

FIBER INSIDE PLANT

Rack Mount Panels | Optical Modules | Cable Assemblies | Components

Founded in 1984, AFL is a global leader providing fiber optic products, equipment, and engineering services to the electric utility, broadband, communications, OEM, enterprise, wireless and transit rail markets. AFL also serves a diverse mix of industry segments that include service providers, military and defense, mining, oil and gas, and biomedical.

AFL brings years of experience in developing solutions for customers, fostering a creative culture to drive and deploy innovative technologies that will improve communications for years to come. Our product line consists of fiber optic cable, transmission and substation accessories, outside plant equipment, connectors, fusion splicers, test equipment and training. AFL has operations in the U.S., Mexico, Europe and Asia.

AFL is dedicated to bringing our customers a quality product as well as delivering superior value.



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LightLink LANSYSTEM Rack Mount Patch and Splice Panels

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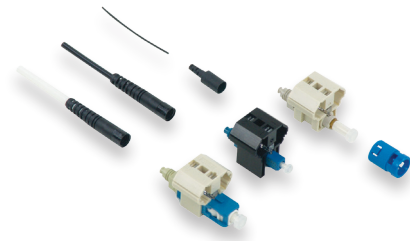
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Features

- No Epoxy, No Polish
- Low Insertion Loss
- Fiber Can Be Reinserted up to Three Times
- 3.0 mm, 2.0 mm and 900 μm Cordage Compatibility
- VFI Accessory to Confirm Proper Installation

Applications

- Premise/Enterprise Networks
- LAN/WAN Connections
- Patch Panels
- Equipment Termination
- FTTx Applications
- Field Repair/Replacement
- Equipment Test Leads

FAST Connectors

FAST Connectors are factory pre-polished, field-installable connectors that completely eliminate the need for hand polishing in the field. Proven mechanical splice technology ensuring precision fiber alignment, a factory pre-cleaved fiber stub and a proprietary index-matching gel combine to offer an immediate low loss termination to either single-mode or multimode optical fibers. FAST Connectors are compatible with 250 μm and 900 μm optical fibers, as well as 900 μm, 2 mm and 3 mm cordage. All primary fiber types are supported, and each connector is color coded per industry standard requirements to aide in identification during and after installation. A factory-installed wedge clip (included with each connector) is removed and discarded upon completion of the termination. Incorporated into this device is an innovative, translucent wedge enabling the use of a common VFI to provide a "pass/fail" signal once physical contact is achieved.

Specifications

PARAMETER		VALUE
Insertion Loss:	Singlemode - UPC	Average: 0.2 dB, Maximum: 0.5 dB
	Singlemode - APC	Average: 0.3 dB, Maximum: 0.6 dB
	Multimode - PC	Average: 0.1 dB, Maximum: 0.5 dB
Return Loss at Room Temperature:	Singlemode - UPC	Average: -55 dB, Maximum: -45 dB
	Singlemode - APC-AU*	Average: -55 dB, Maximum: -50 dB
	Singlemode - APC-AA**	Average: -65 dB, Maximum: -60 dB
	Multimode	Average: -25 dB, Maximum: -20 dB
Operating Temperature		-40°C to +75°C

*Angle/Flat Cleaves

**Angle/Angle Cleaves

TIA/EIA-568-C.3 Compliant

TIA/EIA-604 (FOCIS) Compliant

Ordering Information

FIBER TYPE	HOUSING COLOR	CABLE SIZE	AFL NO.	
			PACKAGE OF 6	PACKAGE OF 100
FAST SC CONNECTOR				
Multimode 62.5/125 μm, OM1	Beige	900 μm	FAST-SC-MM62.5-6	FAST-SC-MM62.5-100
Multimode 50/125 μm, OM2	Black		FAST-SC-MM50-6	FAST-SC-MM50-100
Multimode 50/125 μm, OM3/OM4 compatible	Aqua		FAST-SC-MM50L-6	FAST-SC-MM50L-100
Single-mode, UPC	Blue		FAST-SC-SM-6	FAST-SC-SM-100
Single-mode, APC-AU	Green		FAST-SC-SMAU-6	FAST-SC-SMAU-100
Single-mode, APC-AA	Green		FAST-SC-SMAA-6*	FAST-SC-SMAA-100*
FAST ST CONNECTOR				
Multimode 62.5/125 μm, OM1	Beige	900 μm	FAST-ST-MM62.5-6	FAST-ST-MM62.5-100
Multimode 50/125 μm, OM2	Black		FAST-ST-MM50-6	FAST-ST-MM50-100
Multimode 50/125 μm, OM3/OM4 compatible	Aqua		FAST-ST-MM50L-6	FAST-ST-MM50L-100
Single-mode, UPC	Blue		FAST-ST-SM-6	FAST-ST-SM-100
FAST LC CONNECTOR				
Multimode 62.5/125 μm, OM1	Beige	900 μm	FAST-LC-MM62.5-6	FAST-LC-MM62.5-100
Multimode 50/125 μm, OM2	Black		FAST-LC-MM50-6	FAST-LC-MM50-100
Multimode 50/125 μm, OM3/OM4 compatible	Aqua		FAST-LC-MM50L-6	FAST-LC-MM50L-100
Single-mode, UPC	Blue		FAST-LC-SM-6	FAST-LC-SM-100

* Requires FAST APC Tool Kit for installation

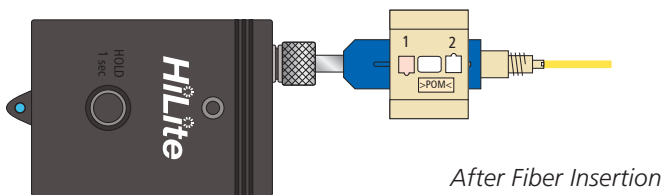
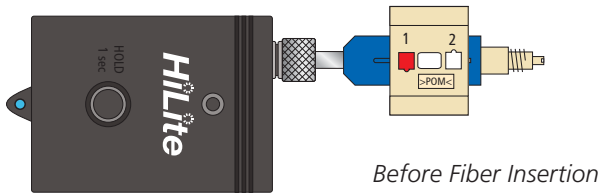
U.S. Patents: 5,963,699 / 5,984,532 / 6,179,482 / 7,003,208 / 7,258,496

FAST Connectors

Accessories

DESCRIPTION			AFL NO.	AFL NO.
BOOT KITS FOR 2MM AND 3MM CORDAGE	COLOR	CABLE SIZE	PACK OF 6	PACK OF 100
2 mm Boot Kit, SC/LC/ST	Black	2 mm	FAST-BOOT-2MM-6	FAST-BOOT-2MM-100
3 mm Boot Kit, SC/LC/ST	Black	3 mm	FAST-BOOT-3MM-6	FAST-BOOT-3MM-100
DUPLEX CLIPS				
LC Duplex Clip (LC only)	Transparent		CS010437-06	CS010437-100
TOOL KITS				AFL NO.
FAST UPC Tool Kit	For all UPC style connectors and SC/ APC-AU (CT-30A Cleaver)			CS001201
FAST UPC Tool Kit	For all UPC style connectors and SC/APC-AU (CT-05A Cleaver)			CS010975
FAST APC Tool Kit	For SC/APC-AA connectors (CT-11A Cleaver)			CS012290
VISUAL FAULT IDENTIFIERS				AFL NO.
AFL NOYES® VFI 2				VF12-00-0900
AFL NOYES HiLite				VF13-00-0900
1.25 mm Universal Adapter (LC Connectors)				2900-50-0010MR

Testing





Tool Kit Contents

FAST Connector Universal Tool Kit

The FAST Connector Universal Tool Kits provide all the necessary installation tools required for fiber preparation of 250 μm or 900 μm fibers, or 900 μm, 2 mm or 3 mm cordage for AFL's pre-polished FAST connectors. Featuring either the CT-30A or CT-05 fiber cleaver, the FAST Connector Universal Tool Kit contains all the industry standard termination tools required for fiber preparation. Additionally, the carrying case has adequate storage for extra FAST connectors for on-site convenience.

Applications

- Premise environments
- LAN Fiber to the Desk environments
- Patch panel/wiring closets
- FTTx applications
- Quick repair/replacement areas

Features

- Industry standard fiber preparation tools
- Compact design, flexible yet rugged case
- Complete instructions provided



CT-30A Cleaver

Ordering Information

DESCRIPTION	AFL NO.
FAST Connector High Precision UPC/PC Tool Kit with CT-30A Cleaver	CS001201
FAST Connector High Precision UPC/PC Tool Kit with CT-05 Cleaver	CS010975
FAST Connector APC (Angle/Angle Connector) Tool Kit with CT-11A Cleaver	CS012290

Tool Kits include: Cleaver, FAST SC Assembly Tool, FAST LC Assembly Tool, 3 mm Cable Clamp, 2 mm Cable Clamp, 0.25/0.9 mm Cable Clamp, Fiber Stripper, Kevlar Scissors, Fiber Preparation Fluid, Lint-free Cloth Wipes, Marker Pen, Installation Instructions, Strip Length Template, Assembly Video (CD) and a Carrying Case.



CT-05 Cleaver



CT-11A Cleaver

Field Master® Connectors



Field Master Connectors for field termination of fiber optics feature high precision, high reliability and low applied connector cost. Durable metal components, industry-standard connector designs, and proven crimp technology give the customer peace-of-mind that their installed network is steady and reliable. Field Master Tool Kits come complete with all necessary tools and consumables for the professional installation of Field Master Connectors.

Features

- High precision ceramic ferrules ensure fiber alignment and repeatable performance
- Rugged metal connector bodies provide sturdy cable terminations
- Industry standard interfaces allow interoperability with media equipment
- Meets EIA/TIA 568B performance requirements
- Field proven crimp technology improves connector/cable tensile performance

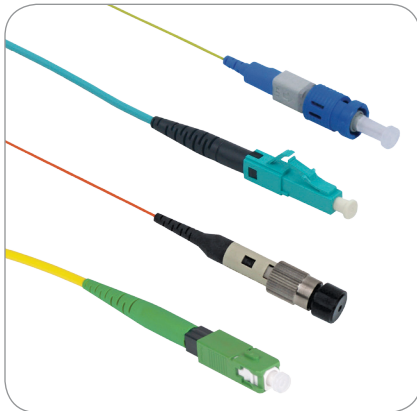
Applications

- Premise environments
- Desk for LAN environments
- Patch panels
- Direct equipment termination
- Fiber to the Subscriber (FTTx) applications
- Repair / replacement requirements

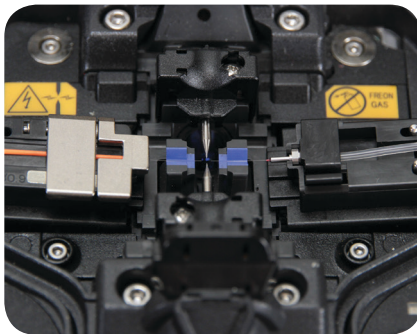
Ordering Information

CONNECTOR	FIBER TYPE	BOOT COLOR	AFL NO.*
SC Field Master Connector (900 μm boot)	Multimode	Black	CS000308
SC Field Master Connector (3.0 mm boot)	Multimode	Beige	CS000309
SC Field Master Connector (900 μm & 3.0 mm boot)	Multimode	Black /Beige	CS005144
SC Field Master Connector (900 μm boot)	Single-mode	Blue	CS000310
SC Field Master Connector (3.0 mm boot)	Single-mode	Blue	CS000311
SC Field Master Connector (900 μm & 3.0 mm boot)	Single-mode	Blue	CS005145
ST Field Master Connector (900 μm boot)	Multimode	Black	CS000316
ST Field Master Connector (3.0 mm boot)	Multimode	Black	CS000317
ST Field Master Connector (900 μm & 3.0 mm boot)	Multimode	Black	CS005147
ST Field Master Connector (900 μm boot)	Single-mode	Blue	CS000318
ST Field Master Connector (3.0 mm boot)	Single-mode	Blue	CS000319
ST Field Master Connector (900 μm & 3.0 mm boot)	Single-mode	Blue	CS005148
LC Field Master Connector (900 μm boot)	Multimode	White	CS000320
LC Field Master Connector (2.0 mm boot)	Multimode	White	CS000321
LC Field Master Connector (900 μm boot)	Single-mode	Blue	CS000322
LC Field Master Connector (2.0 mm boot)	Single-mode	Blue	CS000323
LC Duplex Field Master Connector (2.0 mm boot)	Multimode	White	CS000467
LC Duplex Field Master Connector (2.0 mm boot)	Single-mode	Blue	CS000466

* Packaged 100 pieces per bag.



FuseConnect Connectors (SC, FC, LC, ST)



FuseConnect in Fusion Splicer



FuseConnect Kits—ST (aqua), SC (green), LC (blue)

FuseConnect Fusion Spliced Field Installable Connectors

AFL's FuseConnect fusion spliced, field installable connectors are uniquely designed and feature only four to five components. The factory pre-polished ferrule eliminates the need for polishing, adhesives, and crimping in the field, which minimizes the potential for operator error and expensive connector scrap.

FuseConnect utilizes a fusion splicer to terminate the connector in the field, addressing return loss concerns present in analog optical networks. This advanced process yields true APC performance for SC/APC and LC/APC configurations, and is compliant to GR-326-CORE. FuseConnect is compatible with Fujikura fusion splicers and most other fiber holder-based fusion splicing platforms.

Features

- Field installable
- No adhesives, crimping or polishing
- True APC performance
- MM compliant to TIA/EIA568C.3
- Compatible with most fusion splicers

Applications

- Connectorization in:
 - RF-overlay FTTP networks
 - Cable TV backbone networks
 - Outside plant
 - FTDD
 - MDU FTTP Cabling
- Central office connector replacement
- Data center installation

Specifications

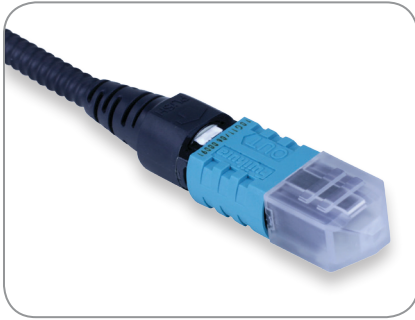
PARAMETER	VALUE
Connector Type	SC, LC, FC, ST
Cable Type	900 μ m, 2 mm, 3 mm
Polish	APC, UPC, PC
Insertion Loss	SM: 0.15 dB (average), 0.3 dB (maximum) / MM: 0.10 dB (average), 0.3 dB (maximum)
Return loss	SM: \leq -65 dB (APC), \leq -55 dB (UPC) / MM: \leq -30 dB (PC)
Operating Temperature	-40°C to +75°C

Ordering Information

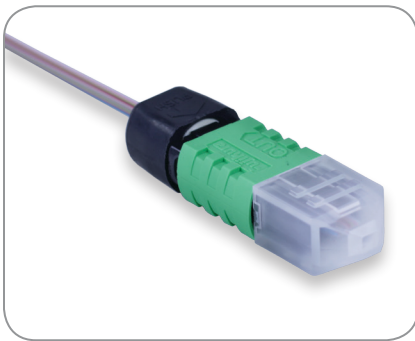
CONN. TYPE	BOOT TYPE	AFL NO.*				
		UPC SM (Blue)	APC SM (Green)	PC 62.5 μ m MM (Beige)	PC 50 μ m MM (Black)	PC 50 μ m LOMMF (AQUA)**
SC	900 μ m	FUSE-SC9SMU-6	FUSE-SC9SMA-6	FUSE-SC9M62-6	FUSE-SC9M50-6	FUSE-SC9M50L-6
	3 mm	FUSE-SC3SMU-6	FUSE-SC3SMA-6	FUSE-SC3M62-6	FUSE-SC3M50-6	FUSE-SC3M50L-6
LC	900 μ m	FUSE-LC9SMU-6	FUSE-LC9SMA-6	FUSE-LC9M62-6	FUSE-LC9M50-6	FUSE-LC9M50L-6
	2 mm	FUSE-LC2SMU-6	FUSE-LC2SMA-6	FUSE-LC2M62-6	FUSE-LC2M50-6	FUSE-LC2M50L-6
FC	900 μ m	FUSE-FC9SMU-6	—	FUSE-FC9M62-6	FUSE-FC9M50-6	FUSE-FC9M50L-6
	2 mm	FUSE-FC2SMU-6	—	FUSE-FC2M62-6	FUSE-FC2M50-6	FUSE-FC2M50L-6
	3 mm	FUSE-FC3SMU-6	—	FUSE-FC3M62-6	FUSE-FC3M50-6	FUSE-FC3M50L-6
ST	900 μ m	FUSE-ST9SMU-6	—	FUSE-ST9M62-6	FUSE-ST9M50-6	FUSE-ST9M50L-6
	2 mm	FUSE-ST2SMU-6	—	FUSE-ST2M62-6	FUSE-ST2M50-6	FUSE-ST2M50L-6
	3 mm	FUSE-ST3SMU-6	—	FUSE-ST3M62-6	FUSE-ST3M50-6	FUSE-ST3M50L-6

* AFL NO. is for one pack of 6 pieces

** Laser Optimized MM Fiber (LOMMF) compatible with OM3 and OM4 fibers



FuseConnect MPO Connectors, Cable



FuseConnect MPO Connectors, Ribbon

FuseConnect MPO Fusion Spliced Field-Terminated Connectors

AFL’s FuseConnect MPO fusion-spliced, field-terminated connectors are uniquely designed and feature just six components. With a factory pre-polished ferrule, its innovative field-termination process eliminates polishing, adhesives and crimping in the field minimizing the potential for operator error and expensive connector scrap.

Designed to Fiber Optic Connector Intermateability Standard (FOCIS), Type MPO, FOCIS-5, TIA-604-5-C, AFL’s FuseConnect MPO performs as an equivalent to the standard factory terminated MPO/MTP® assemblies. Designed to utilize either ribbon or loose tube cable, this connector helps to minimize the complexity involved in the termination of a multi-fiber connection, allowing for a reliable and repeatable termination in field applications.

FuseConnect MPO is part of the FuseConnect series splice-on connector which includes the SC, LC, ST and FC that require a fusion splicer and accessories for installations. The AFL FuseConnect MPO Termination Kit specifically provides all the necessary accessories required for field termination of the FuseConnect MPO.

Features

- Field installable splice-on connector
- Only six components
- No adhesives, crimping or polishing
- TIA-568-C.3, IEC-61754-7, and TIA/EIA-604-5 FOCIS 5 Compliant
- Field MPO polarity customization
- Include 3.0 mm round and optical fiber ribbon flat boots in each pack

Applications

- Connectorization in:
 - RF-overlay FTTP networks
 - Cable TV backbone networks
 - Outside plant
 - MDU FTTP Cabling
- Connector restoration in the field
- Data center installation
- Patch cord customization in the field

Specifications

PARAMETER		VALUE
Insertion Loss	Single-mode (OS1)	Average: 0.25 dB; Max: 0.75 dB
	62.5/125 (OM1)	Average: 0.10 dB; Max: 0.35 dB
	50/125 (OM2)	Average: 0.10 dB; Max: 0.35 dB
	50/125 LO (OM3)	Average: 0.10 dB; Max: 0.35 dB
Return Loss	Single-mode (OS1)	> 65 dB
	62.5/125 (OM1)	> 30 dB
	50/125 (OM2)	> 30 dB
	50/125 LO (OM3)	> 30 dB
Operating Temperature		-40°C to +75°C

continued on next page

FuseConnect MPO Fusion Spliced Field-Terminated Connectors

Ordering Information

AFL NO.*	CONNECTOR TYPE	FIBER TYPE	POLISH	CABLE SIZE		HOUSING COLOR
				ROUND	FLAT	
FUSEMPO-SMA-3-M-6	MPO, Male (guide pins)	Single-mode (OS1)	APC	3.0 mm	250 μm	Green
FUSEMPO-SMA-3-F-6	MPO, Female (No Guide Pins)	Single-mode (OS1)	APC	3.0 mm	250 μm	Green
FUSEMPO-MM6-3-M-6	MPO, Male (guide pins)	Multimode 62.5 μm (OM1)	PC	3.0 mm	250 μm	Beige
FUSEMPO-MM6-3-F-6	MPO, Female (no guide pins)	Multimode 62.5 μm (OM1)	PC	3.0 mm	250 μm	Beige
FUSEMPO-MM5-3-M-6	MPO, Male (guide pins)	Multimode 50 μm (OM2)	PC	3.0 mm	250 μm	Black
FUSEMPO-MM5-3-F-6	MPO, Female (no guide pins)	Multimode 50 μm (OM2)	PC	3.0 mm	250 μm	Black
FUSEMPO-MM5L-3-M-6	MPO, Male (guide pins)	Multimode 50 μm 10Gig (OM3)	PC	3.0 mm	250 μm	Aqua
FUSEMPO-MM5L-3-F-6	MPO, Female (no guide pins)	Multimode 50 μm 10Gig (OM3)	PC	3.0 mm	250 μm	Aqua

*Pack of 6 pieces

Ordering Information – Accessories

DESCRIPTION	AFL NO.
TOOL KIT	
FuseConnect MPO Tool Kit	FUSEMPO-TL-KT
ACCESSORIES	
FuseConnect Ribbonize Tool	FUSE-RB-TL
FuseConnect Stripping Tool (3.0 mm, 2.8 mm, 2.0 mm, and 1.6 mm)	FUSE-ST-TL
FuseConnect MPO Assembly Tool	FUSE-AS-TL

SpliceConnect with Tool Kit

AFL's SpliceConnect is a mechanical splice that provides an inexpensive, quick alternative to mating fibers. Using V-groove technology, this splice maintains physical contact between the fibers. An assembly tool is used to ensure the fibers are mated correctly, resulting in <math><0.1\text{ dB}</math> insertion loss (typical for single-mode). The SpliceConnect secures both fiber and coating independently with the U-shaped sleeve, enhancing the strength against fiber twist.



