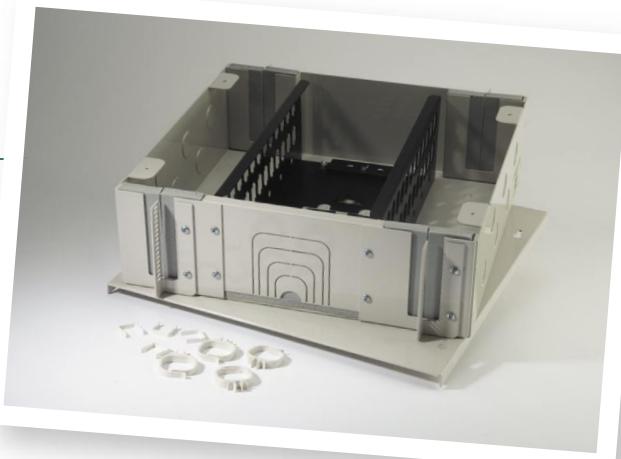
- 48-Port capacity
- Support copper M-Series outlets, fiber connectors, copper and fiber terminations
- Easy access for terminations, moves, adds and changes
- Designed for mounting in various plenum and non-plenum environments (floor, under floor, surface mount or wall)
- Supports cable/port labeling
- Equipped with removable cover section for cord/label access and doesn't expose horizontal cables

Physical Specifications:

Height: 13.08 in (33.2 cm)

Width: 14.00 in (35.6 cm)

Depth: 4.25 in (10.8 cm)



Product Number	Detailed Description	Material ID
M48CPP	48-Port Zone Wiring Box	700188923

Surface-Mount Boxes

Single Port

The M101SMB Modular Surface-Mount Box is designed for use with one M-Series modular information outlet (copper or fiber). It can be mounted on a flat surface using the screws or the double-sided adhesive tape provided. This unit will accept 22-26 gauge cable.

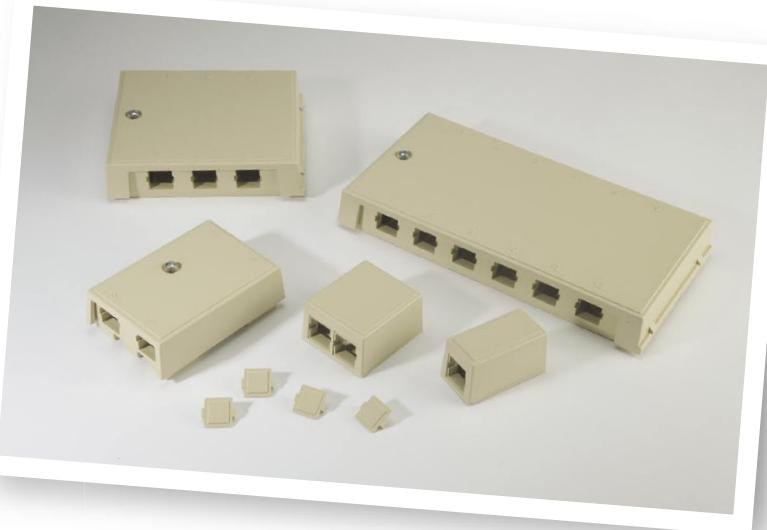
Physical Specifications:

Height: 2.26 in (5.7 cm)

Width: 1.22 in (3.1 cm)

Depth: 1.29 in (3.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic



Faceplates
& Zone
Boxes

Dual Port

The M102SMB Modular Surface-Mount Box is a modular surface-mounted duplex box designed for use with one or two M-Series modular information outlets (copper and/or fiber). It can be mounted on a flat surface using the screws or the double-sided adhesive tape provided. This unit will accept 22-26 gauge cable.

Physical Specifications:

Height: 2.26 in (5.7 cm)

Width: 2.06 in (5.2 cm)

Depth: 1.29 in (3.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Color	Material ID
M102SMB-B-003	Black	107984031
M102SMB-B-246	Electrical Ivory	107984049
M102SMB-B-262	Electrical White	107984056
M102SMB-B-270	Electrical Gray	107984064

4-Port

The M104SMB Modular Surface-Mount Box is a modular multimedia surface-mounted quadplex box designed for use with one to four M-Series modular jacks (copper and/or fiber). The M104SMB can be mounted on a flat surface using the screws or the double-sided adhesive tape provided. One mounting magnet kit is required for mounting on steel walls or furniture.

The outlet openings are numbered on both the base and cover for installation and maintenance identification. The M104SMB is packaged with three color-coordinated M20AP Dust Covers/Blinks to cover any unused jacks. This unit will accept 22-26 gauge cable.

Physical Specifications:

Width: 2.83 in (7.2 cm)

Length: 3.92 in (10.0 cm)

Depth: 1.20 in (3.0 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Color	Material ID
M104SMB-A-003	Black	107952475
M104SMB-A-246	Electrical Ivory	107952442
M104SMB-A-262	Electrical White	107952459
M104SMB-A-270	Electrical Gray	107952467

6-Port

The M106SMB Modular Surface-Mount Box is a modular multimedia surface-mounted sixplex box designed for use with one to six M-Series modular jacks (copper and/or fiber). It is used to terminate 25-Pair Category 5 cable at the transition point, or to terminate four pair wiring in the work location subsystem, or to terminate 4 strands of fiber. The M106SMB can be mounted on a flat horizontal surface or on a wall using two mounting screws, double-sided sticky tape or magnets. Four magnet pockets are manufactured within the structure of the M106SMB as holders.

The M106SMB has a storage device/area for storing unterminated copper conductors.

Physical Specifications:

Height: 5.49 in (13.9 cm)

Width: 4.81 in (12.2 cm)

Depth: 1.22 in (3.1 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Product Number	Color	Material ID
M106SMB-003	Black	107431520
M106SMB-246	Electrical Ivory	107431546
M106SMB-262	Electrical White	107431538
M106SMB-270	Electrical Gray	107431553

12-Port

The M112SMB Modular Surface-Mount Box is a 12-Port modular multimedia surface-mounted box designed for use with 12 M-Series modular jacks and/or fiber modules. The M112SMB can be mounted on a flat surface using the screws or the double-sided adhesive tape provided. Four mounting magnets (optional) are required for mounting on steel walls or furniture. The M112SMB is packaged with six color-coordinated M20AP Dust Cover/Blanks to cover any unused jacks. The outlet openings are numbered on both the base and cover for installation and maintenance identification.

Physical Specifications:

Height: 9.13 in (23.2 cm)

Width: 4.81 in (12.2 cm)

Depth: 1.30 in (3.3 cm)

Plastic: High-impact, flame retardant, UL-rated 94 V-0, thermoplastic

Mounting: Surface



Product Number	Color	Positions	Material ID
M112SMB-003	Black	12	106658164
M112SMB-246	Electrical Ivory	12	106658149
M112SMB-262	Electrical White	12	106658156
M112SMB-270	Electrical Gray	12	106688419

Accessories

The SMBFG fiber organizer has a small spindle to protect and support the fiber bend radius and two guides to route the fiber to the connector. It supports up to four fibers in an all-fiber environment in the M106SMB modular surface-mount box and supports up to six fibers in an all-fiber environment in the M112SMB modular surface-mount box.

The 345A mounting magnet contains two magnets and is used with the M104SMB modular surface-mount box.

The 362PS zone wiring kit labels are used with the M106SMB and M112SMB modular surface-mount boxes.

The D180880 mounting magnet kit contains four magnets and is used with the M106SMB and M112SMB modular surface-mount boxes.

Product Number	Detailed Description	Material ID
SMBFG	Fiber Organizer	107431512
345A	Mounting Magnet	106928765
362PS	Zone Wiring Kit Labels	108035049
D180880	Mounting Magnet Kit	103184156

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Standard Open Racks

The SYSTIMAX Open Rack System is designed for use in telecommunications and equipment rooms for storing telecommunication equipment. Backed by the standard SYSTIMAX SCS 20-Year Warranty, when used with the SYSTIMAX end-to-end solution.

The additional channel depth on RK130A provides extra room for high-density equipment and cable needs. 6 in (15.2 cm) deep upright mounting channels for MDF, IDF and other high capacity distribution frame applications. Ideally suited for back-to-back VisiPatch installations.



Product Number	Detailed Description	Color	Rack Height	Depth	Equipment Support	Shipping Weight	Material ID
RK100A	RACK 19 in	Black	45U 84 in (213.4 cm)	3 in (7.6 cm)	750 lbs (340 kg)	32 lbs (14.5 kg)	108527441
RK130A	RACK 19 in	Black	45U 84 in (213.4 cm)	6 in (15.2 cm)	750 lbs (340 kg)	38 lbs (17.2 kg)	108867151

Wall Mount Racks

The SYSTIMAX Wall Mount product family includes the standard fixed wall mount equipment rack and the hinged swing gate wall rack. The wall mount equipment rack is designed for applications where floor space for free standing racks or cabinets is not available. It provides a sturdy platform for wall mounted equipment.



Product Number	Detailed Description	Color	Rack Height	Depth	Equipment Support	Shipping Weight	Material ID
RW100A	Fixed Wall Rack, 19 in	Black	21U 38.5 in (97.8 cm)	12 in (30.5 cm)	100 lbs (45.4 kg)	11 lbs (5 kg)	108527466
RW100AS	Hinged Swing Gate Wall Rack, 19 in	Black	21U 38.5 in (97.8 cm)	18 in (45.7 cm)	200 lbs (90.7 kg)	26 lbs (11.8 kg)	760034744
RW200AS	Swinging Wall Rack, 19 in	Black	11U 24.5 in (62.2 cm)	18 in (45.7 cm)	85 lbs (38.6 kg)	28 lbs (12.7 kg)	760045336
RW300AS	Swinging Wall Rack, 19 in	Black	19U 38.5 in (97.8 cm)	18 in (45.7 cm)	85 lbs (38.6 kg)	33 lbs (15 kg)	760045344

Standard Vertical Cable Management

The SYSTIMAX Standard Vertical Cabling Management provides a cost-effective, adaptable vertical cable management system for SYSTIMAX open rack system that fits your budget.

The single sided section significantly reduces shipping size and cost to provide maximum value. The double sided unit can be placed back-to-back to align with growth in your network.

Features and Benefits:

- Two-piece design on single sided version reduces the product's shipping size and cost
- One RMU interval cable guide fingers for easy and organized pathway for cables and patch cords. Cable guide fingers are made of durable, flame retardant (UL 94 V-0) plastic to withstand wear-and-tear and prevent accidental breakage
- Includes an aluminum, snap-on, hinged cover to easily hide cable for a professional look. The covers swing on hinges to open left or right, allowing quick access to the cable from either direction for easy moves, adds and changes. The cover sits on top of the cable guide fingers to provide additional room for organizing
- Includes rounded acorn nuts for attaching the two section pieces together in order to eliminate sharp edges and reduce the chance of torn cables and injuries
- Mounting hardware provided for easy assemble to the rack, square carriage bolts—instead of standard round bolts allowing tightening of the nuts with just one hand

The GV100SS, 2 in (5.1 cm) Diameter, Management Spool is available that supports both fiber and copper cables for use with standard vertical cabling managers.



Frames &
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Management

Product Number	Detailed Description	Color	Rack Height	Depth	Width	Shipping Weight	Material ID
GV100A	Std Vertical CA Mgr, Single Sided	Black	7 ft (213.4 cm)	6.76 in (17.2 cm)	6 in (15.2 cm)	19 lbs (8.6 kg)	108527560
GV100AE	Std Vertical CA Mgr, Single Sided Ext Capacity	Black	7 ft (213.4 cm)	9.30 in (23.6 cm)	6 in (15.2 cm)	22 lbs (10 kg)	760034884
GV100DS	Std Vertical CA Mgr, Double Sided	Black	7 ft (213.4 cm)	13.52 in (34.3 cm)	6 in (15.2 cm)	39 lbs (17.7 kg)	760034892
GV100B	Std Vertical CA Mgr, Single Sided	Black	7 ft (213.4 cm)	6.76 in (17.2 cm)	10 in (25.4 cm)	23 lbs (10.4 kg)	760036640
GV100SS	Cable Spools for GV100, 6 Pack	Black	N/A	N/A	N/A	3 lbs (1.4 kg)	760034918

Enhanced Vertical Cable Management

The SYSTIMAX Enhanced Vertical Cabling Management provides an attractive and highly functional vertical management pathway for organizing, distributing, storing and concealing communications cable between or adjacent to SYSTIMAX open rack system. Installation is more attractive and allows for easy moves, adds and changes of connections. The one RMU spacing of the cable guides align with the rack spacing, which may eliminate the need for horizontal cable managers. Compliant with ANSI/TIA/EIA installation of Category 5/5e/6 and fiber cables.

This Enhanced Vertical Cabling Management includes rigid aluminum latching covers that hide and conceal the cable. Each latching cover includes a handle on the outside of the cover for easy removal and installation. This system also includes an extended capacity option for larger cable management applications.

Features and Benefits:

- Manufactured from a combination of strong, lightweight 5052-H32 aluminum sheet and plenum-rated UL 94 V-O flame resistant composite materials for maximum strength
- Extra-wide, contoured cable guides provide smooth movement and extra strong support
- Edge-protected pass through ports to make it easy to route cable from front to back
- Vertical slots along the center separator for optional cable ties
- Locking latch cover can be easily switched from right to left opening and can be removed so that cable does not have to thread through guides
- The door locks in the closed position to protect cables and provides a clean, finished look
- Black powder coat, wrinkle finish to reduce fingerprints, scratches and smudges
- Factory assembled and ready to install out of the box (Mounting hardware included)
- Provides large cable openings that align with each rack-mount space on the rack providing by-RMU control of patch cords
- Extra capacity models have longer T-shaped "fingers" and larger cable openings that will pass twice as much cable/patch cords as standard cable managers

SYSTIMAX MC100SS Retrofit Management Spool supports both fiber and copper cables for use with any SYSTIMAX vertical cabling sections with 2.5 in (6.4 cm) diameter pass-through holes.



Product Number	Detailed Description	Color	Rack Height	Depth	Width	Shipping Weight	Material ID
MC100A	Enhanced Vertical Cable Manager, Locking Latch Covers, Double Sided	Black	7 ft (213.4 cm)	16.5 in (41.9 cm)	6 in (15.2 cm)	45 lbs (20.4 kg)	108527350
MC100B	Enhanced Vertical Cable Manager, Locking Latch Covers, Double Sided	Black	7 ft (213.4 cm)	16.5 in (41.9 cm)	10 in (25.4 cm)	53 lbs (24 kg)	108527351
MC100AE	Enhanced Vertical Cable Manager, Locking Latch Covers, Extra Capacity	Black	7 ft (213.4 cm)	21.23 in (53.9 cm)	6 in (15.2 cm)	56 lbs (25.4 kg)	760034850
MC100BE	Enhanced Vertical Cable Manager, Locking Latch Covers, Extra Capacity	Black	7 ft (213.4 cm)	21.23 in (53.9 cm)	10 in (25.4 cm)	69 lbs (31.3 kg)	760034868
MC100CE	Enhanced Vertical Cable Manager, Locking Latch Covers, Extra Capacity	Black	7 ft (213.4 cm)	21.23 in (53.9 cm)	12 in (30.5 cm)	75 lbs (34 kg)	760034876
MC100SS	Retrofit Cable Spool, 7 Pack	Black	N/A	N/A	N/A	5 lbs (2.3 kg)	760034900

**Frames &
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Product Number	Detailed Description	Color	Rack Height	Depth	Width	Shipping Weight	Material ID
MC110AS	Enhanced Vertical Cable Manager, Locking Latch Covers, Single Sided, 19 in	Black	7 ft (213.4 cm)	8.1 in (20.6 cm)	4.4 in (11.2 cm)	17 lbs (7.7 kg)	760046961
MC110C	Enhanced Vertical Cable Manager, Locking Latch Covers, Double Sided, 19 in	Black	7 ft (213.4 cm)	8.1 in (20.6 cm)	4.4 in (11.2 cm)	40 lbs (18.1 kg)	760046979
MC110CS	Enhanced Vertical Cable Manager, Locking Latch Covers, Single Sided, 19 in	Black	7 ft (213.4 cm)	8.1 in (20.6 cm)	6.0 in (15.2 cm)	20 lbs (9.1 kg)	760046664
MC110BS	Enhanced Vertical Cable Manager, Locking Latch Covers, Single Sided, 19 in	Black	7 ft (213.4 cm)	8.1 in (20.6 cm)	10.0 in (25.4 cm)	45 lbs (20.4 kg)	760046987
MC110ASE	Enhanced Vertical Cable Manager, Locking Latch Covers, Extra Capacity, Single Sided, 19 in	Black	7 ft (213.4 cm)	10.6 in (26.9 cm)	6.0 in (15.2 cm)	31 lbs (14.1 kg)	760046995
MC110BSE	Enhanced Vertical Cable Manager, Locking Latch Covers, Extra Capacity, Single Sided, 19 in	Black	7 ft (213.4 cm)	10.6 in (26.9 cm)	10.0 in (25.4 cm)	40 lbs (18.1 kg)	760047001
MC110CSE	Enhanced Vertical Cable Manager, Locking Latch Covers, Extra Capacity, Single Sided, 19 in	Black	7 ft (213.4 cm)	10.6 in (26.9 cm)	12.0 in (30.5 cm)	44 lbs (20 kg)	760047241

Horizontal Cable Management

The SYSTIMAX Universal Horizontal Cable Manager and Ring Panel provide an enhanced horizontal pathway for patch cords and multimedia applications using coax, copper and fiber optic cables.

Horizontal Ring Panel

The horizontal ring panel is used to organize horizontal cable runs. The rack mounted ring panel is big enough to handle most cable management jobs.



Features and Benefits:

- Large 6 in (15.2 cm) wide x 2.8 in (7.1 cm) high heavy-duty aluminum rings
- Strong lightweight aluminum construction, black finish
- Rounded edges protect cable sheaths and will not bind during installation
- Rings are bolted onto panels so they can be added or removed
- Pre-assembled with seven equally spaced rings

Horizontal Cable Manager

Extra-wide and contoured cable guides separate and organize patch cords for quick and easy moves, adds and changes (MACs). Use above or below patch panels or network switches to route patch cords to exact connection points on the rack.