Features

- Quick splicing time
- Minimal tools
- 250 μm and/or 900 μm fiber capabilities
- Both fiber and coating are secured independently

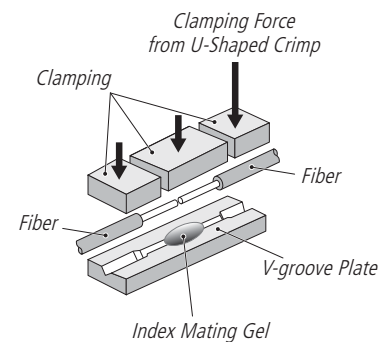
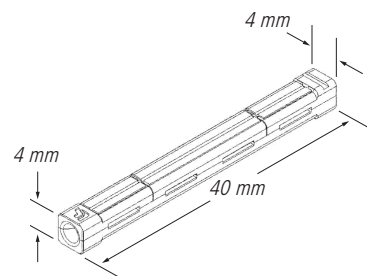
Applications

- Restoration
- Premise environments
- Fiber-to-the-Subscriber (FTTx) applications

Ordering Information

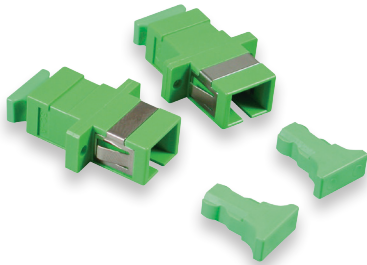
DESCRIPTION	AFL NO.
SpliceConnect Mechanical Splices (Bag of 6)	CS004154
SpliceConnect Mechanical Splice Tool Kit	CS004162
<i>Kit Includes:</i>	
SpliceConnect Mechanical Splicing Tool	CS004155
Fiber Holder, 250 μm	CS004442
Fiber Holder, 900 μm	CS004443
Instruction Manual	CS004159
Instruction Video	CS004160
Carrying Case	CS004161
SpliceConnect Mechanical Splicing Tool	CS004155
Fiber Holder, 250 μm	CS004442
Fiber Holder, 900 μm	CS004443

Dimensions and Structure

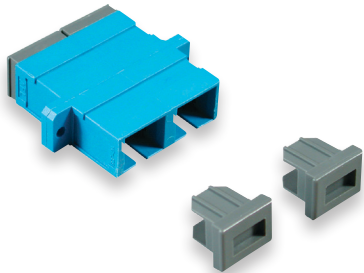


SC Adapters

SC adapters are used to mate industry standard SC connectors. Adapters are available with metal and ceramic alignment sleeves, and are color coded for easy identification. The duplex adapters accept two simplex connectors or one duplex connection. Hybrids are available for special applications.



SC Simplex Adapters



SC Duplex Adapters

SC Simplex Adapters

TYPE	MODE	DESCRIPTION	SLEEVE	COLOR	AFL NO.
SC Simplex	MM	SC-A Type	Ceramic	Beige	C209560
SC Simplex	MM	SC-A Type	Metallic	Beige	C209563
SC Simplex	SM	SC-A Type	Ceramic	Blue	C028851
SC Simplex	SM	Short Flange	Ceramic	Blue	C058475
SC Simplex	SM	SC-A Type	Ceramic	Plated	C002766
SC Simplex	SM	SC-A Type	Metallic	Blue	C033235
SC Simplex	SM	Short Flange	Metallic	Blue	C057037
SC Simplex	SM	SC-A Type	Metallic	Plated	C002507
SC Simplex	SM / AP	SC-A Type	Ceramic	Green	C080810
SC Simplex	SM / AP	Short Flange	Ceramic	Green	C147880

SC Duplex Adapters

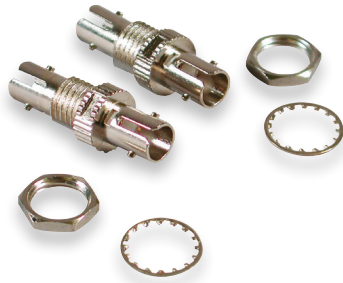
TYPE	MODE	DESCRIPTION	SLEEVE	COLOR	AFL NO.
SC Duplex	MM	Long Flange	Metallic	Beige	C209383
SC Duplex	MM	Long Flange	Ceramic	Beige	C209081
SC Duplex	SM	No Clip / Screw Mount	Ceramic	Blue	C094862
SC Duplex	SM	Long Flange	Ceramic	Blue	C092258
SC Duplex	SM	Long Flange	Metallic	Blue	C092266

FC Adapters

FC adapters connect industry standard FC connectors and are available in Square-Mount, D-Mount and Flange-Mount versions. Our FC adapters feature a metal body for long life and are available with either ceramic or metallic sleeves. The FC D-Mount adapter easily installs into panel mount applications and conforms to JIS C5970. FC Square-Mount meets Bellcore GA326 and the angle polish versions meet the industry standard 2.0 mm key width. An assortment of hybrid configurations is available.



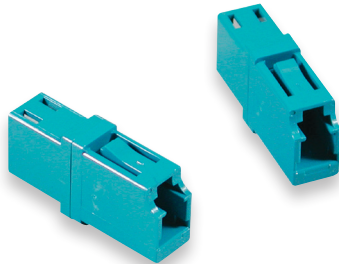
TYPE	MODE	DESCRIPTION	INSERT	COLOR	AFL NO.
FC Simplex	SM / AP	Square Mount	Ceramic	Metal	C143346
FC Simplex	SM	Square Mount	Ceramic	Metal	C146558R
FC Simplex	SM	D Mount	Metallic	Metal	C143680
FC Simplex	SM / AP	D Mount	Ceramic	Metal	C146566
FC Simplex	SM	D Mount	Ceramic	Metal	C145357
FC Simplex	SM	Square Mount Die Cast	Metallic	Metal	C066443



ST Adapters

ST adapters connect industry standard ST connectors and are available in D-Mount and Flange-Mount versions. ST adapters are available with ceramic or metallic sleeves, feature a metal body for long life, and easily install in panel mount applications.

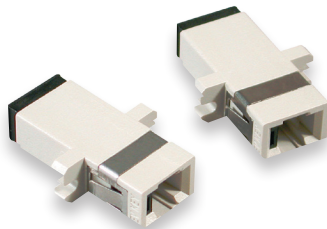
TYPE	MODE	DESCRIPTION	INSERT	COLOR	AFL NO.
ST Simplex	SM Only	D Mount	Ceramic	Metal	C094994
ST Simplex	MM Only	D Mount	Metallic	Metal	C096377



LC Adapters

LC style adapters are used in high density applications and feature a quick plug in installation. Adapters are available in both simplex and duplex designs and utilize high quality zirconia and phosphorous bronze sleeves. The LC duplex adapter uses the same cutout as the copper RJ-45, resulting in less redesign work when retrofitting existing panels.

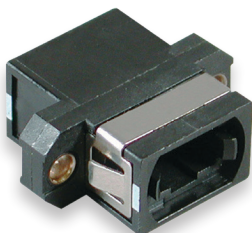
TYPE	MODE	INSERT	COLOR	AFL NO.
LC Duplex	SM	Ceramic	Blue	C178298
LC Duplex	SM/AP	Ceramic	Green	C203962
LC Duplex	MM	Metallic	Beige	C203956
LC Simplex	SM	Ceramic	Blue	C207202
LC Simplex	MM	Ceramic	Beige	C207205



MT-RJ Adapters

MT-RJ adapters connect industry standard MT-RJ connectors in high-density applications. MT-RJ adapters are keyed for proper alignment and conform to RJ-45 modular plates. Mounting hardware is not included.

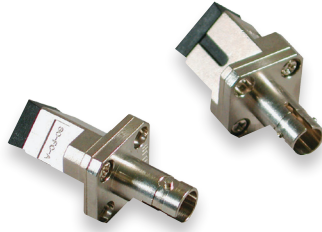
TYPE	MODE	DESCRIPTION	INSERT	COLOR	AFL NO.
MT-RJ Duplex	MM	Flange Mount	—	Beige	C196855



MTP Adapters

The MTP adapter connects two industry standard MTP connectors. The compact MTP adapter measures 25 mm x 10 mm and is found in high density applications.

TYPE	MODE	DESCRIPTION	INSERT	COLOR	AFL NO.
MTP	SM/MM	Flange Mount	—	Black	C057010
MTP (aligned keyway)	SM/MM	Flange Mount	—	Grey	CS000211



Hybrid Adapters

Hybrid FC, SC and ST adapters are available to fit specific application needs.

TYPE	MODE	DESCRIPTION	INSERT	COLOR	AFL NO.
FC - SC Simplex	SM / AP	Angled Adapter	Ceramic	Stainless Steel	C130082
FC - SC Simplex	SM	Square Mount	Metallic	Stainless Steel	C004127
FC - ST Simplex	SM	Square Mount	Metallic	Stainless Steel	C002401
FC - ST Simplex	SM	Square Mount	Ceramic	Stainless Steel	C032980
SC - FC Simplex	SM	Flat Mount	Metallic	Stainless Steel	C033022
SC - FC Simplex	SM	Square Mount	Ceramic	Stainless Steel	C002453
SC - FC Simplex	SM	Flat Mount	Ceramic	Stainless Steel	C033030
SC - ST Simplex	SM	Flat Mount	Metallic	Blue	C002499
SC - ST Simplex	SM	Square Mount	Metallic	Stainless Steel	C004133
SC - ST Simplex	SM	Flat Mount	Ceramic	Blue	C024392
SC - ST Simplex	SM	Flat Mount	Ceramic	Stainless Steel	C038733



Buildout Attenuators

Buildout attenuators provide superior performance for all single-mode in-line attenuation requirements. Standard attenuation values are 5, 10, 15, and 20 dB, available in SC, FC, ST, and LC connector styles. Using no air gap, filters, or light path discontinuities, attenuation is achieved by controlled absorption of light energy. This results in a polarization insensitive device with high power handling capability, environmentally stable, and exceptionally responsive, across a wide bandpass range.

Features

- SC, FC, ST, and LC connector styles (Ultra & Angled Polish)
- Long-term reliability
- Low ripple, wavelength independent attenuation
- Certified to >125 mW continuous power handling capability with no performance degradation
- Polarization insensitive
- Telcordia approved

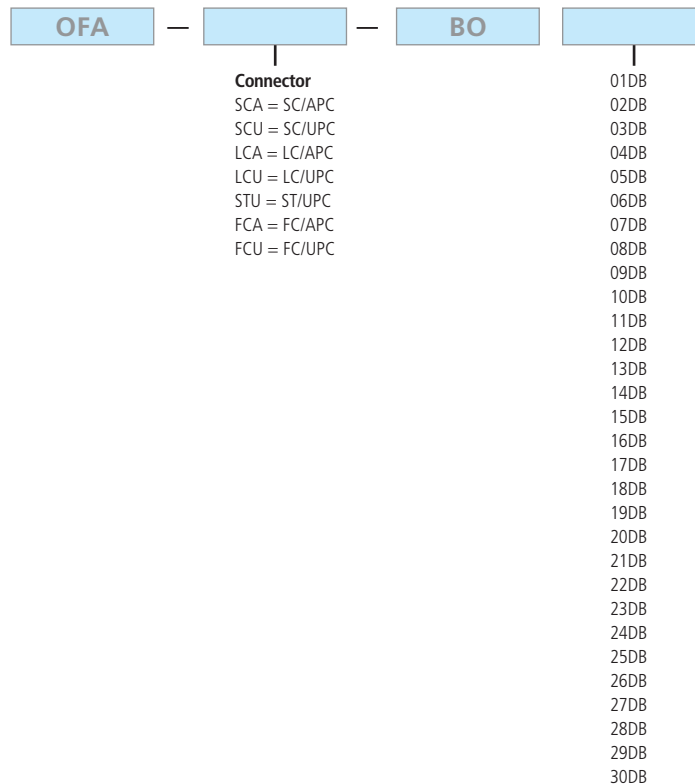
Application

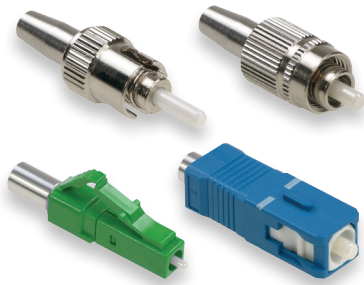
- Broadband Network
- Fiber in the Loop
- Local Area Networks (LAN)
- Long Haul Telecommunications (CLEC, CAPS)
- Network Testing
- Passive Optical Networks
- Telco

Specifications

PARAMETER	VALUE
Standard Attenuation Values	5, 10, 15 and 20 dB
Attenuation Tolerance	Standard at 10%
Vibration resistance	<0.1X attenuation value
Operating Temperature Range:	-40°C to +75°C
Storage Temperature Range:	-40°C to +85°C

Ordering Information





Optical Terminators

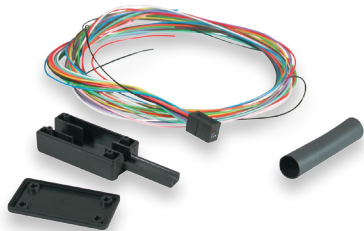
Optical terminators are used to terminate unused connector ports in fiber optic systems so that unwanted reflections are not introduced back into the system. All AFL optical terminators feature zirconia ferrules for long life and durability.

Specifications

PARAMETER	VALUE
Reflectance	<-55 dB (ultra polish)
Reflectance	<-60 dB (angle polish)
Operating Temperature	-40°C to +85°C
Operating Wavelength	1260 nm to 1580 nm

Ordering Information

DESCRIPTION	AFL NO.
SC/UP Terminator	C067393
SC/AP Terminator	C148828
FC/UP Terminator	C067407
FC/AP Terminator	C082562
ST/UP Terminator	C167083
LC/UP Terminator	CS000637
LC/AP Terminator	CS000638










Fanout Kits

Fanout kits route 250 μm fiber into 900 μm tubes ready for connectorization. Easily installed in minutes, these kits require no special tools. Color-coded tubing allows easy identification. The furcation unit snaps together, eliminating epoxy. Loose tube fanout kits are available in 6 and 12 fiber configurations.

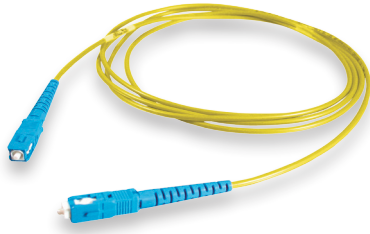
Ordering Information

CABLE TYPE	FIBER COUNT	LENGTH	AFL NO.
Loose Tube Fanout Kit (for 3.0 mm tube)	6 Fibers	24 inches	C189826
Loose Tube Fanout Kit (for 3.0 mm tube)	12 Fibers	24 inches	C189818
Ribbon-Link® Fanout Kit	6 Fibers	36 inches	C189842
Ribbon-Link Fanout Kit	12 Fibers	36 inches	C189834
Uni-Tube Fanout Kit	6 Fibers	36 inches	C193114
Uni-Tube Fanout Kit	12 Fibers	36 inches	C193122

Connector Specifications

PARAMETER	CONNECTOR													
	SC		FC		ST		LC		MTP		MT-RJ		MU	
Single-mode Assemblies														
Image														
	Ultra	Angle	Ultra	Angle	Ultra	Angle	Ultra	Angle	Flat	Angle	Ultra	Angle	Ultra	Angle
Insertion loss (dB)														
Maximum	0.2	0.25	0.2	0.25	0.2	—	0.2	0.25	—	0.75	0.5	—	0.25	—
Typical	0.15	0.2	0.25	0.2	0.15	—	0.15	0.15	—	0.35	0.25	—	0.2	—
Return Loss (dB)														
Minimum	-55 dB	-65 dB	-55 dB	-65 dB	-55 dB	—	-55 dB	-65 dB	—	-55 dB	-35 dB	—	-55 dB	—
Temp Range (°C)	-40 to +85		-40 to +85		-40 to +85		-40 to +85		-40 to +75		-40 to +75		-40 to +85	
Durability Cycles	500		500		500		500		200		200		500	

Multimode Assemblies														
Insertion loss (dB)														
Maximum	0.5	—	0.5	—	0.5	—	0.5	—	0.75	—	0.5	—	0.5	—
Typical	0.25	—	0.25	—	0.25	—	0.25	—	0.35	—	0.25	—	0.25	—
Return Loss (dB)														
Minimum	-30 dB	—	-30 dB	—	-30 dB	—	-30 dB	—	-30 dB	—	-20 dB	—	-20 dB	—
Temp Range (°C)	-40 to +85		-40 to +85		-40 to +85		-40 to +85		-40 to +75		-40 to +75		-40 to +85	
Durability Cycles	500		500		500		500		200		200		500	
Cable Options	Simplex/Duplex 900 µm 1.6 mm 2.0 mm 2.4 mm 3.0 mm		Simplex/Duplex 900 µm 1.6 mm 2.0 mm 2.4 mm 3.0 mm		Simplex/Duplex 900 µm 1.6 mm 2.0 mm 2.4 mm 3.0 mm		Simplex/Duplex 900 µm 1.6 mm 2.0 mm		Bare Ribbon Jacketed Ribbon 8-12 Fiber Count		Bare Ribbon Jacketed Ribbon Dual Link Zipcord		900 µm 2.0 mm	
Applications	Telephony CATV/Broadband Telco Backplanes LAN/WAN		Telephony CATV/Broadband Telco Backplanes LAN/WAN		Telephony CATV/Broadband Telco Backplanes LAN/WAN		Telephony CATV/Broadband Telco Backplanes LAN/WAN		Telephony CATV/Broadband Telco Backplanes LAN/WAN		Telephony CATV/Broadband Telco Backplanes LAN/WAN		Telephony CATV/Broadband Telco Backplanes LAN/WAN	



Simplex Cable Assemblies

Simplex cable assemblies are offered with a variety of combinations. Connectors include SC, FC, ST, LC and MU. 3.0 mm, 2.0 mm, 1.6 mm, and 900 µm simplex cables in riser and plenum are available.

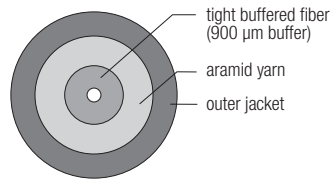
Features

- 3.0 mm, 2.0 mm, 1.6 mm, and 900 µm cable diameter available
- RoHS compliant – Riser, Plenum, and LSZH rated cables available
- Cable compliant with Telcordia® GR-409
- Connectors compliant with Telcordia GR-326

Applications

- Building interconnections (campus LAN)
- Trunking lines direct to telecommunications closet
- Fiber patch panels within communications closets
- Links between electronic equipment and fiber patch panels

Cable Components



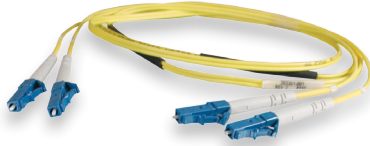
Ordering Information

ASC	ASC	RS	001	Q	0010
Connector End A	Connector End B	Cable Type	Fiber Count	Fiber Type	Cable Length (meters)
Single-mode ASC = Angle SC AFC = Angle FC ALC = Angle LC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC UMA = Ultra MU UMJ = Ultra MU-J	Single-mode ASC = Angle SC AFC = Angle FC ALC = Angle LC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC UMA = Ultra MU UMJ = Ultra MU-J XXX = No connector	RS = 3.0 mm Riser PS = 3.0 mm Plenum RM = 1.6 m Riser PM = 1.6 mm Plenum RT = 2.0 mm Riser PT = 2.0 mm Plenum JH = 900 µm	001 = 1	Q = Single-mode R = Multimode 50/125 2 = Multimode 62.5/125 L = 10G Laser Link 300	0010 = 10 meters (specify length)
Multimode PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM	Multimode PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM XXX = No connector				

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Two-Fiber Cable Assemblies

Zipcord, Dual-Link and Ribbon cables are used to meet the requirements for two-fiber cable assemblies, utilizing SC, FC, ST, LC, MU and MT-RJ connectors.