Features and Benefits:

- Patch cords may also be routed to the back of the rack through the flanged pass-through slot. After routing the cables or cords, simply snap-on the hinged cover for a clean, professional appearance
- Cable guides are offset 1.3 in (3.3 cm) or 2.6 in (6.6 cm) from the front of the rack to ensure proper bending radii of patch cables— even hooded patch cables
- Snap-on cover snaps on at four points
- Black powder coat textured finish, reducing fingerprints and smudges
- Closed trough-style rack-mount cable managers
- T-shaped finger openings at the top and bottom of the trough

Product Number	Detailed Description	Color	Depth	Shipping Weight	Material ID
HC120A	Horizontal Ring Manager, 19 in W x 2U	Black	6 in (15.2 cm)	9 lbs (4.08 kg)	108528795
HCM1U	Horizontal Cable Manager, Single Sided, 19 in W x 1U	Black	5.76 in (14.6 cm)	2 lbs (0.91 kg)	760034793
HCM2U	Horizontal Cable Manager, Single Sided, 19 in W x 2U	Black	5.76 in (14.6 cm)	3 lbs (1.36 kg)	760034801
HCM3U	Horizontal Cable Manager, Single Sided, 19 in W x 3U	Black	5.76 in (14.6 cm)	4 lbs (1.81 kg)	760034819
HCM1UD	Horizontal Cable Manager, Single Sided, Deep Panel, 19 in W x 1U	Black	7.24 in (18.4 cm)	3 lbs (0.91 kg)	760034827
HCM2UD	Horizontal Cable Manager, Single Sided, Deep Panel, 19 in W x 2U	Black	7.24 in (18.4 cm)	4 lbs (1.81 kg)	999901661
HCM3UD	Horizontal Cable Manager, Single Sided, Deep Panel, 19 in W x 3U	Black	7.24 in (18.4 cm)	5 lbs (2.27 kg)	999901662
HCM1UDS	Horizontal Cable Manager, Double Sided, 19 in W x 1U	Black	11.7 in (29.7 cm)	5 lbs (2.27 kg)	760047019
HCM2UDS	Horizontal Cable Manager, Double Sided, 19 in W x 2U	Black	11.7 in (29.7 cm)	6 lbs (2.7 kg)	760047027
HCM3UDS	Horizontal Cable Manager, Double Sided, 19 in W x 3U	Black	11.7 in (29.7 cm)	6 lbs (2.7 kg)	760047035

Jumper Trays

The SYSTIMAX Jumper Trays aid in compliance with ANSI/TIA/EIA 568B bend radius requirements. Two styles are available to provide upper and lower horizontal/vertical cable management and to promote a gradual, controlled bend for both UTP and optical fiber cable.

Features and Benefits:

- Provides 1.5 in (3.8 cm) bend radius for compliant installation of Category 5/5e/6 cable or fiber
- Telescopes to adjust cable entry or exit position
- Strong lightweight aluminum construction, black finish
- Slotted holes allow bend radius location to be user adjustable
- Mounting screws not included
- Sold individually

Product Number	Detailed Description	Color	Depth	Shipping Weight	Material ID
HC190A	Jumper Tray, Upper, 19 in W x 2U, Single Tray	Black	3.5 in (8.9 cm)	3 lbs (1.4 kg)	108528803
HC190B	Jumper Tray, Upper, 19 in W x 2U	Black	6 in (15.2 cm)	4 lbs (1.8 kg)	760034785
HC200A	Jumper Tray, Lower, 19 in W x 2U, Double Tray	Black	3.5 in (8.9 cm)	5 lbs (2.3 kg)	108528811

Frames &
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1100D Patch Cord Organizer and 1100C Wall Adapter

The 1100D Cord Organizers are used for routing patch cords in 19 in (48.3 cm) frames and wall adapters. The 1100D2 is the interbay patch cord organizer which is used for bulk routing cords between bays. The 1100D1 is the intrabay patch cord organizer which provides horizontal and vertical pathways. The 110D3 is used for routing cords on the front and cable on the rear. The 1100C wall adapters are used to mount panels on any flat surface. Hinges provide easy access to the rear of the panel without removing the unit. The adapters can be mounted so that it hinges from the right or left side. The snap-lock pin holds the panel in place once the unit is installed.



Product Number	Detailed Description	Material ID
1100C1-35-19	Wall Adapter	106830573
1100C1-70-19	Wall Adapter	106830581
1100D1-35-19	Intrabay Patch Cord Organizer	106830615
1100D2-35-19	Interbay Patch Cord Organizer	106830623
1100D3-35-19	Interbay Patch Cord and Cable Organizer	107132664

Rack Equipment Shelves

The SYSTIMAX Shelf product family provides single and double sided shelves for miscellaneous equipment and test gear.

Features and Benefits:

- Made of sturdy lightweight 0.090 aluminum construction, black finish
- Holds equipment up to 17.25 in (43.8 cm) wide
- Mounting hardware not included
- Sold individually
- Single sided equipment shelf can be wall mounted

Product Number	Detailed Description	Color	Application	Rack Height	Depth	Equipment Support	Shipping Weight	Material ID
SL100A	Equipment Tray	Black	Used with RK100A or RK130A	5.19 in (13.2 cm)	15 in (13.2 cm)	50 lbs (22.7 kg)	6 lbs (2.7 kg)	108527557
SL110A	Heavy Duty Shelf	Black	Used with RK100A (3 in Deep Rack)	7.16 in (18.2 cm)	20 in (50.8 cm)	200 lbs (90.7 kg)	8 lbs (3.6 kg)	108527565
SL110B	Heavy Duty Shelf	Black	Used with RK130A (6 in Deep Rack)	7.16 in (18.2 cm)	20 in (50.8 cm)	200 lbs (90.7 kg)	10 lbs (4.5 kg)	760034777

Rack Installation Kit

The Rack Installation Kit is used for securing equipment rack and frames to a concrete floor.

Product Number	Detailed Description	Color	Shipping Weight	Material ID
RA140A	Rack Anchor Kit, Concrete Floor	Black	1 lbs (0.45 kg)	108527524

Steel Frame Cabinets

The Steel Frame Cabinet provides an affordable solution for EIA 19 in rack-mountable equipment. It is available as a fully configured cabinet or as a frame-only cabinet with no top panel, side panels or doors.

Features and Benefits:

- Fully-adjustable EIA-310-D compliant vertical mounting rails accommodate depth-variable installation of 19 in equipment
- #12-24 tapped holes or square-punched holes to accept cage nut hardware.
- Available with a solid plex front door and solid metal rear door for bottom-to-top airflow or perforated (mesh) front and rear doors for improved front-to-rear airflow
- Use wide cabinets for modular network switches and heavy fiber or copper cabling. Wide cabinets have approximately 3 in (7.6 cm) of cable management space along both sides of the equipment mounting rails. Standard cabinets have approximately 1 in (2.5 cm) of cable management space along both sides of the equipment mounting rails
- Ships fully assembled
- Cabinet Frame Includes:
 - Four Post Frame
 - Four Vertical Mounting Rails (tapped or square-punched)
 - One Ring Vertical Cable Manager
 - Set of Four Leveling Feet
 - Multi-Bay Attachment Hardware Kit
 - Floor Anchor Clamps
 - Bag of 50 each #12-24 Rack Channel Mounting Screws (Tapped Rails)
 - Bag of 25 each #12-24 Cage Nuts and Screws (Square-punched Rails)



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Product Number	Detailed Description	Color	Dimensions	Shipping Weight	Material ID
SP200A	#12-24 Tapped Rails, w/ Sides, Solid Plex Front Door, Metal Rear Door	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035089
SP200B	#12-24 Tapped Rails, w/ Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035097
SN200A	#12-24 Tapped Rails, w/o Sides, Solid Plex Front Door, Metal Rear Door	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035105
SN200B	#12-24 Tapped Rails, w/o Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035113
SP200AW	Wide, #12-24 Tapped Rails, w/ Sides, Solid Plex Front Door, Metal Rear Door	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035121
SP200BW	Wide, #12-24 Tapped Rails, w/ Sides, Perf Doors	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035139

Product Number	Detailed Description	Color	Dimensions	Shipping Weight	Material ID
SN200AW	Wide, #12-24 Tapped Rails, w/o Sides, Solid Plex Front Door, Metal Rear Door	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035147
SN200BW	Wide, #12-24 Tapped Rails, w/o Sides, Perf Doors	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035154
SP100A	Square Punch, w/ Sides, Solid Plex Front Door, Metal Rear Door	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	300 lbs (136 kg)	760035162
SP100B	Square Punch, w/ Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	300 lbs (136 kg)	760035170
SN100A	Square Punch, w/o Sides, Solid Plex Front Door, Metal Rear Door	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	260 lbs (117.9 kg)	760035188
SN100B	Square Punch, w/o Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	260 lbs (117.9 kg)	760035196
SP100AW	Wide, Square Punch, w/ Sides, Solid Plex Front Door, Metal Rear Door	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	300 lbs (136 kg)	760035204
SP100BW	Wide, Square Punch, w/ Sides, Perf Doors	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	300 lbs (136 kg)	760035212
SN100AW	Wide, Square Punch, w/o Sides, Solid Plex Front Door, Metal Rear Door	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	260 lbs (117.9 kg)	760035220
SN100BW	Wide, Square Punch, w/o Sides, Perf Doors	Black	32.3 in (82 cm) W X 33.4 in (84.8 cm) D X 78 in (198.1 cm) H	260 lbs (117.9 kg)	760035238

Aluminum Cabinets

The SYSTIMAX Aluminum Cabinet System supports a vast array of potential applications. The cabinet is available in 84 in height and two depths to meet the most stringent demands.

Features and Benefits:

- Fully-adjustable EIA-310-D compliant vertical mounting rails accommodate depth-variable installation of 19 in equipment
- #12-24 tapped holes or square-punched holes to accept cage nut hardware
- Available with a solid plex front door and solid metal rear door for bottom-to-top airflow or perforated (mesh) front and rear doors for improved front-to-rear airflow
- Use wide cabinets for modular network switches and heavy fiber or copper cabling. Wide cabinets have approximately 6 in (15.2 cm) of cable management space along both sides of the equipment mounting rails. Standard cabinets have approximately 3 in (7.6 cm) of cable management space along both sides of the equipment mounting rails



Frames &
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Cabinet Frame Includes:

- Four Post Frame
- Four Vertical Mounting Rails (tapped or square-punched)
- One Vertical Cable Manager
- Set of Four Leveling Feet
- Multi-Bay Attachment Hardware Kit
- Floor Anchor Clamps
- Bag of 50 each #12-24 Rack Channel Mounting Screws (Tapped Rails)
- Bag of 25 each 12-24 Cage Nuts and Screws (Square-punched Rails)

Note: Certain servers require optimal airflow. When mounting these servers, select perforated metal doors for increased cooling and ventilation (except when buying a frame-only configuration).

Product Number	Detailed Description	Color	Dimensions	Shipping Weight	Material ID
AP200A	#12-24 Tapped Rails, w/ Sides, Solid Plex Front Door, Metal Rear Door	Black	27.3 in (69.3 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035246
AP200B	#12-24 Tapped Rails, w/ Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035253
AN200A	#12-24 Tapped Rails, w/o Sides, Solid Plex Front Door, Metal Rear Door	Black	27.3 in (69.3 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035261
AN200B	#12-24 Tapped Rails, w/o Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035279
AP200AW	Wide, #12-24 Tapped Rails, w/ Sides, Solid Plex Front Door, Metal Rear Door	Black	32.3 in (82 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035287
AP200BW	Wide, #12-24 Tapped Rails, w/ Sides, Perf Doors	Black	32.3 in (82 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760035295

Product Number	Detailed Description	Color	Dimensions	Shipping Weight	Material ID
AN200AW	Wide, 19 in EIA #12-24 Tapped Rails, w/o Sides, Solid Plex Front Door, Metal Rear Door	Black	32.3 in (82 cm) W X 33.6 in (85.3 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760035303
AP300A	#12-24 Tapped Rails, w/ Sides, Vented Plex Front Door, Perf Rear Door	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760036699
AP300B	#12-24 Tapped Rails, w/ Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760036707
AN300A	#12-24 Tapped Rails, w/o Sides, Vented Plex Front Door, Perf Rear Door	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760036715
AN300B	#12-24 Tapped Rails, w/o Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760036723
AP500A	Square Punch, w/ Sides, Vented Plex Front Door, Perf Rear Door	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760036731
AP500B	Square Punch, w/ Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	300 lbs (136 kg)	760036749
AN500A	Square Punch, w/o Sides, Vented Plex Front Door, Perf Rear Door	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760036756
AN500B	Square Punch, w/o Sides, Perf Doors	Black	27.3 in (69.3 cm) W X 42.6 in (108.2 cm) D X 84 in (213.4 cm) H	260 lbs (117.9 kg)	760036764

Cabinet Cable Management

The SYSTIMAX Vertical and Front-to-Back Cable Management products are used in Data Centers of large enterprise networks or in ISP co-location and head end facilities when cabinets support network, fiber and/or computer and data storage equipment.

Cabinet Vertical Cable Manager

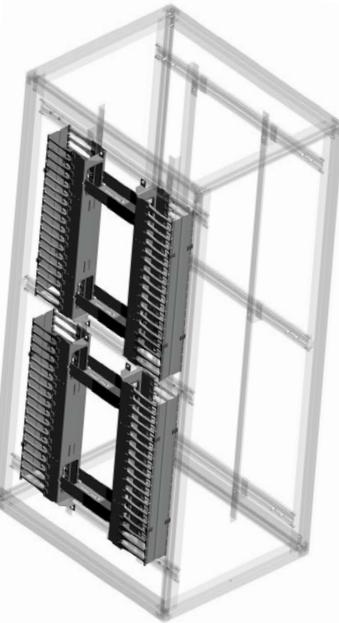
The Vertical Cable Manager allows patch cords to be organized by rack-mount space, making it easier to trace individual cables during moves, adds and changes. It has a snap-on cover to protect cables. Cover snaps on and opens to the right or left for easy access to cables during moves, adds and changes.

Front-to-Back Cable Manager

The Front-to-Back Managers snap onto the vertical managers and adjust to match the depth of the cable managers. Front-to-Back Managers adjust in depth to connect the front and rear Vertical Manager.

Ring Vertical Cable Manager

The Ring Vertical Cable Manager provides additional cable management (one pair of cabling ring sections and eight rings are included with each cabinet or frame).



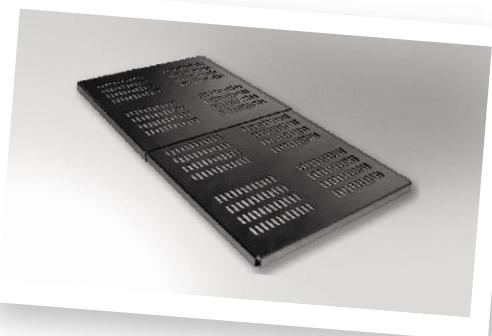
Frames &
Cable
Management

Product Number	Detailed Description	Color	Shipping Weight	Material ID
FB100W	Front-to-Back Cable Manager, Wide	Black	9 lbs (4.08 kg)	760035345
FB100N	Front-to-Back Cable Manager, Narrow	Black	10 lbs (4.54 kg)	760035352
CM100A	Ring Vertical Cable Manager, 6 ft - 6 in (198.1 cm) Cabinet	Black	7 lbs (3.18 kg)	760035329
CM100B	Ring Vertical Cable Manager, 7 ft (213.4 cm) Cabinet	Black	7 lbs (3.18 kg)	760035337
CM100BW	Vertical Cable Manager, Wide, 7 ft (213.4 cm) Cabinet	Black	12 lbs (5.44 kg)	760035360
CM100AW	Vertical Cable Manager, Wide, 6 ft - 6 in (198.1 cm) Cabinet	Black	11 lbs (4.99 kg)	760035378
CM100BN	Vertical Cable Manager, Narrow 7 ft (213.4 cm) Cabinet	Black	14 lbs (6.35 kg)	760035386
CM100AN	Vertical Cable Manager, Narrow, 6 ft - 6 in (198.1 cm) Cabinet	Black	13 lbs (5.9 kg)	760035394
HT100A	Horizontal Cable Tray	Black		760036772

Cabinet Equipment Shelves

The SYSTIMAX Cabinet Shelves provides convenient mounting shelves for CPUs, power supplies, printers or any telecommunications equipment.

- The Low Profile Fixed Shelf has a unique telescoping design delivers between 20 in (50.8 cm) and 36 in (91.4 cm) of continuous support for up to 100 lbs (45.4 kg) of equipment in less than 1 RMU of rack-mount space
- The Fixed Shelves are designed to support heavier equipment. And supports up to 250 lbs (113.4 kg)
- The 32 in Deep Sliding Shelf provides a flexible design to reduce kinking, twisting, and cutting of cables during self-extension and retraction. The cable management belt provides a greater flexibility in the storage of wire bundles. The shelf supports up to 160 lbs (72.57 kg) using less than two RMU
- The Extra Heavy Duty 4-Point Solid Sliding shelf provides support of heavy equipment up to 300 lbs (136.1 kg). The shelf uses only 2 RMU of mounting space



Frames &
Cable
Management

Product Number	Detailed Description	Color	Shipping Weight	Material ID
LP19VNT	Low Profile Cabinet Shelf, 100 lbs (45.36 kg) Capacity, Vented	Black	15 lbs (6.8 kg)	760035428
FXD29DSOL	Fixed Cabinet Shelf, 250 lbs (113.4 kg) Capacity, Solid 29 in (73.7 cm) D	Black	11 lbs (4.99 kg)	760035436
FXD29DVNT	Fixed Cabinet Shelf, 250 lbs (113.4 Kg) Capacity, Vented 29 in (73.7 cm) D	Black	10.5 lbs (4.76 kg)	760035444
SLD32DSOL	Sliding Cabinet Shelf, 160 lbs Capacity, Solid 32 in (81.3 cm) D	Black	25 lbs (11.34 kg)	760036798
SLD32DVNT	Sliding Cabinet Shelf, 160 lbs (72.57 kg) Capacity, Vented 32 in (81.3 cm) D	Black	25 lbs (11.34 kg)	760036780
ESLD32DSOL	Sliding Cabinet Shelf, 300 lbs (136 kg) Capacity, Solid 32 in (81.3 cm) D	Black	29 lbs (13.15 kg)	760036806

Cabinet Fan Kits

SYSTIMAX Cabinet fan kits provide ventilation and cooling. These fan kits are used with the SYSTIMAX steel and aluminum cabinets.

The Steel cabinet fan kit provides ventilation and cooling with a built-in redundancy of a three-fan system. The design allows the fans to exhaust warm air out of the top of the cabinet.



The Aluminum Cabinet Fan Kit is designed to provide ventilation and cooling with four fans mounted on two interchangeable frames to fit the cabinet top panel.

Product Number	Detailed Description	Color	Shipping Weight	Material ID
TS115FK	Steel Cabinet Fan Kit, 115V	Black	8 lbs (3.63 kg)	760035451
TS230FK	Steel Cabinet Fan Kit, 230V	Black	8 lbs (3.63 kg)	760035469
MF115FK	Aluminum Cabinet Fan Kit, 115V	Black	6 lbs (2.72 kg)	760035477
MF230FK	Aluminum Cabinet Fan Kit, 230V	Black	6 lbs (2.72 kg)	760035485

Equipment Frame System Accessories

The SYSTIMAX Equipment Frame System Accessories provide support for the various components of the SYSTIMAX rack and cabinet product offer.