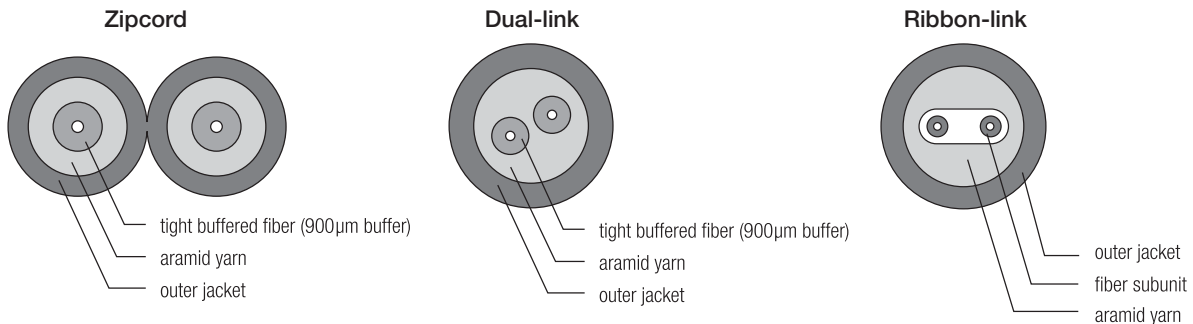
Features

- Flexible, 2-fiber design
- RoHS compliant – Riser, Plenum and LSZH rated cables available
- Cable compliant with Telcordia® GR-409
- Connectors compliant with Telcordia GR-326

Applications

- FDDI, 10 Gigabit Ethernet, ATM and Fiber Channel protocols
- Communications closet to wall outlet
- Wall outlet to desk
- Interconnect and cross-connect applications

Cable Components



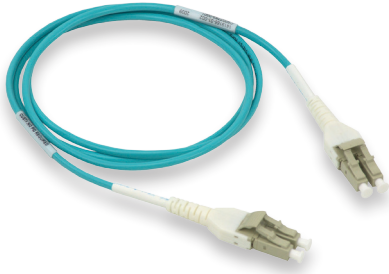
Ordering Information

UST	UST	RD	002	Q	0010
Connector End A	Connector End B	Cable Type	Fiber Count	Fiber Type	Cable Length (meters)
<p>Single-mode</p> <p>ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC USF = Ultra SC Duplex UDL = Ultra LC Duplex SJF = MT-RJ Female SJM = MT-RJ Male</p> <p>Multimode</p> <p>PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM PSF = SC Duplex MM PDL = LC Duplex MM PJF = MT-RJ Female MM PJM = MT-RJ Male MM</p>	<p>Single-mode</p> <p>ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC USF = Ultra SC Duplex UDL = Ultra LC Duplex SJF = MT-RJ Female SJM = MT-RJ Male XXX = No connector</p> <p>Multimode</p> <p>PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM PSF = SC Duplex MM PDL = LC Duplex MM PJF = MT-RJ Female MM PJM = MT-RJ Male MM XXX = No connector</p>	<p>RZ = 3.0 mm Riser Zipcord PZ = 3.0 mm Plenum Zipcord R20Z = 2.0 mm Riser Zipcord P20Z = 2.0 mm Plenum Zipcord R16Z = 1.6 mm Riser Zipcord P16Z = 1.6 mm Plenum Zipcord RD = Riser Dual Link PD = Plenum Dual Link</p>	002 = 2	<p>Q = Single-mode ITU-T G.652D</p> <p>X = Single-mode ITU-T G.657A BIF</p> <p>2 = Multimode 62.5/125 µm OM1</p> <p>R = Multimode 50/125 µm OM2</p> <p>L = Multimode 50/125 µm OM3/10G</p>	<p>XXXX (specify length) 0010 = 10 meters</p>

NOTES: 1. Refer to Connector Specifications page.

* Single connector options, quantity two per end. Duplex connectors are assembled with removable clip.

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LC Uniboot Cable Assemblies

AFL's LC Uniboot terminated cable assemblies offer a more compact design when compared to traditional duplex zipcord assemblies. These assemblies contain two LC connectors encased in a common housing with one boot, terminated on a single, round, two-fiber cable. Utilizing AFL's DUAL-Link 2.8 mm premise cable, LC Uniboot assemblies condense the cable management to half the space used by regular zipcord assemblies. AFL's LC Uniboot cable assemblies offer the best solution for high-density applications.

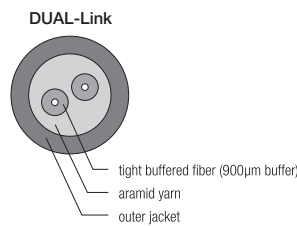
Features

- LC duplex connector uses a single housing and single boot
- 2.8 mm DUAL-Link cable; Riser, Plenum, and LSZH rated cables available
- RoHS compliant
- Connectors compliant with Telcordia® GR-326, TIA/EIA-604-10A(FOCIS 10)
- Cable compliant with Telcordia GR-409

Applications

- Private networks
- Data centers
- High density applications
- Interconnect and cross-connect
- Premise installations

Cable Components



Specifications

PARAMETER	VALUE
Insertion Loss (typical)	0.15 dB (SM/MM)
Return Loss (typical)	-55 dB (SM), -30 dB (MM)
Durability	500 cycles
Operating Temperature	-40°C to +85°C
Ferrule	Zirconia

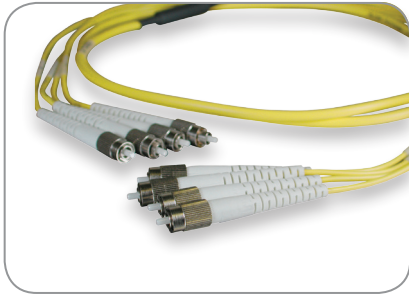
Ordering Information:

LC Uniboot to LC Uniboot, 2.8 mm Riser DUAL-Link Cable

FIBER TYPE	AFL NO.
62.5/125 µm (OM1)	CS007814-XXXX
50/125 µm (OM2)	CS008116-XXXX
50/125 µm 10gig 300 (OM3)	CS007783-XXXX
50/125 µm 10gig 550 (OM4)	CS009233-XXXX
Single-mode	CS009234-XXXX

XXXX = Length (meters)
Example: 0010 = 10

Contact AFL Customer Service for information regarding plenum and LSZH rated assemblies.



Quad Cable Assemblies

Quad cable assemblies are available in a wide variety of configurations, to fit exact application needs. These assemblies are offered using four 900um coated fibers in one circular cable, featuring a 4.8mm outer diameter.

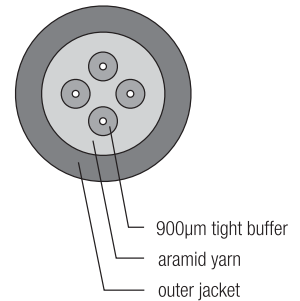
Features

- 4.8mm cable diameter allows flexibility and easy routing
- RoHS compliant - Riser, Plenum, and LSZH rated cables available
- 900um tight buffered fibers allow direct termination (no furcation needed)
- Cable tested to meet or exceed EIA/TIA 568-A/GR-409-CORE
- Connectors compliant with Telcordia GR-326

Applications

- Loaded Panels
- Communications cables with both send-and-receive in a single unit
- Routing between communications closets and equipment rooms
- Intrabuilding backbones

Cable Components

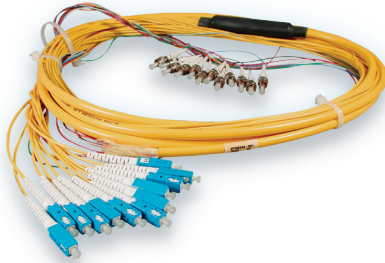


Ordering Information

ASC	ASC	RQ	004	Q	0010	NF
Connector End A	Connector End B	Cable Type	Fiber Count	Fiber Type	Cable Length (meters)	Leg Diameter
Single-mode ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC USF = Ultra SC Duplex UDL = Ultra LC Duplex SJF = MT-RJ Female SJM = MT-RJ Male	Single-mode ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC USF = Ultra SC Duplex UDL = Ultra LC Duplex SJF = MT-RJ Female SJM = MT-RJ Male XXX = No connector	RQ = Quad Riser PQ = Quad Plenum	004 = 4	Q = Single-mode ITU-T G.652D X = Single-mode ITU-T G.657A BIF 2 = Multimode 62.5/125µm OM1 R = Multimode 50/125µm OM2 L = Multimode 50/125µm OM3/10G	XXXX (specify length) 0010 = 10 meters	NN = Non-furcated, both ends 900µm FF = Furcated both ends NF = 900µm end A, Furcated end B
Multimode PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM PSF = SC Duplex MM PDL = LC Duplex MM PJF = MT-RJ Female MM PJM = MT-RJ Male MM	Multimode PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM PSF = SC Duplex MM PDL = LC Duplex MM PJF = MT-RJ Female MM PJM = MT-RJ Male MM XXX = No connector					

NOTES: 1. Refer to Connector Specifications page.
 2. Duplex connectors are assembled with removable clip.

Circular Premise Cable (CPC) Assemblies



High-fiber count Circular Premise Cable (CPC) assemblies provide safe and cost effective installation for many applications. These assemblies help eliminate labor-intensive field termination, yet guarantee reliable performance. Featuring a unified construction for easy fiber identification and rapid installation, these assemblies are built to exceed all TIA and Telcordia® requirements.

Features

- 6-144 fibers with aramid yarn reinforcement for rugged protection
- Highly flexible for ease of routing
- RoHS compliant - Riser, Plenum and LSZH rated cables available
- Pre-installed pulling eye kits available on certain products
- 1 meter standard breakout (other lengths are custom)
- 900 µm tight buffered fibers allows direct termination; 2.0 mm furcation available
- Cable tested to meet or exceed EIA/TIA 568-A/GR-409-CORE
- Telcordia GR-326 compliant connectors

Applications

- Head-end termination to a fiber "backbone"
- Termination of fiber rack systems
- Multi-floor deployment where select fibers are used at each floor
- Intrabuilding "backbones"

Ordering Information

ASC	ASC	RC	012	Q	0010	NN
Connector End A	Connector End B	Cable Type	Fiber Count	Fiber Type	Cable Length (meters)	Leg Diameter
Single-mode ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC Multimode PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM	Single-mode ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC UST = Ultra ST ULC = Ultra LC XXX = No connector Multimode PSC = SC MM PFC = FC MM PLC = LC MM PST = ST MM XXX = No connector	RC = Riser (CPC) PC = Plenum (CPC)	006 = 6 012 = 12 024 = 24 036 = 36 048 = 48 072 = 72 096 = 96 144 = 144	Q = Single-mode ITU-T G.652D X = Single-mode ITU-T G.657A BIF 2 = Multimode 62.5/125 µm OM1 R = Multimode 50/125 µm OM2 L = Multimode 50/125 µm OM3/10G	XXXX (specify length) 0010 = 10 meters	N = 900 µm End A / XXX End B NN = 900 µm End A and B F = Furcated End A / XXX End B FF = Furcated Ends A and B FN = Furcated Ends A / 900 µm End B NF = 900 µm End A / Furcated Ends B

- NOTES:**
1. Refer to Connector Specifications page.
 2. Duplex SC and LC available

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Sub-Unitized MicroCore® Trunk Cable Assemblies

Sub-unitized MicroCore trunk cable assemblies provide high performance for premise installations where space is a premium. The small diameter, sub-unitized design offers twelve 250 µm colored fibers per tube, with aramid strength members enclosed by a PVC jacket, enabling high density architecture. The cable allows quick and efficient termination of MTP connectors, as well as, breakout capability to single fiber connectors.

Features

- Sub-unitized design, with (12) 250 µm colored fibers per tube
- 12, 24, and 72 fiber counts (SM or 50 µm LOMMF) with active part numbers
- Small diameter provides superior bend performance
- Standard 2.0 mm zipcord furcation for single fiber connectors
- One meter standard breakout
- Cable jackets & connector housings color-coded for easy identification
- Sub-unit legs identified for ease of channel routing/traceability
- Cable tested to meet or exceed EIA/TIA 568-A/GR-409-CORE
- Telcordia® GR-326 compliant connectors

Applications

- Data center systems wiring
- MTP-MTP or MTP-Fanouts, and Single Fiber Connector Terminations
- Head-end termination to a fiber "backbone"
- Termination of fiber rack systems
- Multi-floor deployment where select fibers are used at each floor
- Intrabuilding "backbones"

Specifications

PARAMETER	SINGLE-MODE ASSEMBLIES					MULTIMODE ASSEMBLIES		
	LC		SC		MTP	LC	SC	MTP (LOW LOSS)
	ULTRA	ANGLED	ULTRA	ANGLED	ANGLED			
Insertion Loss (Typical dB)***	0.15	0.15	0.15	0.15	0.35	0.15	0.15	0.15
Insertion Loss (Maximum dB)	0.3	0.3	0.3	0.3	0.75	0.5	0.5	0.2
Return Loss (Typical dB)***	-60	-70	-60	-70	-65	-35	-35	-30
Return Loss (Minimum dB)	-55	-65	-55	-65	-55	-30	-30	-20
Temperature Range (°C)	-40 to +85	-40 to +85	-40 to +85	-40 to +85	-40 to +75	-40 to +85	-40 to +85	-40 to +75
Durability Cycles	500	500	500	500	200	500	500	200

*** Typical values based on equal quality connectors.

Ordering Information – MTP-MTP Assemblies

(Female MTPs on both ends – no pins)

(Polarity: Key Up/Key Up, Straight Through)

FIBER COUNT	FIBER	PULLING EYE	AFL NO.
12	Single-mode	No	CS009980-XXXX
12	Single-mode	Yes	CS009981-XXXX
24	Single-mode	No	CS009984-XXXX
24	Single-mode	Yes	CS009985-XXXX
72	Single-mode	No	CS009996-XXXX
72	Single-mode	Yes	CS009997-XXXX
12	50 µm 10gig 300 (OM3)	No	CS010649-XXXX
12	50 µm 10gig 300 (OM3)	Yes	CS010650-XXXX
24	50 µm 10gig 300 (OM3)	No	CS003700-XXXX
24	50 µm 10gig 300 (OM3)	Yes	CS009912-XXXX
72	50 µm 10gig 300 (OM3)	No	CS003720-XXXX
72	50 µm 10gig 300 (OM3)	Yes	CS010016-XXXX
12	50 µm 10gig 550 (OM4)	No	CS008420-XXXX
12	50 µm 10gig 550 (OM4)	Yes	CS010065-XXXX
24	50 µm 10gig 550 (OM4)	No	CS010100-XXXX
24	50 µm 10gig 550 (OM4)	Yes	CS010066-XXXX
72	50 µm 10gig 550 (OM4)	No	CS010101-XXXX
72	50 µm 10gig 550 (OM4)	Yes	CS010067-XXXX

NOTE: XXXX is length in meters.

Contact AFL Customer Service for additional polarity schemes available.

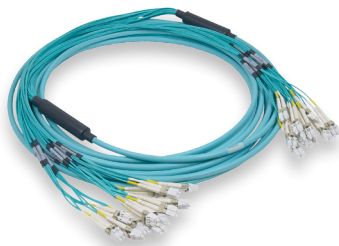
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Sub-Unitized MicroCore® Trunk Cable Assemblies



Ordering Information – MTP Fanout Assemblies (Male MTPs — Duplex Connectors)

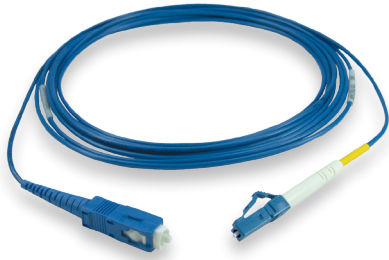
FIBER COUNT	FIBER	PULLING EYE	AFL NO.	
			MALE MTP-LC DUPLEX	MALE MTP-SC DUPLEX
12	Single-mode	No	CS009521-XXXX	CS010020-XXXX
12	Single-mode	Yes	CS0010017-XXXX	CS010021-XXXX
24	Single-mode	No	CS003796-XXXX	CS010022-XXXX
24	Single-mode	Yes	CS010018-XXXX	CS010023-XXXX
72	Single-mode	No	CS003811-XXXX	CS010024-XXXX
72	Single-mode	Yes	CS010019-XXXX	CS010025-XXXX
12	50 μm 10gig 300 (OM3)	No	CS011510-XXXX	CS010030-XXXX
12	50 μm 10gig 300 (OM3)	Yes	CS010027-XXXX	CS010031-XXXX
24	50 μm 10gig 300 (OM3)	No	CS003795-XXXX	CS010032-XXXX
24	50 μm 10gig 300 (OM3)	Yes	CS010028-XXXX	CS010033-XXXX
72	50 μm 10gig 300 (OM3)	No	CS003810-XXXX	CS010034-XXXX
72	50 μm 10gig 300 (OM3)	Yes	CS010029-XXXX	CS010035-XXXX
12	50 μm 10gig 550 (OM4)	No	CS009519-XXXX	CS010073-XXXX
12	50 μm 10gig 550 (OM4)	Yes	CS010068-XXXX	CS010074-XXXX
24	50 μm 10gig 550 (OM4)	No	CS010069-XXXX	CS010075-XXXX
24	50 μm 10gig 550 (OM4)	Yes	CS010070-XXXX	CS010076-XXXX
72	50 μm 10gig 550 (OM4)	No	CS010071-XXXX	CS010077-XXXX
72	50 μm 10gig 550 (OM4)	Yes	CS010072-XXXX	CS010078-XXXX



Ordering Information – LC and SC Trunk Assemblies (Duplex LC and SC Connectors)

FIBER COUNT	FIBER	PULLING EYE	AFL NO.		
			LC DUPLEX-LC DUPLEX	LC DUPLEX-SC DUPLEX	SC DUPLEX-SC DUPLEX
12	Single-mode	No	CS010036-XXXX	CS010038-XXXX	CS010042-XXXX
12	Single-mode	Yes	CS010037-XXXX	CS010039-XXXX	CS010043-XXXX
24	Single-mode	No	CS004602-XXXX	CS007203-XXXX	CS007201-XXXX
24	Single-mode	Yes	CS004603-XXXX	CS007204-XXXX	CS007202-XXXX
72	Single-mode	No	CS004618-XXXX	CS010040-XXXX	CS010044-XXXX
72	Single-mode	Yes	CS004619-XXXX	CS010041-XXXX	CS010045-XXXX
12	50 μm 10gig 300 (OM3)	No	CS010046-XXXX	CS010048-XXXX	CS010052-XXXX
12	50 μm 10gig 300 (OM3)	Yes	CS010047-XXXX	CS010049-XXXX	CS010053-XXXX
24	50 μm 10gig 300 (OM3)	No	CS004608-XXXX	CS007221-XXXX	CS007219-XXXX
24	50 μm 10gig 300 (OM3)	Yes	CS004609-XXXX	CS007222-XXXX	CS007220-XXXX
72	50 μm 10gig 300 (OM3)	No	CS004624-XXXX	CS010050-XXXX	CS010054-XXXX
72	50 μm 10gig 300 (OM3)	Yes	CS004625-XXXX	CS010051-XXXX	CS010055-XXXX
12	50 μm 10gig 550 (OM4)	No	CS010079-XXXX	CS010085-XXXX	CS010091-XXXX
12	50 μm 10gig 550 (OM4)	Yes	CS010080-XXXX	CS010086-XXXX	CS010092-XXXX
24	50 μm 10gig 550 (OM4)	No	CS010081-XXXX	CS010087-XXXX	CS010093-XXXX
24	50 μm 10gig 550 (OM4)	Yes	CS010082-XXXX	CS010088-XXXX	CS010094-XXXX
72	50 μm 10gig 550 (OM4)	No	CS010083-XXXX	CS010089-XXXX	CS010095-XXXX
72	50 μm 10gig 550 (OM4)	Yes	CS010084-XXXX	CS010090-XXXX	CS010096-XXXX

NOTE: XXXX is length in meters.



Bend Insensitive Cable Assemblies

AFL's single-mode bend insensitive cable assemblies enable tight bend radii and routing to minimize signal loss due to high traffic and/or densely packed patch panel routing installations. Available in simplex, duplex, quad (4 fiber) and octo (8 fiber) cable configurations, either ultra or angled polished interfaces can be requested, thereby meeting low insertion loss and high return loss system requirements.

Various standard connector interface options are available and meet Telcordia® GR-326 performance requirements.

Applications

- Service provider networks
- Central office and equipment buildings
- CATV carrier video systems

Features

CONNECTORS

- Ceramic ferrule utilized for precision fiber alignment
- Ribbed boot design on SC insures protected cable bending
- 40 degree LC boot option allows guided cable routing in DMX and DMXtend system applications
- Meets connector interface specifications of EIA.TIA-455 (FOCIS)
- All component materials are compliant to UL94 V-0
- Premium performance at standard grade prices
- Color-coded blue cable jacket identifies enhanced performance
- Tested in accordance with Telcordia GR-326, issue 3 specifications

CABLE

- Fujikura fiber enables tight bend radius control and low loss
- Long term performance at a bend radius <15 mm
- Simplex, Duplex Dual-link, Quad and 8-fiber cable constructions are RoHS compliant
- Cable constructions meet or exceed Telcordia GR-409

Specifications

PARAMETER		VALUE
Insertion Loss	max	0.25 dB
	typical	0.15 dB
Return Loss	max	-65 dB (APC), -55 dB (UPC)
	typical	-68 dB (APC), -58 dB (UPC)
Cable Bend Radius	minimum	< 15 mm
Durability		200 cycles
Operating Temperature		-40°C to +85°C
Storage Temperature		-40°C to +85°C

Ordering Information

SIMPLEX CABLE ASSEMBLIES, 2 MM JACKET DIAMETER

DESCRIPTION	AFL NO.
USC-USC	C063770B-XXXX
ULC-ULC	C213707B-XXXX
ASC-ASC	C202687B-XXXX
UFC-UFC	C185200B-XXXX
AFC-AFC	C202691B-XXXX
USC-ULC	C213712B-XXXX
USC-ASC	C202702B-XXXX
USC-UFC	C167091B-XXXX
USC-AFC	C202705B-XXXX
ASC-AFC	C202696B-XXXX
USC-ULC (40° LC boot)	CS001104B-XXXX

XXXX = Length (meters)
Example: 0010 = 10

DUPLEX DUAL-LINK CABLE ASSEMBLIES, 3.2 MM JACKET DIAMETER

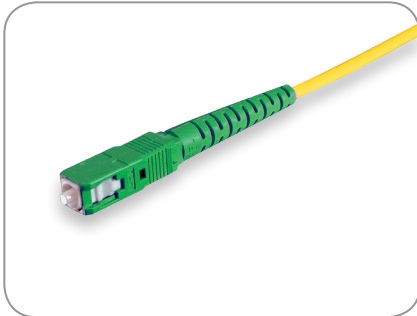
DESCRIPTION	AFL NO.
USC-USC	C141246B-X
ULC-ULC	CS000813B-XXXX
USC-ULC	CS000812B-XXXX
USC-UFC	C124414B-XXXX

QUAD 4-FIBER CABLE ASSEMBLIES, 4.7 MM JACKET DIAMETER

DESCRIPTION	AFL NO.
USC-USC	C183518B-XXXX
ULC-ULC	CS000818B-XXXX
USC-ULC	CS000661B-XXXX
USC-UFC	C178379B-XXXX

OCTO 8-FIBER CABLE ASSEMBLIES, 5.2 MM JACKET DIAMETER

DESCRIPTION	AFL NO.
USC-USC	CS000619B-XXXX
ULC-ULC	CS00815B-XXXX
USC-ULC	CS000814B-XXXX



SC Angled Pigtail Assemblies

AFL single-mode SC Angled Pigtail Assemblies are designed to meet stringent performance requirements of the latest FTTH (Fiber to the Home) applications. Available in either simplex (one fiber) or duplex zipcord (two fiber) construction, the SC angled connector guarantees the high performance return loss required of video signals. Assemblies are tested and qualified to Telcordia® GR-326, Issue 3 requirements and meet all EIA.TIA 455-3 (FOCIS 3) interface standards for SC connectors. The assemblies are provided in easy-to-install disposable packaging reels up to 300 feet, in 50-foot increments.

Applications

- Multi-Dwelling Unit (MDU) drop cables for FTTH systems
- CATV Video systems
- LAN Networks

Features

CONNECTORS:

- Tested in accordance with Telcordia GR-326, issue 3 specifications
- Meets SC interface specifications of EIA.TIA-455-3 (FOCIS 3)
- All component materials are compliant to UL94 V-0
- Ceramic ferrule utilized for precision fiber alignment
- Keyed push-pull latching mechanism
- Connector housings are color coded (Green) for APC identification and -65 dB return loss

CABLE:

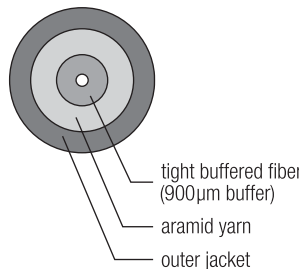
- Cable constructions meet or exceed Telcordia GR-409
- 3.0 mm cable diameter available in Riser and Plenum grade
- Simplex and Duplex zipcord cable construction, RoHS compliant
- Cable manufactured using Corning SMF-28e single-mode fiber

Specification

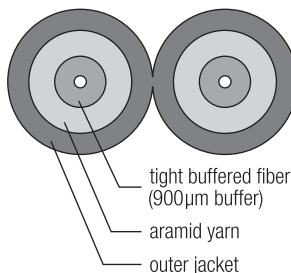
PARAMETER	VALUE	
Insertion loss	maximum	0.25 dB
	typical	0.15 dB
Return Loss	maximum	-65 dB
	typical	-68 dB
Durability	200 cycles	
Operating Temperature	-40°C to + 85°C	
Storage Temperature	-40°C to + 85°C	

Cable Components

Simplex



Duplex Zipcord



Ordering Information

RISER GRADE, SINGLE-ENDED, 3 MM

LENGTH (FEET)	AFL NO.	
	SIMPLEX	DUPLEX ZIPCORD
50	CS000686-0050	CS000688-0050
100	CS000686-0100	CS000688-0100
150	CS000686-0150	CS000688-0150
200	CS000686-0200	CS000688-0200
250	CS000686-0250	CS000688-0250
300	CS000686-0300	CS000688-0300

PLENUM GRADE, SINGLE-ENDED, 3 MM

LENGTH (FEET)	AFL NO.	
	SIMPLEX	DUPLEX ZIPCORD
50	CS000698-0050	CS000700-0050
100	CS000698-0100	CS000700-0100
150	CS000698-0150	CS000700-0150
200	CS000698-0200	CS000700-0200
250	CS000698-0250	CS000700-0250
300	CS000698-0300	CS000700-0300

PLENUM-RISER GRADE, SINGLE-ENDED, 3MM

LENGTH (FEET)	AFL NO.	
	SIMPLEX	DUPLEX ZIPCORD
50	CS000704-0050	CS000706-0050
100	CS000704-0100	CS000706-0100
150	CS000704-0150	CS000706-0150
200	CS000704-0200	CS000706-0200
250	CS000704-0250	CS000706-0250
300	CS000704-0300	CS000706-0300



Wideband Couplers

The dual window Wideband Couplers (WBC) split or couple optical power in two wavelength regions while maintaining a very broad operating bandwidth. Split and coupling ratios are available from 5% to 50%. WBCs are widely considered one of the most cost-effective solutions to optical power management. The WBC is an all-fiber device, based on AFL's fused biconic technology, and is designed and manufactured to meet military and Telcordia® requirements.

Features

- Dual window wideband operation
- Low insertion loss over entire bandwidth and temperature (typical IL change $\leq \pm 0.1$ dB)
- Ultra-low PDL and temperature sensitivity
- High directivity
- Compact design
- Environmentally stable, over 10 years of proven field reliability
- Standard operating temperature range -40°C to +85°C
- Fully tested to Telcordia 1209 and 1221 criteria

Applications

- Telecommunications
- CATV
- LAN
- Monitoring of Networks

Specifications

STANDARD AND PREMIUM GRADES

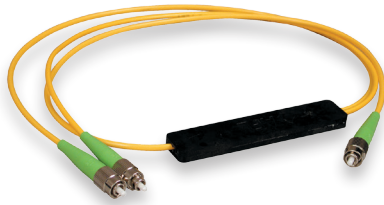
PARAMETER	VALUE
Operating Wavelength	1310 nm + 50 and 1550 nm + 50
Return Loss	55 dB
Directivity	55 dB
Package Dimension	3.2 mm (dia.) x 55 mm (L)
Operating Temperature	-40° to +85°C
Storage Temperature	-40° to +85°C

Ordering Information

SINGLE-MODE PREMIUM GRADE SPECIFICATIONS (MAX. INSERTION LOSS AND MAX. PDL)

RATIO	SPECIFICATIONS (DB)		AFL NO.
	PRIMARY/SECONDARY PORT	PDL (DB)	
50/50	3.6/3.6	0.15	C198364-P
55/45	3.2/4.1	0.15	C198358-P
60/40	2.7/4.7	0.14	C198353-P
65/35	2.3/5.3	0.14	C198349-P
67/33	2.2/5.7	0.14	C198904-P
70/30	2.0/6.0	0.13	C198346-P
75/25	1.8/6.8	0.13	C198340-P
80/20	1.3/7.8	0.10	C198335-P
85/15	1.0/9.2	0.10	C198331-P
90/10	0.8/11.2	0.10	C198328-P
95/5	0.5/14.4	0.10	C198322-P

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Ruggedized Wideband Couplers

Enhancing AFL's wideband coupler offering are two package styles for ruggedized versions of these reliable, standardized couplers – 3 mm and 900 μm furcated pigtail options and a variety of connector styles are offered in both single-mode and multimode applications. All AFL couplers conform to stringent environmental and mechanical standards to provide high reliability in a variety of customer applications.



Features

- Dual window wideband operation
- Low insertion loss
- Low PDL
- High Directivity
- Long term field application
- Environmentally stable over range of -40°C to +85°C

Applications

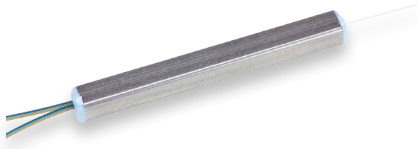
- Telecommunications
- CATV
- LAN
- Fiber in the Loop
- Network monitoring

Ordering Information

T	0102	50	S	ASC	01	ASC	01
Package Type T = 900 μm Diameter Leads 3 = 3 mm Diameter Leads	Output Leads 0102 = 1 x 2	Split Ratio 50 = 50/50% 45 = 45/55% 40 = 40/60% 35 = 35/65% 30 = 30/70% 25 = 25/75% 20 = 20/80% 15 = 15/85% 10 = 10/90% 5 = 5/95%	Configuration S = Single-mode M = Multimode	Input Connector Options ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC SST = Super ST ULC = Ultra LC 000 = Non-connectorized	Input Pigtail Length (M) <i>(Examples)</i> 01 = 1 meter 02 = 2 meters	Output Connector/Adapter ASC = Angle SC AFC = Angle FC USC = Ultra SC UFC = Ultra FC SST = Super ST ULC = Ultra LC 000 = Non-connectorized	Output Pigtail Length (M) <i>(Examples)</i> 01 = 1 meter 02 = 2 meters

Planar Couplers

The Planar Coupler provides the uniform division of an optical signal by having one input port and multiple output ports. Compact packaging and stable optical parameters allow these couplers to be integrated into Telecommunications, Local Area Network (LAN), and Cable Television (CATV) networks.



Features

- Low insertion loss
- Compact design
- Stable optical performance
- Dual Window (1310 & 1550 nm)
- Low insertion loss
- Low back reflection
- High output uniformity
- Telcordia® GR-1029 and GR-1221 qualified

Applications

- Telecommunications Networks
- Datacom
- LAN & CATV Networks
- FTTH, FTTB, & FTTC

Specifications

PARAMETER	VALUE			
	CM000034	CM000033	C198299	CS001470
Operating Wavelength (Grade)	1260-1360 nm and 1480-1580 nm (Standard)			
Optical Split Ratio	1 x 4	1 x 8	1 x 16	1 x 32
Maximum Insertion Loss (dB)	7.5	11.0	14.2	17.8
Typical Insertion Loss (dB)	7.3	10.8	13.9	17.5
Maximum Uniformity (dB)	1.0	1.0	1.5	2.0
Typical Uniformity (dB)	0.8	0.8	1.3	1.8
PDL (dB)	<0.3	<0.3	<0.4	<0.4
Return Loss (dB)	>55	>55	>55	>55
Directivity (dB)	>55	>55	>55	>55
Fiber Type	SMF28e 250 μm equivalent			
Input/Output Fiber Length	1 meter	1.5 meters	1.5 meters	1.5 meters
Operating Temperature	-40° to +85°C			
Package Dimensions (LxWxH) (mm)	40 x 4 x 4	40 x 4 x 4	40 x 4 x 4	50 x 6.5 x 4



Optical Coupler Modules

The optical coupler module offers management of optical power and wavelength, packaged in the LGX® design. Each module is comprised of Telcordia®-compliant PLC or concatenated fused biconic components. Once assembled and terminated, the module is fully tested for environmental, mechanical, and optical integrity.

Features

- Telcordia GR-1209 & GR-1221 compliant
- Telcordia GR-326 compliant connectors and adapters
- Telcordia GR-20 compliant singlemode optical fiber
- Optical bandpass: 1310 ± 40 nm / 1550 ± 40 nm
- RoHS compliant
- Packaged individually / tamper-proof seal

Applications

- CATV
- Telco
- Wide Area Networks
- Fiber Monitoring Systems
- Military systems

Specifications

PARAMETER	VALUE	
	Single-mode	
	Ultra	Angled
Return Loss (Minimum dB)	> -45	> -50
Directivity	> -55	
Operating Temperature/ Relative Humidity	-40 to +85°C / 90%	
Storage Temperature/ Relative Humidity	-40 to +85°C / 90%	

Ordering Information

I/O PORTS	I/O CONN	AFL NO.	OUTPUT PORT COUPLING RATIO (PORT)		INSERTION LOSS (IL) PORT 01		INSERTION LOSS (IL) PORT 02	
			01	02	TYP	MAX	TYP	MAX
1 x 2	USC	CM000165	50	50	3.3	4.0	3.3	4.0
1 x 2	USC	CM000166	40	60	4.3	5.2	2.5	3.3
1 x 2	USC	CM000167	30	70	5.5	6.4	1.5	2.4
1 x 2	USC	CM000168	20	80	7.3	8.3	1.3	1.8
1 x 2	USC	CM000169	10	90	10.3	11.5	0.8	1.1
1 x 2	USC	CM000170	5	95	13.3	14.6	0.5	0.8
1 x 2	ASC	CM000171	50	50	3.3	4.0	3.3	4.0
1 x 2	ASC	CM000172	40	60	4.3	5.2	2.5	3.3
1 x 2	ASC	CM000173	30	70	5.5	6.4	1.5	2.4
1 x 2	ASC	CM000174	20	80	7.3	8.3	1.3	1.8
1 x 2	ASC	CM000175	10	90	10.3	11.5	0.8	1.1
1 x 2	ASC	CM000176	5	95	13.3	14.6	0.5	0.8
1 x 2	ULC	CM000315	50	50	3.3	4.0	3.3	4.0
1 x 2	ULC	CM000325	40	60	4.3	5.2	2.5	3.3
1 x 2	ULC	CM000323	30	70	5.5	6.4	1.5	2.4
1 x 2	ULC	CM000321	20	80	7.3	8.3	1.3	1.8
1 x 2	ULC	CM000319	10	90	10.3	11.5	0.8	1.1
1 x 2	ULC	CM000317	5	95	13.3	14.6	0.5	0.8
1 x 2	ALC	CM000310	50	50	3.3	4.0	3.3	4.0
1 x 2	ALC	CM000324	40	60	4.3	5.2	2.5	3.3
1 x 2	ALC	CM000322	30	70	5.5	6.4	1.5	2.4
1 x 2	ALC	CM000320	20	80	7.3	8.3	1.3	1.8
1 x 2	ALC	CM000318	10	90	10.3	11.5	0.8	1.1
1 x 2	ALC	CM000316	5	95	13.3	14.6	0.5	0.8

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Optical Coupler Modules

Ordering Information (cont.)

I/O PORTS	I/O CONN	AFL NO.	OUTPUT PORT COUPLING RATIO (PORT)			INSERTION LOSS					
			01	02	03	PORT 01		PORT 02		PORT 03	
						TYP	MAX	TYP	MAX	TYP	MAX
1 x 3	USC	CM000177	33.0	33.0	33.0	5.1	6.2	5.1	6.2	5.1	6.2
1 x 3	ASC	CM000178	33.0	33.0	33.0	5.1	6.2	5.1	6.2	5.1	6.2
1 x 3	ULC	CM000326	33.0	33.0	33.0	5.1	6.2	5.1	6.2	5.1	6.2
1 x 3	ALC	CM000311	33.0	33.0	33.0	5.1	6.2	5.1	6.2	5.1	6.2

I/O PORTS	I/O CONN	AFL NO.	OUTPUT PORT COUPLING RATIO (PORT)				INSERTION LOSS							
			01	02	03	04	PORT 01		PORT 02		PORT 03		PORT 04	
							TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX
1 x 4	USC	CM000179	25.0	25.0	25.0	25.0	6.3	7.7	6.3	7.7	6.3	7.7	6.3	7.7
1 x 4	ASC	CM000180	25.0	25.0	25.0	25.0	6.3	7.7	6.3	7.7	6.3	7.7	6.3	7.7
1 x 4	ULC	CM000327	25.0	25.0	25.0	25.0	6.3	7.7	6.3	7.7	6.3	7.7	6.3	7.7
1 x 4	ALC	CM000312	25.0	25.0	25.0	25.0	6.3	7.7	6.3	7.7	6.3	7.7	6.3	7.7

I/O PORTS	I/O CONN	AFL NO.	OUTPUT PORT COUPLING RATIO (PORT)								INSERTION LOSS								
			01	02	03	04	05	06	07	08	PORT 01		PORT 02		PORT 03		PORT 04		
											TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	
1 x 8	USC	CM000181	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4
1 x 8	ASC	CM000182	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4
1 x 8	ULC	CM000346	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4
1 x 8	ALC	CM000347	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4

I/O PORTS	I/O CONN	AFL NO.	OUTPUT PORT COUPLING RATIO (PORT)								INSERTION LOSS								
			01	02	03	04	05	06	07	08	PORT 05		PORT 06		PORT 07		PORT 08		
											TYP	MAX	TYP	MAX	TYP	MAX	TYP	MAX	
1 x 8	USC	CM000181	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4
1 x 8	ASC	CM000182	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4
1 x 8	ULC	CM000346	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4
1 x 8	ALC	CM000347	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	9.3	11.4	9.3	11.4	9.3	11.4	9.3	11.4

Insertion loss (IL) includes connector loss and Polarization Dependent Loss (PDL) across operating temperature over the Optical Bandpass.

*** Additional split ratios available upon request.



LGX® FTTx Splitter Modules

The PON / FTTx splitters provide a convenient in-rack solution to combine or split optical signals in an optical network. Based on PLC technology, these modules offer the network operator high port-to-port uniformity and low insertion loss, as well as a wide operating wavelength range to accommodate future growth needs with new and emerging optical technologies. These products are available in LGX compatible modules.

Features

- Low excess loss
- Low polarization dependent loss
- Flexible LGX packaging options (*see ordering information below for product size information)
- Telcordia® GR-1209 or GR-1221 compliant
- SC/APC Connectors

Applications

- PON - FTTx Networks
- Access Networks
- CATV Links
- Wide Area Networks

Performance Specifications

PARAMETER	1X4	1X8	1X16	1X32
Insertion Loss (dB) *	<7.4	<10.5	<13.9	<17.2
Uniformity (dB) *, **	<0.5	<0.8	<1.1	<1.5
PDL (dB) *, **	<0.3			
Return Loss (dB)	>55			
Directivity (dB)	>55			
Operating Temperature (°C)	-40 to +85			
Storage Temperature (°C)	-40 to +85			
Package	LGX, 1 Slot	LGX, 2 Slot	LGX, 3 Slot	LGX, 3 Slot

*Operating wavelength range (1260-1650 nm) guaranteed by design. Test report provided at 1310 and 1550 nm.

** Value does not include connector loss.

Ordering Information

DESCRIPTION	AFL NO.
1x4 Optical Splitter Module, 1260~1650 nm, Single slot LGX, Black, SC/APC	CM000474
1x8 Optical Splitter Module, 1260~1650 nm, Dual slot LGX, Black, SC/APC	CM000475
1x16 Optical Splitter Module, 1260~1650 nm, Triple slot LGX, Black, SC/APC	CM000476
1x32 Optical Splitter Module, 1260~1650 nm, Triple slot LGX, Black, SC/APC	CM000477

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Optical Splitter Shelf

The LightLink LanSystem™ Optical Splitter Shelf provides a convenient in-rack solution to combine/split optical signals in a passive optical network. With 1x16, 1x32 and 2x32 options available, the splitter shelf also features a Planar Lightwave Circuit (PLC) allowing a signal to be split into either 16 or 32 channels in a 1U rack-mountable housing. The 2x32 option provides a filter WDM concatenated to a PLC, which allows 1310/1490/1550 nm signal management evenly across 32 channels.



Features

- Telcordia® GR-63 NEBS tested housing
- Aluminum Material per ASTM B209
- Universal Mounting Bracket WECO, EIA
- 19" and 23" Rack Mountable
- Rugged construction, ensuring environmental, mechanical, and optical integrity
- WDM and PLC fully compliant to Telcordia GR-1209 and GR-1221
- Low Excess loss
- Low Polarization Dependent Loss

Applications

- PON-FTTx Networks
- CATV links
- DWDM & CWDM systems
- Wide area networks
- Outside plant requirements

Specifications

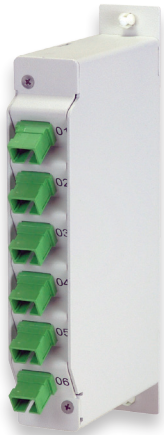
PARAMETER	1x16	1x32	2x32	
Insertion Loss	13.5 ~ 14.3 dB	17.5 - 18.5 dB	17.5 - 19 dB	
Uniformity	1.5 dB Typical	1.8 dB Typical	1.8 dB Typical	
PDL	≤ 0.3 dB	<0.45 dB	<0.45 dB	
Return Loss	≥ 55 dB	≥ 55 dB	≥ 40 dB	
Directivity	≥ 55 dB	≥ 55 dB	≥ 50 dB	
Fiber Type	SMF-28e	SMF-28e	SMF-28e	
Operating Temp	-40°C to +85°C	-40°C to +85°C	-40°C to +70°C	
Storage Temp	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	
Operating Bandwidth	1260 ~ 1650	1260 ~ 1650	1550 nm Band - Port 1 (Pass)	1550 - 1560 nm
			1310 + 1490 nm - Port 2 (Reflect)	1260-1360 nm & 1480-1500 nm

Ordering Information

DESCRIPTION	AFL NO.
1x16 Optical Splitter Shelf, ASC inputs/outputs, 1U, textured White	FM001000
1x32 Optical Splitter Shelf, ASC inputs/outputs, 1U, textured White	FM000775
2x32 Optical Splitter Shelf, ASC inputs/outputs, 1U, textured White	FM000622

Optical FTTx Coupler Module

AFL's Optical FTTx Coupler Module is designed to satisfy requirements utilizing 1550 nm bandwidths in FTTx applications and is specified for FTTx video installations. The module features a compact footprint with adapter ports consisting of SC/APC adapter outputs.