- Filler panels fill empty spaces between mounted equipment to give a sturdy aluminum construction
- The #12-24 Combination Pan Head, Pilot Point Mounting Screws attach equipment to racks and cabinets. A cutting notch in the thread removes paint in threaded holes to improve metal-to-metal contact. The pilot point reduces cross-threading. The combination head can be used with #3 Phillips and slotted screw drivers
- Air dry lacquer for touching up finish. Matches color and gloss of CPI's textured paint. Note: This cannot be shipped via air
- Cable ties used to strap together free hanging computer cable for a tangle-free installation.

Product Number	Detailed Description	Color	Shipping Weight	Material ID
FPNL1U	Filler Panel, 19 in EIA 1U	Black	Less 1 lb (0.45 kg)	760034751
FPNL2U	Filler Panel, 19 in EIA 2U	Black	Less 1 lb (0.45 kg)	760034769
FPNL3U	Filler Panel, 19 in EIA 3U	Black	Less 1 lb (0.45 kg)	760043521
CR230A	Spray Paint, Touch Up	Black	2 lbs (0.91 kg)	108867102
MS100A	Mounting Screws, Pan-Head, #12-24, 50/pk	Black	1 lb (0.45 kg)	108527450
MS200A	Mounting Screws, Pan-Head, #12-24, 1,000/pk	Black	9 lbs (4.1 kg)	108527451
EC130A	Cable Tie, Velcro, 3/4 in (1.9 cm) X 9 in (22.9 cm), 25/pk	Teal	Less 1 lb (0.45 kg)	108528118



Equipment Frame Grounding Solution

The SYSTIMAX Grounding products bond cable runway components and connect equipment frames to the telecommunications ground.

- SYSTIMAX Cable Runway Ground Strap Kits provide a ground pathway between cable runway lengths when fastened together across splices
- The Two Mounting Hole Ground Terminal Block provides a convenient way to attach ground wires to racks or cabinets and meets BICSI and ANSI/TIA/EIA two-hole mounting recommendations. Constructed of extruded, high-strength aluminum and accepts conductors ranging from #14 AWG through 2/0. Includes two #3/8-24 x 7/8 in L stainless steel set screws

Product Number	Detailed Description	Color	Shipping Weight	Material ID
CGT200	Runway Grounding Kit	Green	0.5 lb (0.23 kg)	760035030
RA100A	Two Mounting Hole Ground Terminal Block	Black	1 lb (0.45 kg)	108528951

EMEA Cabinets and Accessories

The SYSTIMAX cabling cabinet unique design maximizes the open area available to bring in cables, especially in the two areas most used for cable entry at the rear of the rack and at the sides (top or bottom). The SYSTIMAX cabling cabinet frame design also ensures the cables flow over a smooth surface, which will not damage the data cables. In addition to this functionality it is supported by the SYSTIMAX SCS 20-Year Warranty.

Features and Benefits:

- Outstanding cable volume
- Multiple cable entry
- Vertical cable channels
- Lightweight, for ease of installation
- Load rated to 500 kg for standard cabling cabinet and 900 kg for server cabinet
- Right/left handed door openings
- Easily removed and refitted cladding
- Future proof—can accommodate both 19 in and ETSI equipment
- Accessories can easily be added or changed 42U (75SU)
- 2 width options—600 mm and 800 mm
- 2 depth options—800 mm and 1,000 mm (only available in server cabinet)
- Bayed cabinet options available for all versions
- All cabinets include earthing scubs (cables and connectors)
- All cabinets include cable tray installed to assist with cable management



Cabinets-Cabling

Detailed Description	Material ID
47U 800 x 800 mm Cabinet	999902096
47U 800 x 800 mm Baying Cabinet V2	999902098
47U 600 x 800 mm Cabinet V2	999902097
47U 600 x 800 mm Baying Cabinet V2	999902099
42U 800 x 800 mm Cabinet V2	999902092
42U 800 x 800 mm Baying Cabinet Plus Brackets (Comes without side panels) V2	999902094
42U 600 x 800 mm Cabinet V2	999902093
42U 600 x 800 mm Baying Cabinet Plus Brackets (Comes without side panels) V2	999902095
25U 800 x 800 mm Cabinet V2	999902100
25U 600 x 800 mm Cabinet V2	999902101
25U 800 x 800 mm Baying Cabinet V2	999902102
25U 600 x 800 mm Baying Cabinet V2	999902103
12U 400 mm Wallbox + 100 mm Rear Section	999902028
15U 400 mm Rear/100 mm Rear Section	999902029

Cabinets-Server

Detailed Description	Material ID
47U 800 x 1,000 Cabinet V2	999902105
47U 800 x 1,000 Baying Cabinet V2	999902107
47U 600 x 1,000 Cabinet V2	999902104
47U 600 x 1,000 Baying Cabinet V2	999902106
42U 600 x 1,000 Cabinet V2	999902055
42U 600 x 1,000 Baying Cabinet	999902065
42U 800 x 1,000 Cabinet	999902068
42U 800 x 1,000 Baying Cabinet	999902069

Cabinets-Accessories

Detailed Description	Material ID
Standard 800 Deep (566 mm) Chassis Tray Support Angles for 19 in Applications	999902009
Standard 600 Wide (19 in) x 566 mm Deep Vented Chassis Tray	999902010
Standard 600 Wide (19 in) x 625 mm Deep Vented Sliding Shelf Kit, with a Load Rating of 35 kg	999902011
800 Wide x 800 Deep x 100 mm High Unvented Plinth Kit	999902012
600 Wide x 800 Deep x 100 mm High Unvented Plinth Kit	999902013
Wallbox Fan Tray	999902022
Top Mounted Fan Tray c/w 4 of Fans Fitted for Air Extraction	999902003
Standard Castor/Leveller Combination Kit (4 of)	999902002
UK 2 meter Long Fan Tray Lead	999902004
Euro 2 meter Fan Tray Lead	999902076
9 Way UK Power Strip	999902005
9 Way Schuko Power Strip	999902007
5 Way UK Power Strip	999902006
5 Way Schuko Power Strip	999902008
13 Way Plus Switch and Cover Schuko	999902063
Shelve H D Fixed 19 in x 556 Kit	999902082
Shelve H D Sliding 19 in x 630 Kit	999902083
Raft for IMnet II 600 mm Deep	999902086
Raft for IMnet II 800 mm Deep	999902087

Note: Variations on standard product available on request.

Frames &
Cable
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Cable Runway System

The SYSTIMAX Cable Runway System provides improved cable organization for easy cable changes. Cable runways prevent tangles and cable damage to maintain quality data transmission.