Specifications

PARAMETER	VALUE
Performance	
Wavelength	1540-1560 nm
Insertion Loss	1550 < 3.9 dB
PDL	<0.2 dB
PMD	< 0.05 ps
Return Loss	> 55 dB
Directivity	> 55 dB
Operating Temperature	-40 to +75°C
Storage Temperature	-40 to +85 °C
Relative Humidity	0 to 90%
Optical Power	500 mW

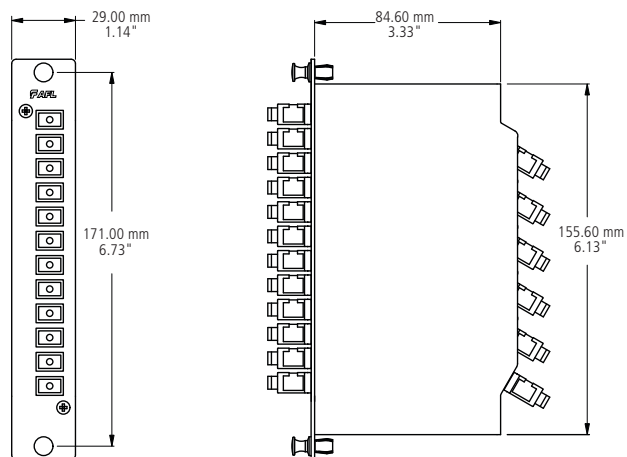
PACKAGING

Packaging Size	Standard Single Width LGX® Rack Module
Fiber Type	Low-Water-Peak Non-Dispersion Shifted SMF-28e
Connector Type	All ports – SC/APC, Green

Ordering Information

DESCRIPTION	AFL NO.
Optical FTTx Coupler Module	CM000072

Dimensions



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Wavelength Division Multiplexer Couplers

The WDM separates or combines wavelengths in the 1310 and 1550 nm bands over an ultra-wide bandwidth (+ 20 nm) and temperature range while maintaining excellent stability and optical performance. The device, which is fabricated using an advanced fused biconical taper technology, is designed to meet Telcordia® 1209 and 1221 requirements.

Specifications (Single-Mode Premium)

PARAMETER	VALUE
Model Number	S004794
Configuration	1 x 2
Wavelength	1310 / 1550 nm
Directivity	<-65 dB
Operating Temperature	-40° to +85°C
Typical Temperature Stability	<0.1 dB
Typical Polarization Stability (passband)	<0.1 dB
Isolation	20 dB

*Isolation of 32 dB and higher not available in 63 mm L or 69 mm L x 3 mm OD

Features

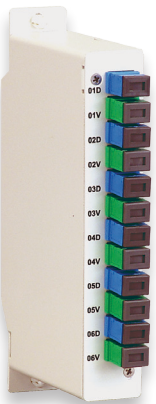
- Low insertion loss
- Ultra-wide bandwidth
- Wide operating temperature
- Low PDL
- Highly stable and reliable
- Epoxy-free optical path

Applications

- Telecommunications
- CATV
- Fiber Optic Sensors and Instruments
- Subscriber Loops
- Military Systems, Fiber Optic Gyros
- FTTH

Optical FTTx WDM Module

The Optical FTTx WDM Module is designed to satisfy requirements utilizing 1310, 1490 and 1550 nm bandwidths in FTTx applications. The module features a compact footprint with adapter ports consisting of SC (UPC or APC) outputs.



Specifications

PARAMETER	VALUE
1550 Band – Port 1 (Pass)	1550-1560 nm
1310 + 1490 Band – Port 2 (Reflect)	1260-1360 & 1480-1500 nm
Insertion Loss	1550 < 1.2 dB 1310 + 1490 < 1.2 dB
Isolation	1550 > 25 dB 1310 + 1490 > 20 dB
PDL	<0.2 dB
PMD	< 0.2 ps
Return Loss	> 50 dB
Directivity	> 50 dB
Operating Temperature	-40 to +75°C
Storage Temperature	-40 to +85°C
Relative Humidity	0 to 90%
Optical Power	500 mW

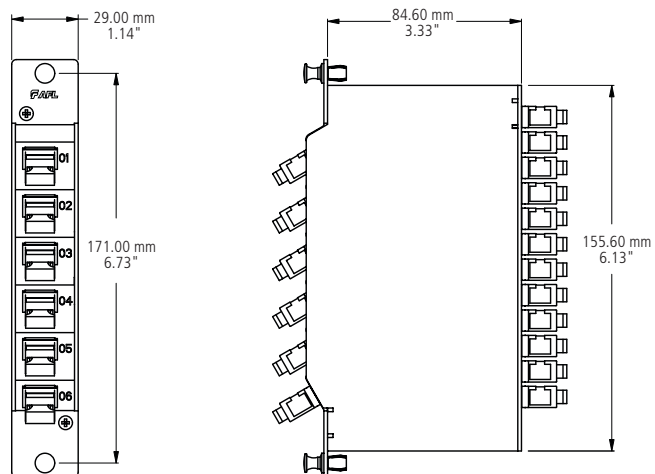
PACKAGING

Packaging Size	Standard Single Width LGX® Rack Module
Fiber Type	Low-Water-Peak Non-Dispersion Shifted SMF-28e
Connector Type	Port 3 (Common) – SC/APC Port 1 (Data) – SC/JPC Port 2 (Video) – SC/APC

Ordering Information

AFL NO.	DESCRIPTION
CM000043	Optical FTTx WDM Module

Dimensions



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LGX[®] FTTx WDM Modules

The FTTx WDM Modules are designed to satisfy 1310, 1490 and 1550 nm wavelength management requirements in FTTx passive optical networks. Based on proven thin-film filter technology, these modules offer low overall insertions loss, high wavelength thermal stability and high band isolation, all of which add to network reliability. These products are available in LGX compatible modules of scaling density to meet varying density objectives.

Features

- Low excess loss
- Low polarization dependent loss
- Flexible LGX packaging options
(*see ordering information below for product size and density information)
- Telcordia[®] GR-1209 or GR-1221 compliant
- SC/APC Connectors

Applications

- PON - FTTx Networks
- Access Networks
- CATV Links
- Wide Area Networks

Performance Specifications

PARAMETER	UNIT	SPECIFICATION		
		MINIMUM	MAXIMUM	
Wavelength Range	1310 Band	nm	1260	1360
	1490 Band	nm	1480	1500
	1550 Band	nm	1550	1560
Insertion Loss	1310+1490 Port	dB		1.2
	1550 Port	dB		1.4
Band Isolation	1310/1490 Port @ 1550	dB	40	
	1550 @ 1310/1490 Port	dB	30	
Wavelength Thermal Stability	nm/°C			0.002
Directivity	dB	50		
PDL	dB			0.15
PMD	ps			0.1
Return Loss	dB	45		
Optical Power Level	mW	300		
Operation Temperature	°C			-5 to 70
Operation Humidity	%RH			5 to 90
Storage Temperature	°C			40 to 85
Storage Humidity	%RH			0 to 95

Ordering Information

DESCRIPTION	AFL NO.
PON WDM Module, 1X, 1310/1490+1550, Single slot LGX, Black, SC/APC	CM000478
PON WDM Module, 2X, 1310/1490+1550, Single slot LGX, Black, SC/APC	CM000479
PON WDM Module, 4X, 1310/1490+1550, Dual slot LGX, Black, SC/APC	CM000480
PON WDM Module, 6X, 1310/1490+1550, Triple slot LGX, Black, SC/APC	CM000481

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RFOG WDM Module

The RFOG WDM module is designed to satisfy wavelength management requirements where 1310, 1490, 1550, 1590 / 1610 nm wavelengths are used in passive optical network applications. This unit is available in traditional LGX® module packaging with virtually all connector options supported. Also available is a high density platform delivering unsurpassed ports per rack unit for applications requiring the most efficient use of available rack space.

Features

- Flexible packaging options
- Low Excess Loss
- Low PDL
- Monitoring / Tap ports available
- RoHS compliant

Applications

- PON - FTTx Networks
- Access Networks
- CATV Links

Specifications

PARAMETER		UNIT	SPECIFICATION	
			MIN	MAX
Wavelength Range	1310 Band	nm	1270	1350
	1490 Band		1480	1500
	1550 Band		1540	1570
	1590/1610 Band		1584.5	1620
Insertion Loss	1310+1490 Port	dB	-	1.2
	1550 Port			1.4
	1590/1610 Port			1.5
Band Isolation	1310/1490 Port @ 1550	dB	40	
	1310/1490 Port @ 1590/1610		40	
	1550 Port @ 1310/1490		30	
	1550 Port @ 1590		15	
	1590/1610 Port @ 1310/1490/1550		35	
Wavelength Thermal Stability		nm/°C		0.002
Directivity		dB	50	
PDL		dB		0.15
PMD		ps		0.10
Return Loss		dB	45	
Optical Power Handling		mW	300	

Environmental Specifications

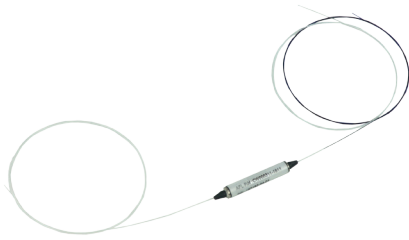
PARAMETER	UNIT	SPECIFICATION
Operation Temperature	°C	-5 ~ +70
Operation Humidity	%RH	5 ~ 95 not condensed
Storage Temperature	°C	-40 ~ +85
Storage Humidity	%RH	0 ~ 95 not condensed

Ordering Information

DESCRIPTION	AFL NO.
FILTER WDM, 1310+1490/1550+1590/1610, SC/APC	CM000150
DUAL FILTER WDM, 1310+1490/1550+1590/1610, LC/APC	CM000151

* Additional configuration available upon request. Contact AFL Customer Service.

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CWDM Single-channel OADM

The CWDM Single-channel OADM is designed to add/drop a single CWDM channel from an optical fiber. This product is hardened and designed to perform in OSP applications from -40° to +85° C, but can also be used in splice trays or similar structures in Inside Plant or similar environments. While 250um leads are most commonly desired, these products can also be supplied with color-coded 900um leads and terminated with virtually any common single-fiber optical connector.

Features

- Hardened for OSP use
- Low Excess Loss
- Low PDL
- Color coded 900um leads available
- RoHS Compliant

Applications

- Metro Ethernet / Cellular Backhaul
- Access Networks
- CWDM Systems
- CATV Links

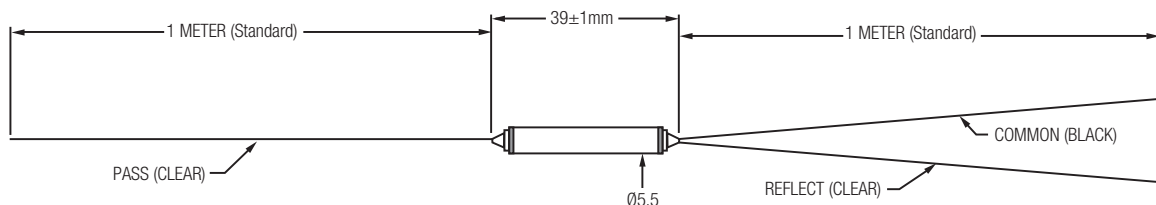
Specifications

PARAMETER	UNIT	VALUE
Center Wavelength	nm	ITU-T Grid
Channel Passband	nm	ITU-T Grid ± 6.5
Passband Flatness	dB	< 0.5
Bandwidth (@ -5dB)	nm	>14
Insertion Loss (Pass Channel)	dB	< 1.0
Insertion Loss (Reflect Channel)	dB	< 0.6
Adjacent Channel Isolation	dB	> 30
Non-Adjacent Channel Isolation	dB	> 45
Isolation (Reflect Channel)	dB	> 13
Return Loss	dB	> 45
PDL	dB	< 0.1
Directivity	dB	> 50
IL Thermal Stability	dB/°C	< 0.005
Wavelength Thermal Stability	nm/°C	< 0.002
Operation Temperature	°C	-40 to +85
Operation Humidity	% RH	5 to 95 not condensed
Storage Temperature	°C	-40 to +85
Storage Humidity	% RH	0 to 95 not condensed

Part Numbers

ITEM NUMBER	MODEL CODE	PASSBAND
CW000311-1431	CWDM TFF, 3-Port, 1431nm, 250um leads, NC, OSP	1431
CW000311-1451	CWDM TFF, 3-Port, 1451nm, 250um leads, NC, OSP	1451
CW000311-1471	CWDM TFF, 3-Port, 1471nm, 250um leads, NC, OSP	1471
CW000311-1491	CWDM TFF, 3-Port, 1491nm, 250um leads, NC, OSP	1491
CW000311-1511	CWDM TFF, 3-Port, 1511nm, 250um leads, NC, OSP	1511
CW000311-1531	CWDM TFF, 3-Port, 1531nm, 250um leads, NC, OSP	1531
CW000311-1551	CWDM TFF, 3-Port, 1551nm, 250um leads, NC, OSP	1551
CW000311-1571	CWDM TFF, 3-Port, 1571nm, 250um leads, NC, OSP	1571
CW000311-1591	CWDM TFF, 3-Port, 1591nm, 250um leads, NC, OSP	1591
CW000311-1611	CWDM TFF, 3-Port, 1611nm, 250um leads, NC, OSP	1611

* Additional configuration available upon request. Contact AFL Customer Service.



Coarse WDM Modules (CWDM)



Double-width LGX 118 package shown

Features

- Telcordia® qualified components
- 20 nm channel spacing
- 2, 4, 8, and 16 channel configurations
- Most industry standard connectors
- Low insertion loss
- High isolation
- Custom configurations upon request

Applications

- CATV Systems
- Sensor Systems
- 10G Ethernet Systems
- Metro Optical Networks
- Metro Access Networks

AFL's Coarse WDM modules are designed using proven thin-film filter technology providing high isolation, 20nm channel separation and a high level of thermal stability. CWDM modules are available in 2, 4, 8, and 16 channel configurations and are factory assembled in a thin cassette or rugged LGX® cassette with industry standard connector options to meet varying system requirements. An optional 1310 nm Mux/Demux Upgrade Port is available to allow seamless integration of legacy voice, video, and data services.

Specifications

PARAMETER	UNIT	VALUE			
Ports		2	4	8	16
Center Wavelength	nm	1271-1611			
Passband @ 0.5 dB	nm	> 14			
Passband	nm	± 6.5			
Passband Flatness	dB	< 0.5			
Insertion Loss (Typ.)	dB	1.4	1.6	1.8	4.3
Insertion Loss (Max.)	dB	1.8	2.0	2.5	5.0
Adjacent Channel Isolation	dB	> 30			
Non-Adjacent Channel Isolation	dB	> 45			
Wavelength Thermal Stability	nm/°C	< 0.002			
IL Thermal Stability	db/°C	< 0.005	< 0.005	< 0.007	< 0.008
Return Loss	dB	> 45			
PMD	ps	< 0.10	< 0.10	< 0.15	< 0.15
PDL	dB	< 0.10	< 0.15	< 0.20	< 0.25
Directivity	dB	> 50			
Operation Temperature	°C	-5 to +65			
Storage Temperature	°C	-40 to +85			
LGX 118 Package		Single-width	Single-width	Double-width	Triple-width
Thin Cassette Package	mm	88.9 x 50.8 x 8.3	120 x 80 x 13	130 x 87 x 13	150 x 115 x 13
Options		2% Tap, 1310 Upgrade			
1310 Channel Wavelength	nm	1260-1360			
1310 Channel Isolation	dB	40 minimum			
1310 Channel Insertion Loss	dB	1.3 maximum			

* Includes Connectors

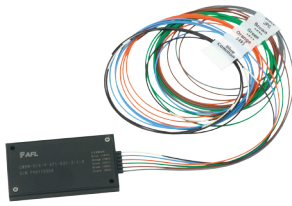
Ordering Information

CWDM	—	04	—	5	—	1271	—	1331	—	B	—	ASC	—	ISP
		Channel Count		Package/Pigtail		Start Wavelength (nm)		End Wavelength (nm)		Options		Connectors		
		02 = 2 Channel		1 = Thin Cassette,		1271		1291		U = 1310 Upgrade Port		ASC = SC/APC		
		04 = 4 Channel		1 Meter Pigtail		1291		1311		T = 2% Tap Port		USC = SC/UJC		
		08 = 8 Channel		3 = Thin Cassette,		1311		1331		X = No Option		ALC = LC/APC		
		16 = 16 Channel		3 Meter Pigtail		1331		1351		B = 1310 Upgrade Port		ULC = LC/UJC		
				5 = Thin Cassette,		1351		1371		and 2% Tap Port		X = No connectors		
				5 Meter Pigtail		1371		1391						
				L = LGX 118		1391		1411						
						1411		1431						
						1431		1451						
						1451		1471						
						1471		1491						
						1491		1511						
						1511		1531						
						1531		1551						
						1551		1571						
						1571		1591						
						1591		1611						

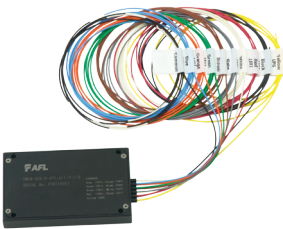
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Thin Film Filter (TFF) Compact Series CWDM



CWDM 4-Channel Mini Module



CWDM 8-Channel Mini Module

AFL's TFF compact series CWDM modules deliver reliable performance and flexibility in every network application – from cellular backhaul and metro Ethernet to access and security. With its reduced package size, this new outside plant CWDM module has added flexibility, making deployment options more convenient.

This CWDM series is based on proven Thin Film Filter technology, offering low insertion loss and high thermal stability over the entire outside plant operating temperature range. Numerous configurations are available to meet unique needs and support new or existing network architectures. Typical options include a variety of configurations (mux, demux, and balanced), upgrade ports (1310, C-Band, and others), test / monitoring ports and multiple termination options.

Features

- Low insertion loss
- Compact size
- High thermal stability
- Telcordia GR-1221-CORE compliant
- RoHS 6/6 compliant

Applications

- CWDM systems
- Metro ethernet / access networks
- Cellular backhaul networks

Specifications

PARAMETER	UNIT	WITHOUT UPGRADE PORT		WITH 1310NM UPGRADE PORT	
		4 Channel	8 Channel	4 Channel	8 Channel
Operating Wavelength	nm	1471~1611			
Channel Spacing	nm	20			
Center Wavelength	nm	Customer specified			
Pass Band	nm	± 6.5			
1310 Upgrade Port Pass Band	nm	—		1270~1350	
1310 Upgrade Port Insertion Loss	dB	—		1.0	
CWDM Channel Insertion Loss	dB	≤ 2.0	≤ 2.5	≤ 2.6	≤ 3.4
CWDM Adjacent Channel Isolation	dB	≥ 30			
CWDM Non-adjacent Channel Isolation	dB	≥ 45			
PDL	dB	≤ 0.2			
PMD	ps	≤ 0.1		≤ 0.25	
Return Loss	dB	≥ 45			
Directivity	dB	≥ 50			
Maximum Input Power	mW	≤ 300			
Package Size	Mm	60 (l) x 35 (w) x 6(d)		70(l) x 45(w) x 9(d)	
Operating Temperature	°C	-40 ~ +85			

* Actual optical specifications will vary based on product configuration
 1. Higher and lower channel counts available

Dense WDM (DWDM) Modules



Double-width LGX 118 package shown

AFL's Dense WDM modules (DWDM) are designed using proven thin-film filter technology featuring low insertion loss, high isolation, and superior environmental stability. DWDM modules are available in 2, 4, 8, and 16 channel configurations, with 100 GHz and 200 GHz spaced central wavelength options on the ITU-T Grid in the C-Band (1528 nm-1568 nm) and L-Band (1568 nm-1610 nm). All DWDM modules are factory assembled in a thin cassette package or a rugged LGX® cassette with most common industry standard connector options to meet varying system requirements.

Features

- Telcordia® qualified components
- 100 GHz & 200 GHz ITU-T channel spacing
- 2, 4, 8 and 16 channel configurations
- Most industry standard connectors
- Low insertion loss
- High isolation
- Epoxy-free optical path

Applications

- CATV Systems
- Sensor Systems
- 10G Ethernet Systems
- Metro Optical Networks
- Metro Access Networks

Specifications

PARAMETER	UNIT	VALUE							
		100 GHZ DWDM				200 GHZ DWDM			
Ports		2	4	8	16	2	4	8	16
Center Wavelength	nm	1531-1561 (CH. 20-58)				1530-1560 (CH. 21-59)			
Passband @ 0.5 dB	nm	>0.25				>0.6			
Passband	nm	±0.11				±0.25			
Passband Flatness	dB	<0.5				<0.5			
Insertion Loss (Typ.)	dB	1.4	1.6	2.6	3.8	1.4	1.6	2.6	3.8
Insertion Loss (Max.)	dB	1.8	2.0	3.2	4.5	1.8	2.0	3.2	4.5
Adjacent Channel Isolation	dB	>25				>25			
Non-Adjacent Channel Isolation	dB	>45				>45			
Wavelength Thermal Stability	nm/°C	<0.001				<0.002			
IL Thermal Stability	db/°C	<0.005	<0.005	<0.007	<0.007	<0.005	<0.005	<0.007	<0.007
Return Loss	dB	>45				>45			
PMD	ps	<0.10	<0.10	<0.10	<0.15	<0.10	<0.10	<0.10	<0.15
PDL	dB	<0.10	<0.20	<0.20	<0.25	<0.10	<0.20	<0.20	<0.25
Directivity	dB	>50				>50			
Operation Temperature	°C	-5 to +65				-5 to +65			
Storage Temperature	°C	-40 to +85				-40 to +85			
LGX 118 Package		Single-width	Single-width	Double-width	Triple-width	Single-width	Single-width	Double-width	Triple-width
Thin Cassette Package	mm	88.9x50.8x8.3	120x80x13	130x87x13	150x115x13	88.9x50.8x8.3	120x80x13	130x87x13	150x115x13

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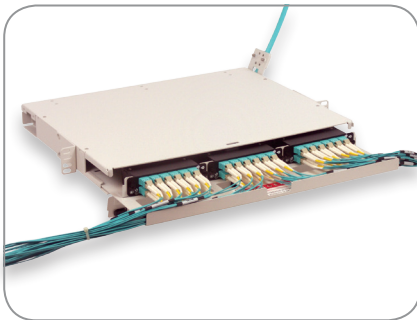
Dense WDM (DWDM) Modules

Ordering Information

DWDM	—	04	—	5	—	1	—	20	—	24	—	ASC	—	ISP
		Channel Count		Package/Pigtail		Spacing		Start Channel		End Channel		Connectors		
		02 = 2 Channel		1 = Thin Cassette, 1 Meter Pigtail		1 = 100 GHz		20		21		ASC = SC/APC		
		04 = 4 Channel		3 = Thin Cassette, 3 Meter Pigtail		2 = 200 GHz		21		22		USC = SC/UPC		
		08 = 8 Channel		5 = Thin Cassette, 5 Meter Pigtail				22		23		ALC = LC/APC		
		16 = 16 Channel		L = LGX 118				23		24		ULC = LC/UPC		
								24		25		X = No connectors		
								25		26				
								26		27				
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LightLink LANSystem 1RU Fiber Termination Patch/Splice Panel

The AFL's 1RU Fiber Termination Patch/Splice Panel is designed for use as a rack mount interconnect point where termination and connectivity of up to 36 fibers is desired. The panel design is based on a 1 rack unit height and is provisioned with three LGX® 118 compatible mounting positions that can accommodate adapter plates, XFM optical cassettes, passive optical modules or any combination therein. Standard panels are available empty for complete field configuration, half-loaded with adapter plates for field termination and cable assembly installation, or stubbed with a factory-installed cable assembly of a user specified length.



Features

- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Most common connector styles and types available
- Compatible with industry standard equipment frames
- Modular design
- Slide-out tray with relief cut-outs for simplified connector access
- Optional splice tray kit for on site con-version to patch and splice panel
- Optional front door key lock for heightened protection of internal components

Specifications

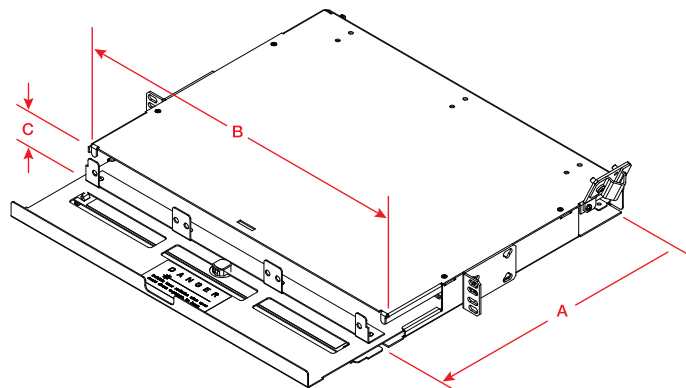
- Aluminum Construction per ASTM B209
- Durable textured powder coat finish available in black or white
- Universal 19/23" EIA/TIA rack compatibility
- Standard density: up to 18-fiber, High density: up to 36-fiber
- LGX 118 compatible
- Standard cable stub location is right rear exiting upward

Applications

- Telecommunications closets
- Data Centers
- Customer Premise
- LAN / WAN Networks
- Central Offices / Headends
- Hubs / Cabinets / Remote Terminals
- FTTH / FTTB Networks

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	CAPACITY	UNLOADED WEIGHT
13.51	17.00	1.75	1	18 / 36	4 lbs.



LGX is a registered trademark of Furukawa Electric North America, Inc.

LightLink LANSystem 1RU Fiber Termination Patch/Splice Panel

Configuration Part Numbers

CONFIGURATION	AFL NO.
1 RU PATCH PANELS - 12 FIBERS	
CON012P – EMPTY	FM001038
CON012P w/ 12 PSC adapters (2 Six Packs) 118 LGX (Beige)	FM001344
CON012P w/ 12 UST adapters (2 Six Packs) 118 LGX	FM001346
CON012P w/ 12 PST adapters (2 Six Packs) 118 LGX	FM001347
CON012P w/ 6 UDL (dup) adapters (2 Three Packs) 118 LGX (Blue)	FM001353
CON012P w/ 6 PDL (dup) adapters (2 Three Packs) 118 LGX (Beige)	FM001354
CON012P w/ 12 ASC adapters (2 Six Packs) 118 LGX (Green)	FM001352
CON012P w/ 12 UFC adapters (2 Six Packs) 118 LGX	FM001349
CON012P w/ 12 USC (ZR) adapters (2 Six Packs) 118 LGX (Blue)	FM001351
CON012P w/ 12 AFC adapters (2 Six Packs) 118 LGX	FM001350
1 RU HIGH DENSITY PATCH PANELS - 24 FIBERS	
CON024HD w/ 24 UST adapters (2 Twelve Packs) 118 LGX 24 Fibers	FM001355
CON024HD w/ 24 PST adapters (2 Twelve Packs) 118 LGX 24 Fibers	FM001356
CON024HD w/ 12 PDL (dup) adapters (2 Six Packs) 118 LGX 24 Fibers	FM001348
CON024HD w/ 12 USF (dup) adapters (2 Six Packs) 118 LGX 24 Fibers	FM001357
CON024HD w/ 12 ASF (dup) adapters (2 Six Packs) 118 LGX 24 Fibers	FM001358
1U PATCH AND SPLICE PANELS - 12 FIBERS	
CNS012P – EMPTY	FM001328
CNS012P w/ 12 PSC adapters (2 Six Packs) 118 LGX, Splice Tray	FM001323
CNS012P w/ 12 UST adapters (2 Six Packs) 118 LGX, Splice Tray	FM001329
CNS012P w/ 12 PST adapters (2 Six Packs) 118 LGX, Splice Tray	FM001325
CNS012P w/ 6 UDL (dup) adapters (2 Three Packs) 118 LGX, Splice Tray (Blue)	FM001334
CNS012P w/ 6 PDL (dup) adapters (2 Three Packs) 118 LGX, Splice Tray (Beige)	FM001335
CNS012P w/ 12 ASC adapters (2 Six Packs) 118 LGX, Splice Tray	FM001333
CNS012P w/ 12 UFC adapters (2 Six Packs) 118 LGX, Splice Tray	FM001330
CNS012P w/ 12 USC (ZR) adapters (2 Six Packs) 118 LGX, Splice Tray	FM001332
CNS012P w/ AFC adapters (2 Six Packs) 118 LGX, Splice Tray	FM001331
1U HIGH DENSITY PATCH AND SPLICE PANELS - 24 FIBERS	
CNS024HD w/ 24 UST adapters (2 Twelve Packs) 118 LGX, Splice Tray	FM001336
CNS024HD w/ 24 PST adapters (2 Twelve Packs) 118 LGX, Splice Tray	FM001337
CNS024HD w/ 12 USF (dup) adapters (2 Six Packs) 118 LGX, Splice Tray	FM001338
CNS024HD w/ 12 ASF (dup) adapters (2 Six Packs) 118 LGX, Splice Tray	FM001339

Accessories

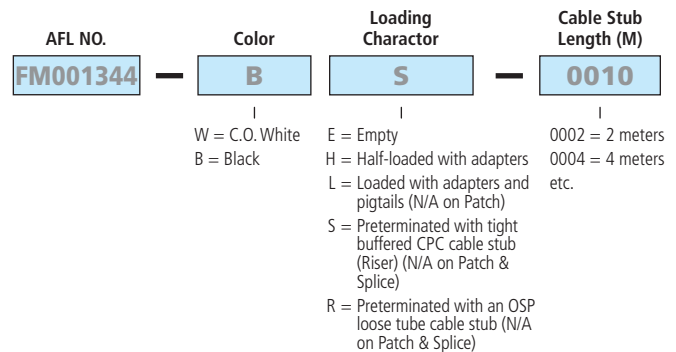
DESCRIPTION	AFL NO.
Splice Tray Kit: Single Fusion, 12 fiber, 1RU Patch Panel, Standard Density (1 splice tray)	FM002826-1
Splice Tray Kit: Single Fusion, 12 fiber, 1RU Patch Panel, High Density (2 splice trays)	FM002826-2
Splice Tray Kit: Single Fusion, 12 fiber, 1RU Patch Panel, Standard Density, Ribbon (1 splice tray)	FM002826-1R
Splice Tray Kit: Single Fusion, 12 fiber, 1RU Patch Panel, High Density, Ribbon (2 splice trays)	FM002826-2R
Kit, Lock, for CON / CNS Panels	FM001318

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired. When ordering stubbed (S), enter the cable stub length required in meters. Standard stub is Circular Premise Cable (CPC).



Example: Order number for a panel Black in color, loaded with 12 PSC adapters (2 six packs), connectors and a cable stub 10 meters in length.

LightLink LANSystem 2RU Fiber Termination Patch/Splice Panel



The AFL 2RU Fiber Termination Patch/Splice Panel is designed for use as a rack mount interconnect point where termination and connectivity of up to 72 fibers is desired. The panel design is based on a 2 rack unit height and is provisioned with six LGX® 118 compatible mounting positions that can accommodate adapter plates, XFM optical cassettes, passive optical modules or any combination of these. Standard panels are available empty for complete field configuration, half-loaded with adapter plates for field termination and cable assembly installation, or stubbed with a factory-installed cable assembly of a user specified length.

Applications

- Telecommunications closets
- Data Centers
- Customer Premise
- LAN / WAN Networks
- Central Offices / Headends
- Hubs / Cabinets / Remote Terminals
- FTTH / FTTB Networks

Features

- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Most common connector styles and types available
- Compatible with industry standard equipment frames
- Modular design
- Slide-out tray with relief cut-outs for simplified connector access
- Optional splice tray kit for on site conversion to patch and splice panel
- Optional front door key lock for heightened protection of internal components

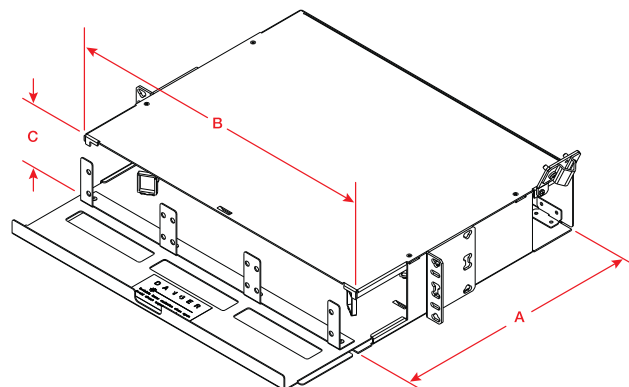
Specifications

- Aluminum construction per ASTM B209
- Durable textured powder coat finish available in black or white
- Universal 19/23" EIA/TIA rack compatibility
- Standard density: up to 36 fiber, High density: up to 72 fiber
- LGX 118 compatible
- Standard cable stub location is right rear exiting upward

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	CAPACITY	UNLOADED WEIGHT
13.51	17.00	3.5	2	36 / 72*	5 lbs.

* 72 fiber capacity not available in Patch and Splice configuration.



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LightLink LANSystem 2RU Fiber Termination Patch/Splice Panel

Configuration Part Numbers

CONFIGURATION	AFL NO.
2 RU PATCH PANELS - 24 FIBERS	
CON024P – EMPTY	FM001029
CON024P with 24 PSC adapters (4 Six Packs) 118 LGX (Beige)	FM001433
CON024P with 24 UST adapters (4 Six Packs) 118 LGX	FM001434
CON024P with 24 PST adapters (4 Six Packs) 118 LGX	FM001435
CON024P with 12 UDL (dup) adapters (4 Three Packs) 118 LGX (Blue)	FM001441
CON024P with 12 PDL (dup) adapters (4 Three Packs) 118 LGX (Beige)	FM001442
CON024P with 24 ASC adapters (4 Six Packs) 118 LGX (Green)	FM001439
CON024P with 24 UFC adapters (4 Six Packs) 118 LGX	FM001436
CON024P with 24 USC (ZR) adapters (4 Six Packs) 118 LGX (Blue)	FM001438
CON024P with 24 AFC adapters (4 Six Packs) 118 LGX	FM001437
2U PATCH AND SPLICE PANELS - 24 FIBERS	
CNS024P – EMPTY	FM001414
CNS024P with 24 PSC adapters (4 Six Packs) 118 LGX, Splice tray	FM001411
CNS024P with 24 UST adapters (4 Six Packs) 118 LGX, Splice tray	FM001412
CNS024P with 24 PST adapters (4 Six Packs) 118 LGX, Splice tray	FM001413
CNS024P with 12 UDL (dup) adapters (4 three Packs) 118 LGX , Splice tray	FM001419
CNS024P with 12 PDL (dup) adapters (4 three Packs) 118 LGX , Splice tray	FM001420
CNS024P with 24 ASC adapters (4 Six Packs) 118 LGX, Splice tray	FM001418
CNS024P with 24 UFC adapters (4 Six Packs) 118 LGX, Splice tray	FM001415
CNS024P with 24 USC (ZR) adapters (4 Six Packs) 118 LGX, Splice tray	FM001417
CNS024P with 24 AFC adapters (4 Six Packs) 118 LGX, Splice tray	FM001416

Note: All MM cable is 62.5 μm unless otherwise specified.

Accessories

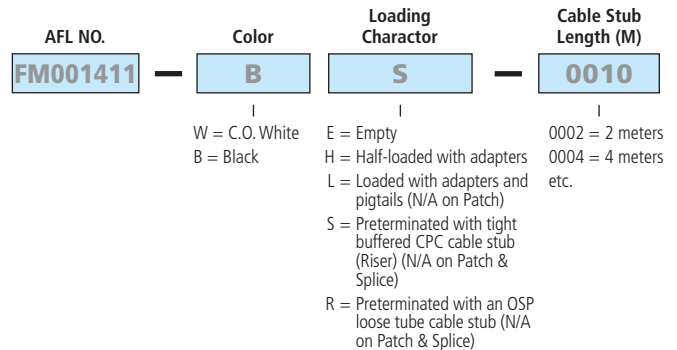
DESCRIPTION	AFL NO.
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04 (1 splice tray)	FM002827-1
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04 (2 splice trays)	FM002827-2
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04 (3 splice trays)	FM002827-3
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04 (4 splice trays)	FM002827-4
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04, Ribbon (1 splice tray)	FM002827-1R
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04, Ribbon (2 splice trays)	FM002827-2R
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04, Ribbon (3 splice trays)	FM002827-3R
Splice Tray Kit: Single Fusion, 12 fiber, 2RU, WME02, WME04, Ribbon (4 splice trays)	FM002827-4R
Kit, Lock, for CON / CNS Panels	FM001318

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired. When ordering stubbed (S), enter the cable stub length required in meters.



Example: Order number for a panel Black in color, loaded with 24 PSC adapters (4 six packs), connectors and a cable stub 10 meters in length.

LightLink LANSystem CON048P Fiber Termination Patch Panel



The CON048P Fiber Termination Panel is used where termination and connectivity of up to 48 fibers (standard density) or 96 fibers (high density) is desired. The panel design is based on a 3 rack unit height with a master plate to accommodate nine LGX® compatible adapter plates or modules. Standard panels are available in empty, loaded and preterminated versions. Loaded panels include adapters and adapter plates. Preterminated panels include adapters, adapter plates and standard 48 fiber OFNR cable. The fiber stub for preterminated panels exits the right rear of the unit facing up.

Applications

- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Features

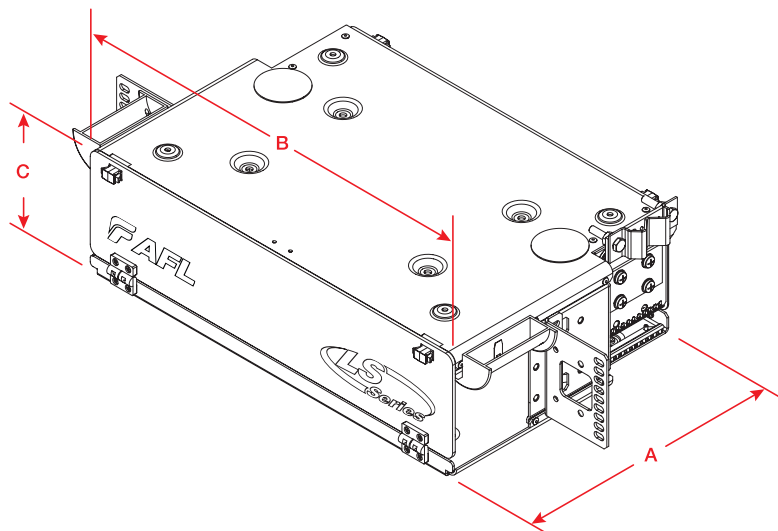
- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Various connector styles and types available
- Compatible with industry standard equipment frames
- LGX compatible master plate (118 mm)
- Modular design
- Provides maximum protection of optical components

Specifications

- Telcordia® GR-63 NEBS Tested
- Aluminum material per ASTM B209
- Black or white texture powder coated
- Universal mounting bracket WECCO, EIA
- 19" and 23" rack compatible

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY	UNLOADED WEIGHT	MATERIAL GAUGE
11	17	5.25	3	54/108	8.4 lbs.	2.03 mm



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Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CON048P Fiber Termination Patch Panel

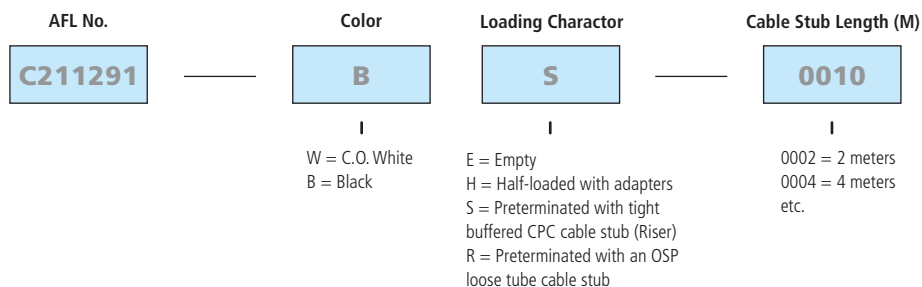
Ordering Information

CONFIGURATION	AFL NO.
3 RU PATCH PATCH PANELS	
CON048P – EMPTY	C211291
CON048P with 48 USC (PB) adapters (8 Six Packs) 118 LGX (Blue)	C211300
CON048P with 48 PSC adapters (8 Six Packs) 118 LGX (Beige)	C211309
CON048P with 48 UST adapters (8 Six Packs) 118 LGX	C211336
CON048P with 48 PST adapters (8 Six Packs) 118 LGX	C211345
CON048P with 24 UDL (dup) adapters (8 Three Packs) 118 LGX (Blue)	FM000181
CON048P with 24 PDL (dup) adapters (8 Three Packs) 118 LGX (Beige)	FM000182
CON048P with 48 ASC adapters (8 Six Packs) 118 LGX (Green)	C213928
CON048P with 48 UFC adapters (8 Six Packs) 118 LGX	C213916
CON048P with 48 USC (ZR) adapters (8 Six Packs) 118 LGX (Blue)	C213923
CON048P with 48 AFC adapters (8 Six Packs) 118 LGX	C213919
CON048P with 48 ULC adapters (8 Six Packs) 118 LGX	C213934
CON048P with 24 PSF (dup) adapters (8 Three Packs) 118 LGX (Beige)	FM000183
CON048P with 24 USF (dup) adapters (8 Three Packs) 118 LGX (Blue)	FM000184
CON048P with 24 ASF (dup) adapters (8 Three Packs) 118 LGX (Green)	FM000185
CON048P with 48 MTRJ adapters (8 Six Packs) 118 LGX (Blue)	FM000186
3 RU HIGH DENSITY PATCH PANELS	
CON096HD with 96 UST adapters (8 Twelve Packs) 118 LGX 96 Fibers	FM000187
CON096HD with 96 PST adapters (8 Twelve Packs) 118 LGX 96 Fibers	FM000188
CON096HD with 48 UDL (dup) adapters (8 Six Packs) 118 LGX 96 Fibers	C211349
CON096HD with 48 PSF (dup) adapters (8 Six Packs) 118 LGX 96 Fibers	C211313
CON096HD with 48 PDL (dup) adapters (8 Six Packs) 118 LGX 96 Fibers	C211360
CON096HD with 48 USF (dup) adapters (8 Six Packs) 118 LGX 96 Fibers	FM000189
CON096HD with 48 ASF (dup) adapters (8 Six Packs) 118 LGX 96 Fibers	FM000190

Note: All MM cable is 62.5 µm unless otherwise specified.