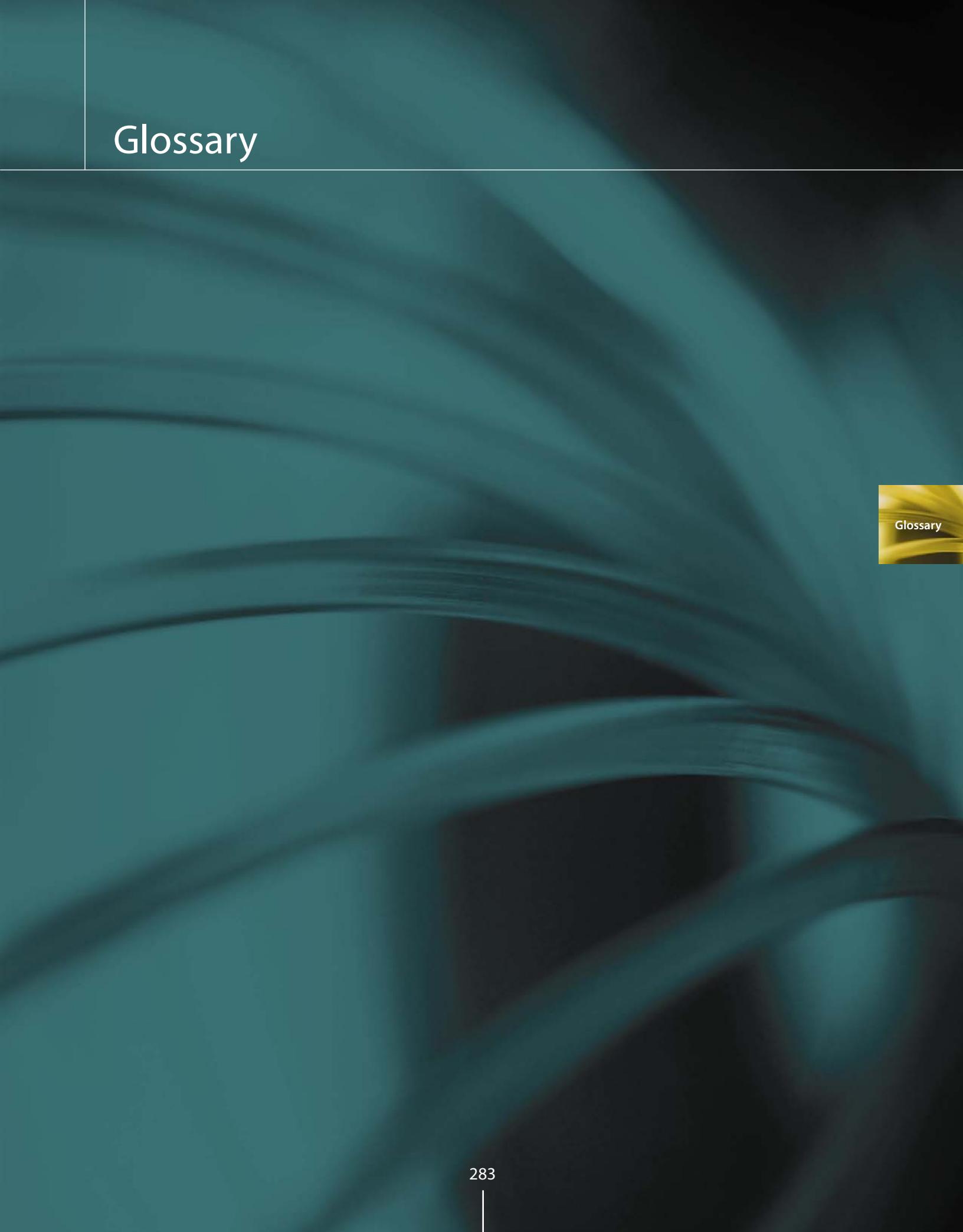
Product Number	Detailed Description	Runway Width	Color	Shipping Weight	Material ID
CR100A	Cable Runway Straight	12 in (30.5 cm)	Black	25 lbs (11.4 kg)	108528902
CR100B	Cable Runway Straight	18 in (45.7 cm)	Black	29 lbs (13.2 kg)	760034959
CR200A	Cable Runway Bend 90° Outside	12 in (30.5 cm)	Black	4 lbs (1.8 kg)	760036608
CR200B	Cable Runway Bend 90° Outside	18 in (45.7 cm)	Black	9 lbs (4.1 kg)	760036616
CR200C	Cable Runway Bend 90° Inside	12 in (30.5 cm)	Black	4 lbs (1.8 kg)	760042390
CR200D	Cable Runway Bend 90° Inside	18 in (45.7 cm)	Black	9 lbs (4.1 kg)	760042408
CR300A	Cable Runway Curve	12 in (30.5 cm)	Black	12 lbs (5.5 kg)	760036624
CR300B	Cable Runway Curve	18 in (45.7 cm)	Black	19 lbs (8.6 kg)	760036632
CR180A	Wall Angle Support Kit	12 in (30.5 cm)	Black	4 lbs (1.8 kg)	108528696
CR180B	Wall Angle Support Kit	18 in (45.7 cm)	Black	6 lbs (2.7 kg)	760035071
CR190A	Threaded Rod Ceiling Kit, 5/8 in	12 in (30.5 cm) or 18 in (45.7 cm)	Gold	7 lbs (3.2 kg)	108528704
CR220A	Runway End-Bar	12 in (30.5 cm)	Black	6 lbs (2.7 kg)	108867177
CR220B	Runway End-Bar	18 in (45.7 cm)	Black	7 lbs (3.2 kg)	760035048
CR150A	Runway, Butt-Splice Kit	12 in (30.5 cm) or 18 in (45.7 cm)	Black	1 lbs (0.5 kg)	108528647
CR150B	Runway 90-Degree Junction Kit	12 in (30.5 cm) or 18 in (45.7 cm)	Black	1 lbs (0.5 kg)	108528654
CR160B	Runway 90-Degree Splice Kit	12 in (30.5 cm) or 18 in (45.7 cm)	Black	1 lbs (0.5 kg)	108527540
CR100CAP	Protective End Cap	12 in (30.5 cm) or 18 in (45.7 cm)	Black	1 lbs (0.5 kg)	760036673
CR100FT	Cable Runway Foot Kit	12 in (30.5 cm) or 18 in (45.7 cm)	Black	4 lbs (1.8 kg)	760036681
CR170A	Triangular Support Kit	12 in (30.5 cm)	Black	5 lbs (2.3 kg)	108528688
CR170B	Triangular Support Kit	18 in (45.7 cm)	Black	9 lbs (4.1 kg)	760035022
CR100WA	Cable Runway Wall-to-Rack Kit for 3 in (7.6 cm) Channel Rack Use With Racks: RK100A	12 in (30.5 cm)	Black	32 lbs (14.5 kg)	760034967
CR100WB	Cable Runway Wall-to-Rack Kit for 6 in (15.2 cm) Channel Rack Use With Racks: RK130A	12 in (30.5 cm)	Black	24 lbs (10.9 kg)	760034975
CR221R	Runway Elevation to Rack Kit Used with CR110A, CR110B, CR111A, or CR111B – sold separately	To Rack Kit 2 in (5.1 cm) – 3 in (7.6 cm)	Black	1.5 lbs (0.7 kg)	760035063
CR221C	Runway Elevation to Cabinet Kit Used with CR221C	To Cabinet Kit 2 in (5.1 cm) – 3 in (7.6 cm)	Black	2 lbs (0.9 kg)	760035055

Product Number	Detailed Description	Runway Width	Color	Shipping Weight	Material ID
CR110A	Adjustable Rack Mounting Plate for 3 in (7.6 cm) D Rack Used with Racks: RK100A	12 in (30.5 cm)	Black	5 lbs (2.3 kg)	108528662
CR110B	Adjustable Rack Mounting Plate for 3 in (7.6 cm) D Rack Used with Racks: RK100A	18 in (45.7 cm)	Black	7 lbs (3.2 kg)	760034983
CR111A	Adjustable Rack Mounting Plate for 6 in (15.2 cm) D Rack Used with Racks: RK130A	12 in (30.5 cm)	Black	5 lbs (2.3 kg)	760034991
CR111B	Adjustable Rack Mounting Plate for 6 in (15.2 cm) D Rack Used with Racks: RK130A	18 in (45.7 cm)	Black	7 lbs (3.2 kg)	760035006
CR120A	Runway Radius Drop	12 in (30.5 cm)	Black		108528910
CR120B	Runway Radius Drop	18 in (45.7 cm)	Black		760035014
CR130A	Runway Radius Drop, Stringer, 5 in (12.7 cm) Long	12 in (30.5 cm) or 18 in (45.7 cm)	Black		108528936





Glossary



A close-up photograph of an open book, focusing on the edges and corners of its pages. The pages are white and slightly aged, with visible texture and some minor discoloration. The lighting is dramatic, creating strong shadows and highlights that emphasize the three-dimensional nature of the book's form.

Glossary

Glossary of Terms

The following glossary offers explanations for a number of terms used in this catalog. It additionally provides explanations for a number of other terms frequently used within the networking and cabling industries.

10BASE-T

10 Mb/s Ethernet using 2-pairs of Category 3 cable.

100BASE-T4

100 Mb/s Fast Ethernet using 4-pairs of Category 3 cable.

100BASE-TX

100 Mb/s Fast Ethernet using 2-pairs of Category 5 cable.

100VG-AnyLAN

100 Mb/s LAN using Demand Priority Protocol originally developed by Hewlett Packard and AT&T for Category 3 cable.

1000BASE-T

1000 Mb/s (1 Gbps) Ethernet using 4-pairs of Category 5e cable.

1000BASE-TX

A low cost alternative to 1000BASE-T developed by TIA for Category 6 cabling.

1000BASE-SX

1000 Mb/s (1 Gbps) Ethernet operating on multimode fiber with short wave lasers (850 nm).

1000BASE-LX

1000 Mb/s (1 Gbps) Ethernet operating on multimode fiber with long wave lasers (1300 nm).

10GBASE-T

10 Gbps Ethernet using 4-pairs of Category 6 or better cabling.

10GBASE-LR

10 Gigabit Ethernet operating at long wavelength (1300 nm) on singlemode optical fiber. 10GBASE-LR is the LAN version, 10GBASE-LW is the WAN version. Up to 10 Km reach.

10GBASE-LX4

10 Gigabit Ethernet operating at long wavelength (1300 nm) on multimode or singlemode optical fiber. Designed to overcome the imperfections of legacy multimode fiber, by utilizing 4 lasers and 4 detectors operating at different wavelengths. Up to 300 m reach on multimode, 10 Km on singlemode.

10GBASE-SR

10 Gigabit Ethernet operating at short wavelength (850 nm) on laser optimized (OM3) multimode fiber. The lowest cost transceiver alternative, taking advantage of the advances in multimode fiber technology that eliminate the imperfections

of legacy multimode. Up to 300 m reach on laser optimized (OM3) multimode fiber (up to 550 m supported on enhanced OM3 fiber).

Ad hoc cabling

Cabling scheme where different types of cabling components from different vendors are linked together to form a cabling system.

Alien Crosstalk

Signal coupling between adjacent cabling components (cables, connectors) or between adjacent links or channels.

Analogue transmission

A method of signal transmission in which the shape of the signal is a continuously variable and directly measurable physical quantity such as voltage.

Application

A system, with its associated transmission method which is supported by telecommunications cabling.

Application layer

The uppermost layer (layer 7) of the open systems interconnection (OSI) model. This layer is concerned with support to the user application and is responsible for managing the communication between applications, e.g. Email, File transfer, etc.

ASCII

The American Standard Code for Information Interchange. A widely-used 7 or 8 bit binary code used to represent alphabetic and numeric characters in computer understandable form.

Asynchronous

Two or more signals sourced from independent clocks, therefore having different frequency and phase relations.

Asynchronous data transfer

A method of data transfer in which each alphabetic or numeric character (represented by 7 or 8 bits) is preceded by 'start' and 'stop' bits to delineate the 7/8 bit pattern from the ideal pattern which otherwise occupies the (digital) transmission medium.

Asynchronous transfer mode (ATM)

A high-speed cell-based switching and multiplexing technology based on segmentation of voice, data and video into fixed packets (cells). These cells are transferred along switched paths and are not received on a regular basis (hence the term asynchronous).

Attenuation

The effect of signal dwindling, experienced with accumulating line length or distance of radio transmission.

Backbone(s)

The part of a premises distribution system that includes a main cable route and facilities for supporting the cable from the equipment room to the upper floors, or along the same floor to the wiring closets.

Balanced circuit

A circuit where equal and opposite signals are generated and sent on to two conductors. The better the balance of a circuit, the lesser is its emissions and the greater is its noise immunity (hence the better is its EMC performance).

Balanced twisted pair cable

A cable consisting of one or more metallic symmetrical cable elements (twisted pairs or quads).

Balun

An adapter used to convert balanced to unbalanced signals in order to connect legacy equipment or video devices to structured cabling.

Bandwidth

The range of frequencies that can be used for transmitting information on a channel. It indicates the transmission-carrying capacity of a channel. Thus, the larger the bandwidth, the greater the amount of information that can pass through the circuit. Measured in hertz or bits per second or MHz-Km (for fiber).

Bit error rate (BER)

A measure of quality of a digital transmission line, either quoted as a percentage, or more usually as a ratio, typically 1 error in 10E8 or 10E9 bits carried. The lower the number of errors, the better the quality of the line.

Bridge(s)

A device used to link two subnetworks using the same communications method and sometimes the same kind of transmission medium.

Building backbone cable

A cable that connects the building distributor to a floor distributor. Building backbone cables may also connect floor distributors in the same building.

Building distributor

A distributor in which the building backbone cable(s) terminate(s) and at which connections to the campus backbone cable(s) may be made.

Building entrance facility

A facility that provides all necessary mechanical facility and electrical services, that complies with all relevant regulations, for the entry of telecommunications cables into a building.

BUS

Consists of a common transmission path with a number of nodes attached to it. Sometimes referred to as linear network topology.

Cable fill

The ratio of cable installed into a conduit/trunking against the theoretical maximum capacity of the conduit/trunking.

Cable routing diagram

A detailed drawing showing the layout of the cable routes.

Cabling

A system of telecommunications cables, cords and connecting hardware that can support the connection of information technology equipment.

Campus

A premises containing more than one building adjacent or near to one another.

Campus backbone cabling

A cable that connects the campus distributor to the building backbone distributor(s). Campus backbone cables may also connect building cabling distributors directly.

Carrier sense multiple access/collision (CSMA/CD)

Network access method in which nodes contend for the right to send data. If two or more nodes attempt to transmit at the same time, they abort their transmission until a random time period of microseconds has transpired and then attempt to resend.

Category 3

Industry standard for cable and connecting hardware products with transmission characteristics specified to 16 MHz, designed to support digital transmission of 10 Mb/s.

Category 5

Industry standard for cable and connecting hardware products with transmission characteristics specified to 100 MHz, designed to support digital transmission of 100 Mb/s.

Category 5e

Enhanced Category 5 specifications for cable and connecting hardware products with transmission characteristics specified to 100 MHz, intended to support digital transmission of 1000 Mb/s.

Category 6

Industry standard for cable and connecting hardware products with transmission characteristics specified to 250 MHz, designed to support digital transmission in excess of 1000 Mb/s.

Category 6A

Specification currently in draft to become an industry standard for cable and connecting hardware products with transmission characteristics specified to 500 MHz, designed to support digital transmission of 10 Gbps.

Category 7

Industry standard for cable and connecting hardware products with transmission characteristics specified to 600 MHz, and requiring individually shielded pair cables. May require either a switched RJ45 or a non-RJ45 connector.

Ceiling distribution

Distribution system that uses the space between the false or suspended ceiling and the structural ceiling for housing horizontal cable routes.

Cell relay

A fast packet switching technique which uses fixed-length cells. Generic name for ATM, SMDS and BISDN.

CENELEC

European committee for electrotechnical standardization.

CENELEC EN50173

The European standard for generic cabling for customer premises.

CENELEC EN50174

A proposed European cabling systems planning & installation standard being developed by CENELEC.

Channel

The end-to-end transmission path connecting any two pieces of application-specific equipment. Equipment cables and work area cables are included in the channel.

Churn

The relocation of an individual or a group of individuals within a building such that the workspace or services to the workspace require change.

Client/server

A technique by which processing can be distributed between nodes requesting information (clients) and those maintaining data (servers).

Coaxial Cable (COAX)

A cable with a center conductor surrounded by a thick insulation, surrounded by an outer conductor made of metal braid. An outer jacket insulation is optional.

Collapsed backbone

This architecture is a backbone topology where wiring concentrators located at floor levels are attached in a star configuration to a central high performance switching concentrator.

Consolidation point

An interconnection point in horizontal cabling, typically used to support the re-arrangement of furniture cloisters.

Cords

A short length of copper wire or fiber optic cable with connectors on each end. Used to connect equipment to cabling, or to connect cabling segments (cross-connection).

Cross-connect

A facility enabling the termination of cable elements and their connection, primarily by means of patch cords or jumpers.

Crosstalk

An electromagnetic coupling between two physically isolated circuits in a system. This coupling causes a signal on one circuit to induce a noise voltage on adjacent circuits, thereby causing signal interference.

CSMA/CD

See Carrier Sense Multiple Access/Collision Detect.

Customer premises equipment (CPE)

Customer owned equipment used to terminate or process information from the public network (i.e. Multiplexer or PABX).

Data circuit terminating equipment (DCE)

The equipment terminating and controlling the transmission line, and often marking the end point of the public data network. Data terminal equipment's (DTEs) such as computers are connected directly to DCE.

Data terminating equipment (DTE)

The term used to describe any type of computer or other equipment, when connected to a data communications network.

Datalink layer

Layer 2 of the OSI model. This layer is responsible for error free transmission of bits on a physical interface. Also known as the link layer. The best known layer 2 protocol is HDLC (High Level Data Link Control).

Decibel (dB)

A unit used to measure relative increase or decrease in power, voltage or current, using a logarithmic scale.

Digital transmission

A technique in which all information is converted into binary digits for transmission.

Distributor

The term used for the functions of a collection of components (i.e. patch panels, patch cords) used to connect cables.

EIA/TIA

North American Standards organization.

EIA/TIA 568B

North American commercial building telecommunications wiring standard.

EIA/TIA 569A

North American commercial building standard for telecommunications pathways and spaces. Its purpose is to standardize specific design and construction practices within and between buildings which are in support of telecommunications media and equipment.

EIA/TIA 606

North American administration standard for the telecommunications infrastructure of commercial buildings. Its purpose is to provide guidelines for a uniform administration scheme for the cabling infrastructure.

Electromagnetic compatibility (EMC)

The ability of a system, equipment or device to operate satisfactorily in its environment without introducing unacceptable electromagnetic disturbance, or being affected by that environment.

Electromagnetic flux

Electric and magnetic fields (commonly referred to as emissions) generated by equipment or system.

Electromagnetic interference (EMI)

The interference in signal transmission or reception caused by the radiation of electric and magnetic fields.

Equipment cable

A cable connecting equipment to a distributor.

Equipment room

A room dedicated for housing distributors and application-specific equipment.

Ethernet

A LAN originally developed by DEC, Xerox and Intel. It uses the CSMA/CD protocol.

Fast Ethernet

A 100 Mb/s LAN based on CSMA/CD protocol. See 100BASE-T.

Fiber

See Optical Fiber.

Fiber channel

This is an ANSI standard describing point to point and switched point to point physical interface, transmission protocol, signalling protocol, services and command set mapping of a high performance serial link for uses between mainframe computers and computer peripherals.

Fiber distributed data interface (FDDI)

An American National Standards Institute standard for fiber-based token passing access protocol that operates at a 100 Mb/s data transfer rate.

Flood wiring

The concept of wiring for future growth, by providing full coverage of information outlets.

Flood distributor

The distributor used to connect between the horizontal cable and other cabling subsystems or equipment (see telecommunications closet).

Foil screened twisted pair cable (FTP)

A cable that uses a metallic foil to surround the conductors in a twisted pair cable.

Full duplex

Simultaneous two-way communication on the same link or cabling channel.

Full duplex Ethernet

Full duplex Ethernet allows nodes to transmit and receive data at the same time, doubling throughput between workstation and switch.

Generic cabling

A structured telecommunications cabling system, capable of supporting a wide range of applications. Generic cabling can be installed without prior knowledge of the required applications. Application-specific hardware is not a part of generic cabling.

Grid Computing

Grid computing makes spare CPU horsepower available across the network to large jobs that require it, by harnessing the capabilities of dispersed devices across the network.

Half duplex

Two-way transmission on a single link or cabling channel, one direction at a time.

Horizontal cable

A cable connecting the floor distributor to the telecommunications outlet(s).

Horizontal runs

See horizontal subsystem.

Horizontal subsystem

The part of the premises distribution system installed on one floor that includes the cabling and distribution components connecting the riser backbone or equipment wiring to the information outlet.

Hub

A concentrator or repeater in a star topology at which node connections meet.

Hybrid cable

An assembly of two or more different types of cable units, cables or categories covered by an overall sheath. It may be covered by an overall shield.

IEC 60332

The international standard covering fire performance of cables.

IEEE

Institute of Electrical and Electronic Engineers in the USA. This organization is also involved in producing Local Area Network standards such as Ethernet.

Individual pair screened

Where each twisted pair in one overall cable has its own screen.

InfiniBand™ architecture

A high bandwidth switched network topology currently being developed for Storage Area Networks (SANS).

Integrated services digital network (ISDN)

Integrated voice and data network based on digital communications technology and standards interfaces.

Intelligent buildings

Buildings that maximize the efficiency of its occupants and allow effective management of resources with minimum life-time costs (Source: European Intelligent Building Group).

Interconnect

A location at which equipment cables are terminated and interconnected to the cabling subsystems without using a patch cord or jumper.

Interface cards

See Network Interface Cards.

Interference

A signal impairment caused by the interaction of another unwanted signal.

ISO

International Standards Organization.

ISO seven layer model

A 7 layer hierarchical reference structure model developed by the ISO for defining, specifying and relating communications protocol.

ISO/IEC IS 11801

The international standard for generic cabling for customer premises.

ISO/IEC 14763-1

The international standard for basic administration of generic cabling.

Jumper

A cable unit or cable element without connectors used to make a connection on a cross-connect.

Keying

A mechanical feature of a connector system which guarantees correct orientation of a connection or prevents the connection to a jack or optical fiber adapter of the same type intended for another purpose.

Permanent link

The transmission path between two mated interfaces of generic cabling, excluding equipment cables, work area cables and cross-connections.

Local area network(s) (LANs)

A LAN allows users to share information and computer resources. Typically, a local area network is limited to a single building.

Multimedia

A means of conveying information with components in different media such as voice, music, text, graphics, image and video.

Multimode fiber

Optical fibers that have a large core and that permit non-axial rays or modes to propagate through the core.

Network architecture

Network topology and design.

Network interface cards (NICs)

The piece of equipment that is installed into the expansion port of a personal computer and allows communication between the PC and the network.

Network layer

The network layer is layer 3 of the OSI model. This layer sets up an end-to-end connection across a network determining which permutation of individual links to be used. Thus the network layer performs overall routing functions.

Node(s)

A piece of communications equipment on the network.

Noise

The term used for spurious signals produced in a conductor by sources other than the transmitter to which it is connected. Noise can affect a legitimate signal to the extent that it is inaccurate or indecipherable when it reaches the receiver. The higher the speed of data transmission, the worse the effects of noise become.

Open system interconnection (OSI)

A conceptual model specified by CCITT recommendations in the X200 series. The model describes the 7-layer process of communication between co-operating computers. The model provides a standard for the development of communication protocols allowing for computers of different manufacturers to be interconnected.

Optical fiber

A transmission medium consisting of a core of glass or plastic surrounded by a protective cladding. Signals are transmitted as light pulses, introduced into the fiber by a light transmitter (i.e. Laser or an LED).

Outlets

A term used to describe the sockets provided in the work location of a structured cabling system. These are usually 8-pin modular sockets which can support a variety of services (i.e. voice, video and data).

PABX

Private Automatic Branch Exchange. A private switching system that switches calls both internally within a building or premises and outside to the telephone network.

Packet switching

A type of exchange or network which conveys a string of information from origin to destination by cutting it up into a number of packets and carrying each independently. A packet-switched effect could be achieved by sending individual pages of a book through the post separately. The receiving device re-assembles the message. Thus a direct connection between origin and destination does not exist at any point.

Patch cord(s)

Flexible cable unit or element with connector(s), used to establish connections on a patch panel.

Patch panel(s)

Termination and administration hardware designed to accommodate the use of patch cords. It facilitates administration for moves and changes.

Pathway(s)

Designated cable routes and/or support structures in a false floor or ceiling.

Peripheral(s)

Additions to a system, a resource (i.e. printer, scanner, etc).

Physical layer

Layer 1 of the open systems interconnection (OSI) model. The physical layer protocol is the hardware and software in the line terminating device which converts the databits needed by the datalink layer into the electrical pulses, modem tones, optical signals or other means which will transmit the data.

Physical topology

Physical cabling layout (i.e. ring, bus, star wired etc).

Ports

A computer interface capable of transmitting and or receiving information.

PowerSum

A method of testing and measuring crosstalk in multi-pair cables that accounts for the sum of crosstalk affecting a pair when all other pairs are active. This is the only method of specifying crosstalk performance that is suited to cables with more than four pairs.

Presentation

Layer 6 of the OSI model. Responsible for identifying the syntax of layer the data being transmitted.

Proprietary networks

Networks that are not designed or installed to standard based guidelines and do not relate specifically to any relevant standard.

Proprietary

Systems that are not standards specific and therefore are not interoperable with standards based equipment.

Protocol(s)

A rule of procedure by which computer devices intercommunicate. Thus a protocol is the equivalent of a human language, with punctuation and grammatical rules.

Public network interface

A point of demarcation between public and private network. In many cases the public network interface is the point of connection between the network provider's facilities and the customer premises cabling.

Raceway

Any distribution method designed for holding cables, (i.e. conduit, metal or plastic trunking, cable trays, etc).

Redundancy risers

A fail-safe method of splitting and routing riser/backbone cables via two or more riser cores. Also known as diverse routing.

Ring

A closed loop network topology.

Riser(s)

The term used to describe a space utilized by backbone cabling to house communications cabling and other building services. This space should preferably be specified, or allowed for, at the time of the building design.

Router(s)

An intermediate system between two or more networks capable of forwarding data packets at the network layer (layer 3).

Scaleable

The ability to adapt to different bit rates.

Screened cable

See foil screened twisted pair cable.

Serial communications

See serial data transmission.

Serial data transmission

Data transmission between computer devices using only a single circuit path. Whole bytes of information (8 bits) are sent in sequential pattern. Compares with parallel transmission. Parallel transmission is often used internally within computing devices because of the higher processing speeds which are possible, but for long-distance telecommunication, serial transmission is more economic in terms of line plant.

Serial port(s)/transmission

Normally a DB 9-pin connector located on the mother board of a PC. A technique in which each bit of information is sent sequentially on a single channel.

Server(s)

Host computer(s).

Session layer

Layer 5 of the OSI model. Responsible for establishment and control of dialogues between users on different machines. Synchronization for reliable data transfer and token management to control use of the connection are services provided by this layer.

Shielded twisted pair cable (STP)

An electrically conducting cable comprising one or more elements each of which is individually shielded. There may be an overall shield in which case the cable is referred to as a shielded twisted pair cable with an overall shield.

Signal to noise ratio (SNR)

The ratio of the signal magnitude to the noise magnitude and is usually expressed in dB. The higher the SNR of a system, the better is its performance.

Simplex

A transmission means allowing only one direction of transmission. (i.e. public broadcast radio.)

Singlemode

Optical fiber with a small core diameter in which only singlemode is capable of propagation. 8.3 micron is the common standard core size.

Splice

A joining of conductors or fibers, generally from separate cables.

Star

A physical point to point network topology.

Star physical topology

See Star.

Star quad

A cable element which comprises four insulated conductors twisted together. Two diametrically facing conductors from a transmission pair.

Star topology

See Star.

Storage Area Network (SAN)

A high speed network or subnetwork of shared storage devices.

STP

See shielded twisted pair cable.

Structured cabling

Flexible cabling scheme which allows rapid reconfiguration for office moves through patching.

Switching

A function carried out by a switching hub, alleviating traffic by making virtual connections between transmitting and receiving nodes.

Synchronization

The method by which the bit patterns appearing on digital line systems may be properly clocked and interpreted - allowing the beginning of particular patterns and frame formats to be correctly identified.

Synchronous

Signals that are sourced from the same timing reference and hence are identical in frequency.

Synchronous data transfer

Data transfer employing synchronized transmit and receive clocks, rather than using start and stop bits to distinguish character patterns from idle line operation.

SYSTIMAX SCS

Brand name of SYSTIMAX Solutions structured cabling system.

Telecommunications

A branch of technology concerned with the transmission, emission and reception of signs, signals, writing, images and sounds; that is, information of any nature by cable, radio, optical or other electromagnetic systems.

Telecommunications closet

An enclosed space for housing telecommunications equipment, cable terminations, and cross-connect cabling. The telecommunications closet is a recognized cross-connect point between the backbone and horizontal cabling subsystems.

Telecommunications outlet

A socket where the horizontal cable terminates. The telecommunications outlet provides the interface to the work area cabling.

Thick coax

The transmission medium used for Ethernet or IEEE 802.3 10BASE-2 LANs. It is a 50 ohm thick coax cable (commonly referred to as the thick yellow cable).

Token ring

The transmission medium used for IEEE 802.3 10BASE-2 LANs (sometimes referred to as Cheapernet). It is a 50 ohm thin coax cable.

Token ring LAN

A 4 or 16 Mb/s LAN standard based on token passing access protocol originally developed by IBM. Sometimes referred to as IEEE 802.5 or ISO 8802-5 standard.

Topology

The physical or logical configuration of a telecommunications system.

TP-PMD

Twisted Pair Physical Medium Dependant. A twisted pair version of the FDDI standard that allows 100 Mb/s transmission over Category 5 copper cable.

Transducer

A sensing device that converts a signal from one form to another (i.e. mechanical to electrical).

Transport layer

Layer 4 of the OSI model. The transport layer provides for end-to-end data relaying service across any type of data network and is responsible for end-to-end reliability.

Twinaxial cable (TWINAX)

Twinaxial cable is similar to coax except that the center of the cable contains a twisted pair rather than a single conductor.

Twisted pair(s)

A cable element which consists of two insulated conductors twisted together in a determined fashion to form a balanced transmission line.

Unshielded twisted pair cable

An electrically conducting cable comprising one or more pairs none of which is shielded.

UTP

See unshielded twisted pair cable.

VCSEL

Vertical Cavity Surface Emitting Laser

Video conferencing

Real time communications via video between two or more users at separate locations.

Wide area networks (WANS)

Networks that are linked across a large geographical area generally using leased lines from a public operator.

Wireless LAN

Local area network that communicates using radio technology.

Work area

A building space where the occupants interact with telecommunications terminal equipment. A user's work area which is typically 9 sq. meter or 100 sq. ft.

Work area cable

A cable connecting the telecommunications outlet to the terminal equipment.

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