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired. When ordering stubbed (S), enter the cable stub length required in meters.



Example: Order number for a panel Black in color, loaded with 48 USC adapters (8 six packs), connectors and a cable stub 10 meters in length.

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

LightLink LANSystem CON072P Fiber Termination Patch Panel



The CON072P Fiber Termination Panel is used where termination and connectivity of up to 72 fibers (standard density) or 144 fibers (high density) is desired. The panel design is based on a 4 rack unit height with a master plate to accommodate 12 LGX® compatible adapter plates or modules. Standard panels are available in empty, loaded and preterminated versions. Loaded panels include adapters and adapter plates. Preterminated panels include adapters, adapter plates and standard 72 fiber OFNR cable. The fiber stub for preterminated panels exits the right rear of the unit facing up.

Applications

- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Features

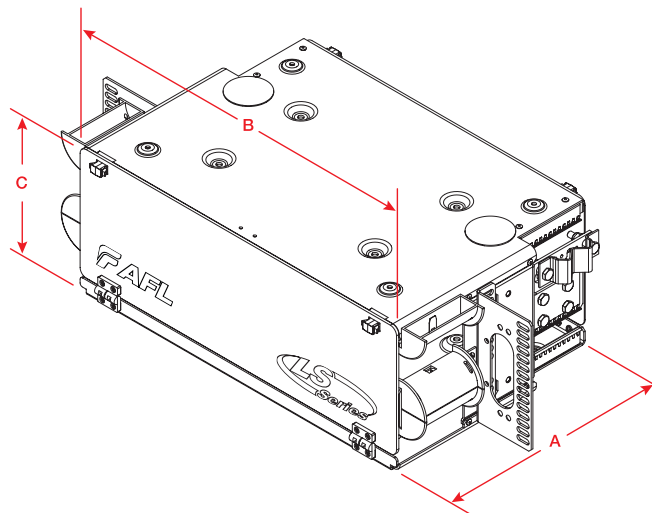
- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Various connector styles and types available
- Compatible with industry standard equipment frames
- LGX compatible master plate and footprint (118 mm)
- Modular design
- Provides maximum protection of optical components
- Available with I/O loose tube stub

Specifications

- Telcordia® GR-63 NEBS Tested
- Aluminum material per ASTM B209
- White or black texture powder coated
- Universal mounting bracket WECO, EIA
- 19" and 23" rack compatible
- 144 fiber (high density) version

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY	UNLOADED WEIGHT	MATERIAL GAUGE
11	17	7	4	72/144	9 lbs.	2.03 mm



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Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CON072P Fiber Termination Patch Panel

Ordering Information

CONFIGURATION	AFL NO.
4 RU PATCH PANELS	
CON072P – EMPTY 118 LGX	C211372
CON144HD – EMPTY 118 LGX	FM000344
CON072P with 72 USC (PB) adapters (12 Six Packs) 118 LGX (Blue)	C211381
CON072P with 72 PSC adapters (12 Six Packs) 118 LGX (Beige)	C211390
CON072P with 72 UST adapters (12 Six Packs) 118 LGX	C211417
CON072P with 72 PST adapters (12 Six Packs) 118 LGX	C211426
CON072P with 36 UDL (dup) adapters (12 Three Packs) 118 LGX (Blue)	FM000191
CON072P with 36 PDL (dup) adapters (12 Three Packs) 118 LGX (Beige)	FM000192
CON072P with 72 ASC adapters (12 Six Packs) 118 LGX (Green)	C213955
CON072P with 72 UFC adapters (12 Six Packs) 118 LGX	C213941
CON072P with 72 USC (ZR) adapters (12 Six Packs) 118 LGX (Blue)	C213952
CON072P with 72 AFC adapters (12 Six Packs) 118 LGX	C213946
CON072P with 72 ULC adapters (12 Six Packs) 118 LGX	C213959
CON072P with 36 PSF (dup) adapters (12 Three Packs) 118 LGX (Beige)	FM000193
CON072P with 36 USF (dup) adapters (12 Three Packs) 118 LGX (Blue)	FM000136
CON072P with 36 ASF (dup) adapters (12 Three Packs) 118 LGX (Green)	FM000194
CON072P with 72 MTRJ adapters (12 Six Packs) 118 LGX	FM000195
4 RU HIGH DENSITY PATCH PANELS	
CON144HD with 72 UDL (dup) adapters (12 Six Packs) 118 LGX 144 Fibers	C211432
CON144HD with 72 ADL (dup) adapters (12 Six Packs) 118 LGX 144 Fibers	FM000345
CON144HD with 72 PSF (dup) adapters (12 Six Packs) 118 LGX 144 Fibers	C211396
CON144HD with 72 PDL (dup) adapters (12 Six Packs) 118 LGX 144 Fibers	C211439
CON144HD with 72 USF (dup) adapters (12 Six Packs) 118 LGX 144 Fibers	FM000196
CON144HD with 72 ASF (dup) adapters (12 Six Packs) 118 LGX 144 Fibers	FM000197
CON144HD with 144 UST adapters (12 Twelve Packs) 118 LGX 144 Fibers	FM000198
CON144HD with 144 PST adapters (12 Twelve Packs) 118 LGX 144 Fibers	FM000199
CON144HD with 144 UFC adapters (12 Twelve Packs) 118 LGX 144 Fibers	FM000200
CON144HD with 144 USC (PB) adapters (12 Twelve Packs) 118 LGX 144 Fibers	FM000133
CON144HD with 144 ASC adapters (12 Twelve Packs) 118 LGX 144 Fibers	FM000201

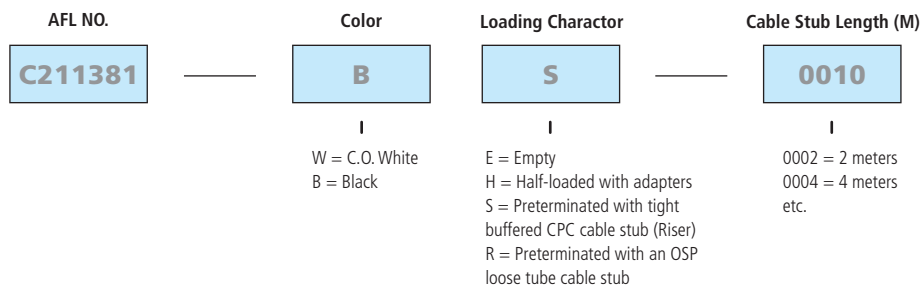
Note: All MM cable is 62.5 µm unless otherwise specified.

Connector/Adapter Key

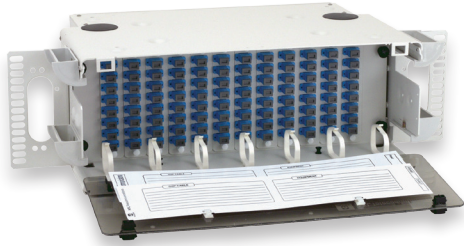
TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired. When ordering stubbed (S), enter the cable stub length required in meters.



Example: Order number for a panel Black in color, loaded with 72 USC adapters (12 six packs), connectors and a cable stub 10 meters in length.



LightLink LANSystem CON096P Fiber Termination Patch Panel

The CON096P Fiber Termination Panel is used where termination and connectivity of up to 96 fibers is desired. The panel design is based on a 4 rack unit height with a master plate to accommodate 12 LGX® compatible adapter plates or modules. Standard panels are available in empty, loaded and preterminated versions. Loaded panels include adapters and adapter plates. Preterminated panels include adapters, adapter plates and standard 96 fiber OFNR cable. The fiber stub for preterminated panels exits the right rear of the unit facing up.

Applications

- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Features

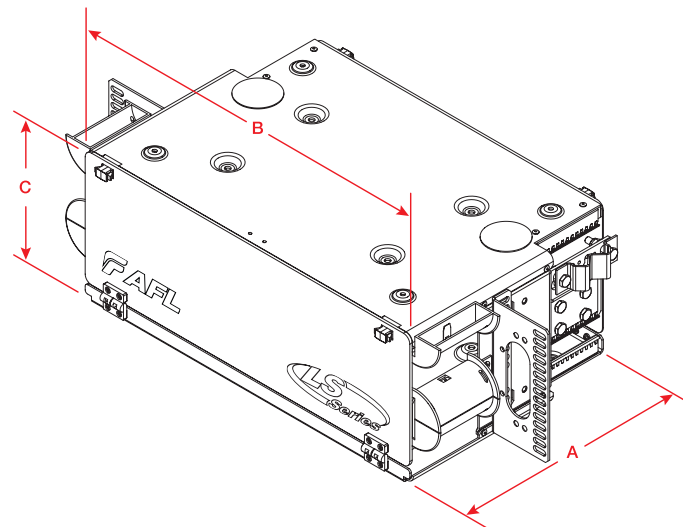
- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Various connector styles and types available
- Compatible with industry standard equipment frames
- LGX compatible master plate and footprint (130 mm)
- Modular design
- Provides maximum protection of optical components
- Utilizes (12) 8-packs
- Available with I/O loose tube stub

Specifications

- Telcordia® GR-63 NEBS Tested
- Aluminum Material per ASTM B209
- White or Black Texture Powder Coated
- Universal Mounting Bracket WECO, EIA
- 19" and 23" Rack Compatible

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY	UNLOADED WEIGHT	MATERIAL GAUGE
11	17	7	4	96	9 lbs.	2.03 mm



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Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CON096P Fiber Termination Patch Panel

Ordering Information

CONFIGURATION	AFL NO
4 RU PATCH PANELS	
CON072/96P – EMPTY 130 LGX	FM000344
CON096P with 96 USC (PB) adapters (12 Eight Packs) 4U Housing 130 LGX	FM000202
CON096P with 96 PSC adapters (12 Eight Packs) 4U Housing 130 LGX	FM000203
CON096P with 96 UST adapters (12 Eight Packs) 4U Housing 130 LGX	C213964
CON096P with 96 PST adapters (12 Eight Packs) 4U Housing 130 LGX	FM000204
CON096P with 96 ASC adapters (12 Eight Packs) 4U Housing 130 LGX	C213982
CON096P with 96 UFC adapters (12 Eight Packs) 4U Housing 130 LGX	C213970
CON096P with 96 USC (ZR) adapters (12 Eight Packs) 4U Housing 130 LGX	C213977
CON096P with 96 AFC adapters (12 Eight Packs) 4U Housing 130 LGX	C213973
CON096P with 96 MTRJ adapters (12 Eight Packs) 4U Housing 130 LGX	FM000205

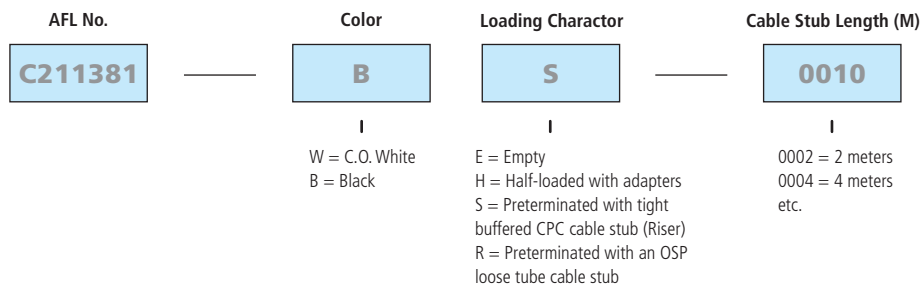
Note: All MM cable is 62.5 μm unless otherwise specified.

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired. When ordering stubbed (S), enter the cable stub length required in meters.



Example: Order number for a panel Black in color, loaded with 72 USC adapters (12 six packs), connectors and a cable stub 10 meters in length.

LightLink LANSystem CON144P Fiber Termination Patch Panel



The CON144P Fiber Termination Panel is used where termination and connectivity of up to 144 fibers (standard density) or 288 (high density) is desired. The panel design is based on a 5 rack unit height with a master plate to accommodate 12 LGX® (170 mm) compatible adapter plates. Standard panels are available in empty, loaded and preterminated versions. Loaded panels include adapters and adapter plates. Preterminated panels include adapters, adapter plates and standard 144 fiber OFNR cable. The fiber stub for preterminated panels exits the right rear of the unit facing up. High density panels use two 144 fiber stubs for 288 terminations.

Applications

- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Features

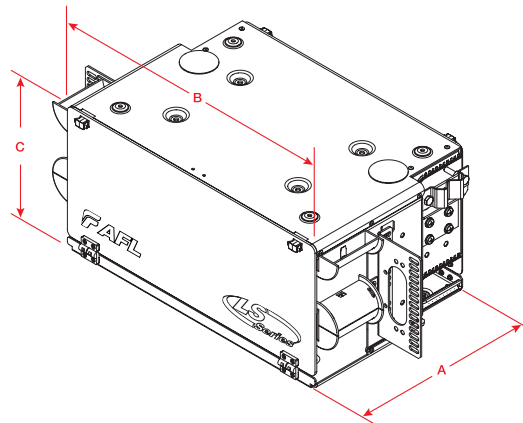
- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Various connector styles and types available
- Compatible with industry standard equipment frames
- LGX compatible master plate (170 mm)
- Modular design
- Provides maximum protection of optical components
- Available with I/O loose tube stub

Specifications

- Telcordia® GR-63 NEBS Tested
- Aluminum material per ASTM B209, standard front cover lexan
- Central office white, black, texture powder coated
- Universal mounting bracket WECO, EIA
- 19" and 23" rack compatible

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY	UNLOADED WEIGHT	MATERIAL GAUGE
11	17	8.75	5	144/288	9 lbs.	2.03 mm



LGX is a registered trademark of Furukawa Electric North America, Inc.

Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CON144P Fiber Termination Patch Panel

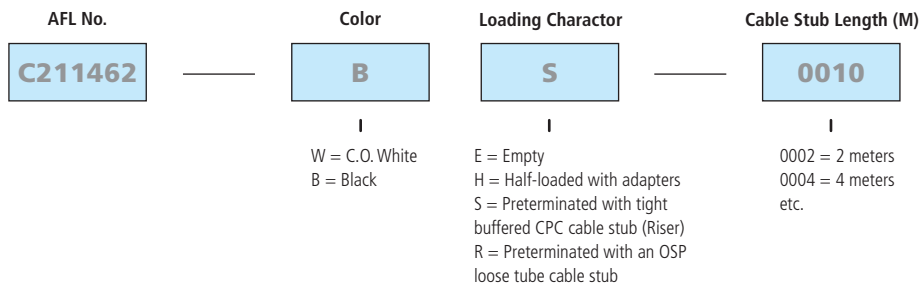
Ordering Information

CONFIGURATION	AFL NO.
5 RU PATCH PANELS	
CON144P – EMPTY 170 LGX	C211453
CON144P with 144 USC (PB) adapters (12 Twelve Packs) 170 LGX (Blue)	C211462
CON144P with 144 PSC adapters (12 Twelve Packs) 170 LGX (Beige)	C211471
CON144P with 144 UST adapters (12 Twelve Packs) 170 LGX	C211498
CON144P with 144 PST adapters (12 Twelve Packs) 170 LGX	C211507
CON144P with 72 UDL (dup) adapters (12 Six Packs) 170 LGX (Blue)	FM000206
CON144P with 72 PDL (dup) adapters (12 Six Packs) 170 LGX (Beige)	FM000207
CON144P with 144 ASC adapters (12 Twelve Packs) 170 LGX (Green)	C214009
CON144P with 144 UFC adapters (12 Twelve Packs) 170 LGX	C213995
CON144P with 144 USC (ZR) adapters (12 Twelve Packs) 170 LGX (Blue)	C214006
CON144P with 72 PSF (dup) adapters (12 Six Packs) 170 LGX (Beige)	FM000208
CON144P with 72 USF (dup) adapters (12 Six Packs) 170 LGX (Blue)	FM000209
CON144P with 72 ASF (dup) adapters (12 Six Packs) 170 LGX (Green)	FM000210
CON144P with 144 MTRJ adapters (12 Twelve Packs) 170 LGX	FM000211
5 RU HIGH DENSITY PATCH PANELS (USES TWO 144 STUBS)	
CON288HD with 144 UDL (dup) adapters (12 Twelve Packs) 170 LGX 288 Fibers	C211511
CON288HD with 144 ADL (dup) adapters (12 Twelve Packs) 170 LGX 288 Fibers	FM000346
CON288HD with 144 PDL (dup) adapters (12 Twelve Packs) 170 LGX 288 Fibers	C211522
CON288HD with 144 PSF (dup) adapters (12 Twelve Packs) 170 LGX 288 Fibers	C211475
CON288HD with 144 USF (dup) adapters (12 Twelve Packs) 170 LGX 288 Fibers	FM000212
CON288HD with 144 ASF (dup) adapters (12 Twelve Packs) 170 LGX 288 Fibers	FM000213

Note: All MM cable is 62.5 µm unless otherwise specified.

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired. When ordering stubbed (S), enter the cable stub length required in meters.



Example: Order number for a panel Black in color, loaded with 144 USC adapters (12 twelve packs), connectors and a cable stub 10 meters in length.

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

LightLink LANSystem CNS048P – 48 Fiber Patch and Splice Panel



The CNS048P is a rack mountable fiber patch and splice panel designed to accommodate up to 48 fiber terminations (standard density) or 96 fiber terminations (high density) and up to 144 single fusion splices with optional STF-48 splice drawer. The CNS048P provides a compact and versatile method of splicing and connectivity. Standard panels are available in empty, loaded and unloaded versions. Unloaded panels include six packs, adapters and splice drawers. Loaded panels also include pigtailed (<3 meters).

Applications

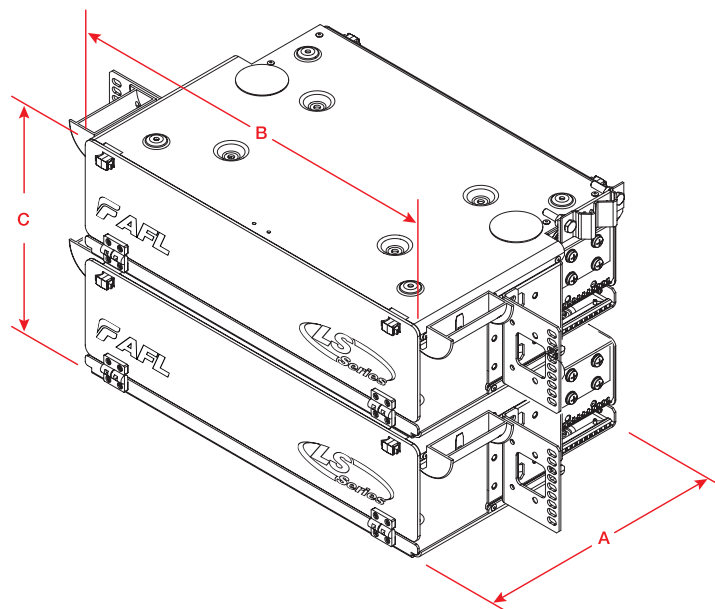
- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Specifications

- Telcordia® GR-63 NEBS tested
- Aluminum material per ASTM B209
- Central office white, black, texture powder coated
- Universal mounting bracket - WECO, EIA
- 19" and 23" rack compatible
- Fiber storage capacity - one meter per spliced fiber (3 mm jacket)
- Uses two STF-48 splice drawers
- Two panel package - 3U patch, 3U splice
- Nine 118 mm LGX® positions

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY
11	17	10.5	6	48/96



LGX is a registered trademark of Furukawa Electric North America, Inc.

Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CNS048P – 48 Fiber Patch and Splice Panel

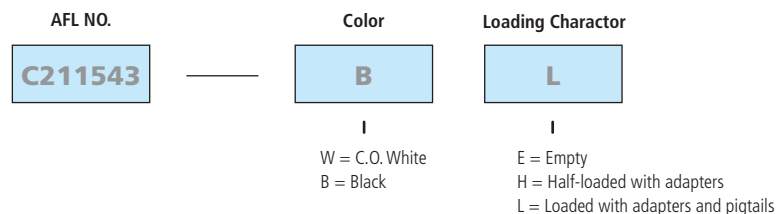
Ordering Information

CONFIGURATION	AFL NO.
6U PATCH AND SPLICE PANELS (1 - 3U PATCH, 1 - 3U SPLICE)	
CNS048P – EMPTY	C211534
CNS048P with 48 USC (PB) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211543
CNS048P with 48 PSC adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211552
CNS048P with 48 UST adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211579
CNS048P with 48 PST adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211588
CNS048P with 24 UDL (dup) adapters (8 Three Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000234
CNS048P with 24 PDL (dup) adapters (8 Three Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000235
CNS048P with 48 ASC adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C210928
CNS048P with 48 UFC adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C210913
CNS048P with 48 USC (ZR) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C210922
CNS048P with AFC adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C210917
CNS048P with ULC adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C210931
CNS048P with 24 PSF (dup) adapters (8 Three Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000236
CNS048P with 24 USF (dup) adapters (8 Three Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000237
CNS048P with 24 ASF (dup) adapters (8 Three Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000238
CNS048P with 48 MTRJ adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000239
6U HIGH DENSITY PATCH AND SPLICE PANELS	
CNS096HD with 96 UST adapters (8 Twelve Packs) Splice Drawer 2 - 48 position) 118 LGX	FM000240
CNS096HD with 96 PST adapters (8 Twelve Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000241
CNS096HD with 48 UDL (dup) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211594
CNS096HD with 48 PSF (dup) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211558
CNS096HD with 48 PDL (dup) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	C211601
CNS096HD with 48 USF (dup) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000242
CNS096HD with 48 ASF (dup) adapters (8 Six Packs) Splice Drawer (2 - 48 position) 118 LGX	FM000243

Note: All MM cable is 62.5 µm unless otherwise specified.

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired.



Example: Order number for a panel Black in color, loaded with, master plate, adapter plates, 48 USC adapters (8 six packs), splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

Empty - Includes master plate, mounting hardware, cable clamp.

Unloaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), hardware, cable clamp.

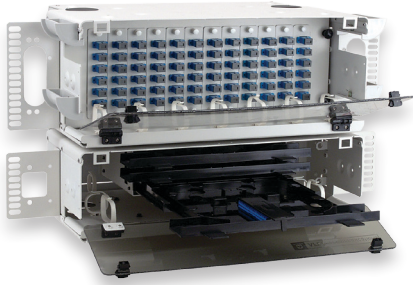
Loaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

Accessories

DESCRIPTION	AFL NO.
Telescoping Splice Drawer	911442-00-00

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM



LightLink LANSystem CNS072P – 72 Fiber Patch and Splice Panel

The CNS072P is a rack mountable fiber patch and splice panel designed to accommodate up to 72 fiber terminations (standard density) or 144 fiber terminations (high density) and up to 144 single fusion splices. The CNS072P provides a compact and versatile method of splicing and connectivity. Standard panels are available in empty, loaded and unloaded versions. Unloaded panels include adapter plates, adapters and splice drawers. Loaded panels also include pigtails (<3 meters).

Applications

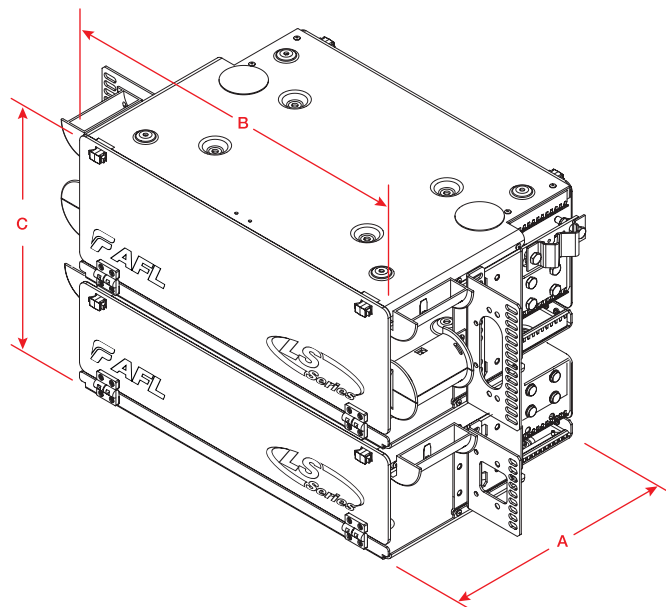
- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Specifications

- Telcordia® GR-63 NEBS tested
- Aluminum material per ASTM B209
- Central office white, black, texture powder coated
- Universal mounting bracket - WECO, EIA
- 19" and 23" rack compatible
- Fiber storage capacity - one meter per spliced fiber (3 mm jacket)
- Uses three STF-48 splice drawers
- Two panel package - 4U patch, 3U splice
- Twelve 118 mm LGX® positions
- 144 fiber (high density) version uses

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY
11	17	12.25	7	72/144



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Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CNS072P – 72 Fiber Patch and Splice Panel

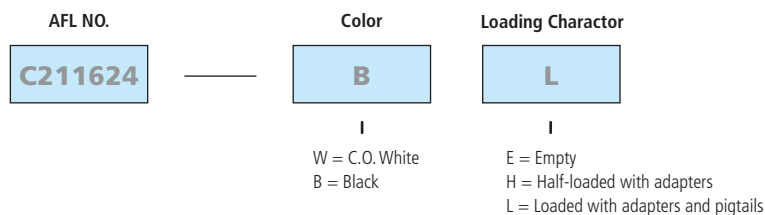
Standard Panel Ordering Information

CONFIGURATION	AFL NO.
7U PATCH AND SPLICE PANELS (1 - 4U PATCH, 1 - 3U SPLICE)	
CNS072P – EMPTY 118 LGX	C211615
CNS096P – EMPTY 118 LGX	C210967
CNS072P with 72 USC (PB) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211624
CNS072P with 72 PSC adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211633
CNS072P with 72 UST adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211660
CNS072P with 72 PST adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211669
CNS072P with 36 UDL (dup) adapters (12 Three Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000244
CNS072P with 36 PDL (dup) adapters (12 Three Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000245
CNS072P with 72 ASC adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C210958
CNS072P with 72 UFC adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C210946
CNS072P with 72 USC (ZR) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C210953
CNS072P with 72 AFC adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C210949
CNS072P with 72 ULC adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C210964
CNS072P with 36 PSF (dup) adapters (12 Three Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000246
CNS072P with 36 USF (dup) adapters (12 Three Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000247
CNS072P with 36 ASF (dup) adapters (12 Three Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000248
CNS072P with 72 MTRJ adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000249
7U HIGH DENSITY PATCH AND SPLICE PANELS (1 - 4U PATCH, 1 - 3U SPLICE)	
CNS144HD with 72 UDL (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211673
CNS144HD with 72 PSF (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211637
CNS144HD with 72 PDL (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	C211684
CNS144HD with 72 USF (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000250
CNS144HD with 72 ASF (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000251
CNS144HD with 144 UST adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000252
CNS144HD with 144 PST adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000253
CNS144HD with 144 UFC adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000254
CNS144HD with 144 USC adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000255
CNS144HD with 144 ASC adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 118 LGX	FM000256

Note: All MM cable is 62.5 µm unless otherwise specified.

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired.



Example: Order number for a panel Black in color, loaded with, master plate, adapter plates, 72 USC adapters (12 six packs), splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

Empty - Includes master plate, mounting hardware, cable clamp.

Unloaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), hardware, cable clamp.

Loaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

Accessories

DESCRIPTION	AFL NO.
Telescoping Splice Drawer	911442-00-00

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM



LightLink LANSystem CNS096P – 96 Fiber Patch and Splice Panel

The CNS096P is a rack mountable fiber patch and splice panel designed to accommodate up to 96 fiber terminations (standard density) or 144 fiber terminations (high density) and up to 144 single fusion splices. The CNS096P provides a compact and versatile method of splicing and connectivity. Standard panels are available in empty, loaded and unloaded versions. Unloaded panels include adapter plates, adapters and splice drawers. Loaded panels also include pigtails (<3 meters).

Applications

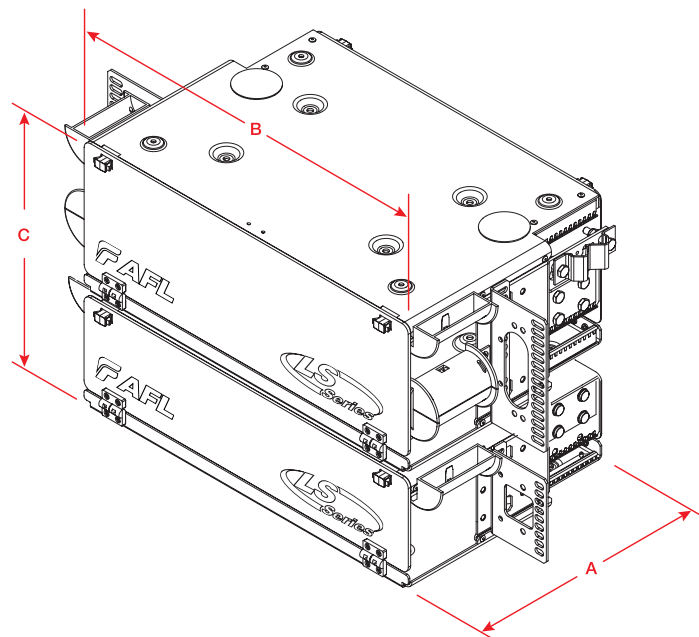
- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Specifications

- Telcordia® GR-63 NEBS tested
- Aluminum material per ASTM B209
- Central office white, black, texture powder coated
- Universal mounting bracket - WECCO, EIA
- 19" and 23" rack compatible
- Fiber storage capacity - one meter per spliced fiber (3 mm jacket)
- Uses two STF-48 splice drawers
- Two panel package - 4U patch, 3U splice
- Twelve 130 mm LGX® positions
- Twelve 8-packs

Dimensions

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY
11	17	12.25	7	96



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Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CNS096P – 96 Fiber Patch and Splice Panel

Standard Panel Ordering Information

CONFIGURATION	AFL NO.
7U PATCH AND SPLICE PANELS (1 - 4U PATCH, 1 - 3U SPLICE)	
CNS072/96P – EMPTY 130 LGX	C210967
CNS096P with 96 UST adapters (12 Eight Packs) Splice Drawers (2 - 48 position) 130 LGX	C210971
CNS096P with 96 UFC adapters (12 Eight Packs) Splice Drawers (2 - 48 position) 130 LGX	C210976
CNS096P with 96 AFC adapters (12 Eight Packs) Splice Drawers (2 - 48 position) 130 LGX	C210982
CNS096P with 96 USC (ZR) adapters (12 Eight Packs) Splice Drawers (2 - 48 position) 130 LGX	C210985
CNS096P with 96 ASC adapters (12 Eight Packs) Splice Drawers (2 - 48 position) 130 LGX	C210989
CNS096P with 96 MTRJ adapters (12 Eight Packs) Splice Drawers (2 - 48 position) 130 LGX	FM000257

Note: All MM cable is 62.5 μm unless otherwise specified.

Accessories

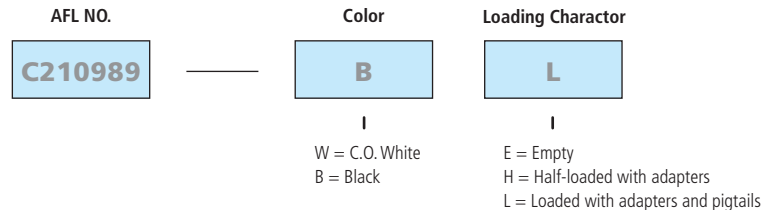
DESCRIPTION	AFL NO.
Telescoping Splice Drawer	911442-00-00

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired.

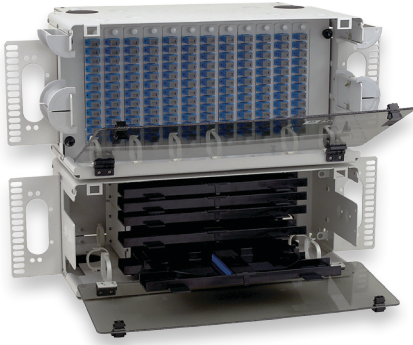


Example: Order number for a panel Black in color, loaded with, master plate, adapter plates, 96 ASC adapters (12 eight packs), splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

Empty - Includes master plate, mounting hardware, cable clamp.

Unloaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), hardware, cable clamp.

Loaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.



LightLink LANSystem CNS144P – 144 Fiber Patch and Splice Panel

The CNS144P is a rack mountable fiber patch and splice panel designed to accommodate up to 144 fiber terminations (standard density) or 288 fiber terminations (high density) and up to 288 single fusion splices using double density splice trays. The CNS144P provides a compact and versatile method of splicing and connectivity. Standard panels are available in empty, loaded and unloaded versions. Unloaded panels include adapter plates, adapters and splice drawers. Loaded panels also include pigtailed (<3 meters).

Applications

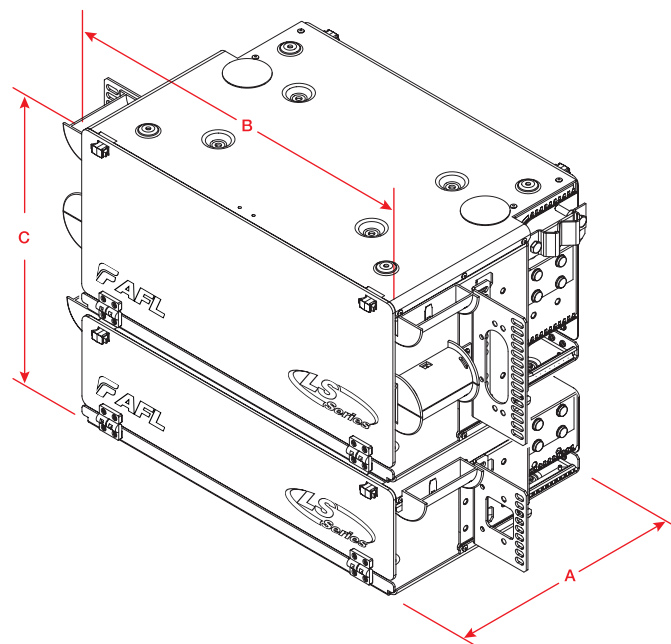
- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

Specifications

- Telcordia® GR-63 NEBS tested
- Aluminum material per ASTM B209, standard front cover lexan
- Central office white, black, texture powder coated
- Universal mounting bracket - WECO, EIA
- 19" and 23" rack compatible
- Fiber storage capacity - one meter per spliced fiber (3 mm jacket)
- Uses six STF-48 splice drawers
- Two pane package - 5U patch, 3U splice (4U splice panel with High Density version)
- Twelve 170 mm LGX® positions

Dimensions

PANEL VERSION	DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	FIBER CAPACITY
Standard	11	17	14	8	144
High Density	11	17	15.75	9	288



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Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem CNS144P – 144 Fiber Patch and Splice Panel

Standard Panel Ordering Information

CONFIGURATION	AFL NO.
8U PATCH AND SPLICE PANELS (1 - 5U PATCH, 1 - 3U SPLICE)	
CNS144P – EMPTY	C211696
CNS144P with 144 USC (PB) adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	C211705
CNS144P with 144 PSC adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	C211714
CNS144P with 144 UST adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	C211741
CNS144P with 144 PST adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	C211750
CNS144P with 72 UDL (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000258
CNS144P with 72 PDL (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000259
CNS144P with 144 ASC adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	C211021
CNS144P with 144 UFC adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	C211007
CNS144P with 144 USC (ZR) adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000260
CNS144P with 72 PSF (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000261
CNS144P with 72 USF (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000262
CNS144P with 72 ASF (dup) adapters (12 Six Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000263
CNS144P with 144 MTRJ adapters (12 Twelve Packs) Splice Drawers (3 - 48 position) 170 LGX	FM000264
9U HIGH DENSITY PATCH AND SPLICE PANELS (1 - 5U PATCH, 1 - 4U SPLICE)	
CNS288HD with 144 UDL (dup) adapters (12 Twelve Packs) Splice Drawers (6 - 48 position) 170 LGX	C211756
CNS288HD with 144 PDL (dup) adapters (12 Twelve Packs) Splice Drawers (6 - 48 position) 170 LGX	C211763
CNS288HD with 144 PSF (dup) adapters (12 Twelve Packs) Splice Drawers (6 - 48 position) 170 LGX	C211720
CNS288HD with 144 USF (dup) adapters (12 Twelve Packs) Splice Drawers (6 - 48 position) 170 LGX	FM000265
CNS288HD with 144 ASF (dup) adapters (12 Twelve Packs) Splice Drawers (6 - 48 position) 170 LGX	FM000266

Note: All MM cable is 62.5 µm unless otherwise specified.

Accessories

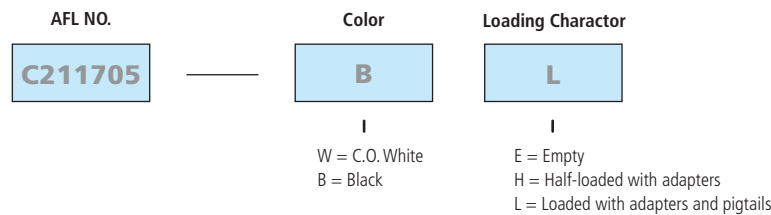
DESCRIPTION	AFL NO.
Telescoping Splice Drawer	911442-00-00

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC (PB)	Ultra Polish SC with (PB) sleeve-SM
USC (ZR)	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL (ZR)	Ultra Polish LC Duplex (ZR) sleeve-SM
UDL (PB)	Ultra Polish LC Duplex (PB) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

Ordering Information

Select the seven digit AFL number of the panel you need, specify black or C.O. white, and choose the loading character desired.



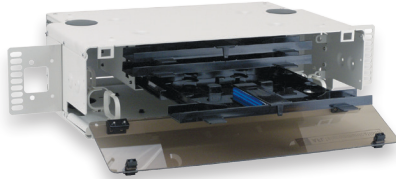
Example: Order number for a panel Black in color, loaded with, master plate, adapter plates, 144 USC adapters (12 twelve packs), splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

Empty - Includes master plate, mounting hardware, cable clamp.

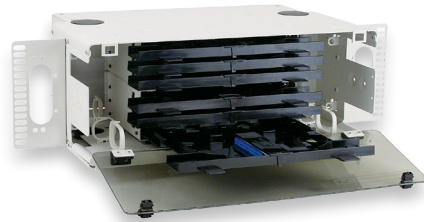
Unloaded - Includes master plate, adapter plates, adapters, splice tray (12, 24) / drawer (48 & up), hardware, cable clamp.

Loaded - Includes master plate, adapter plates, adapters, splice drawer (48 & up), pigtails with connectors, hardware, cable clamp.

LightLink LANSystem SPL3RU and SPL4RU – Optical Splice Shelf



SPL3RU



SPL4RU

The LightLink LANSystem Optical Splice Shelf is designed to provide a convenient in-rack splicing and interconnection point for Outside Plant (OSP) cable entering a Central Office (CO), Controlled Environmental Vault (CEV), Headend (HE) or customer location. Units are available with three or six sliding, telescoping drawer assemblies. Each drawer is capable of handling up to 48 individual single-fused or up to 144 mass-fused fibers, with minimum bend radius routing and protection.

Features

- Fits comfortably into new and existing interconnect, cross-connect, customer premise, and co-location environments
- Compatible with industry standard equipment frames
- For in-rack splicing of outside plant cable to connectorized pigtails or riser cable
- Drawers handle up to 48 single-fused or 144 mass-fused fibers
- Cable entry/exit grommet seals
- Durable and scratch resistant power coated antique white finish
- Hinged plexiglass front and rear door
- Spring loaded latches

Specifications

- Telcordia® GR-63 NEBS tested
- Aluminum material per ASTM B209
- Central office white, black, texture powder coated
- Universal mounting bracket - WECCO, EIA
- 19" and 23" rack compatible

Applications

- Telecommunication Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hubs
- Cabinets
- Remote Terminals

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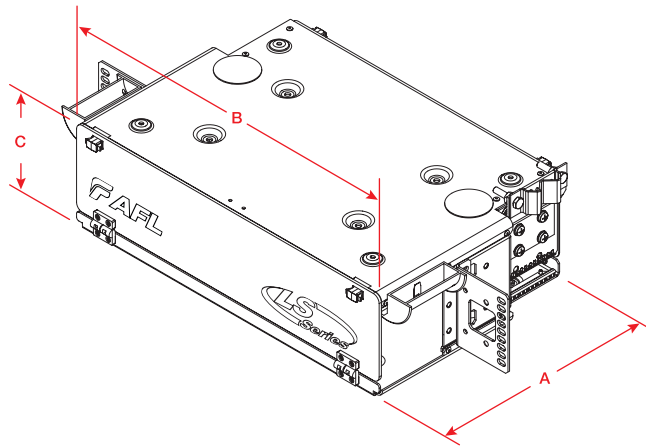
LGX is a registered trademark of Furukawa Electric North America, Inc.

Telcordia is a registered trademark of Telcordia Technologies, Inc.

LightLink LANSystem SPL3RU and SPL4RU – Optical Splice Shelf

Dimensions

MODEL	NO. OF TRAYS	DEPTH (A) (INCHES)	WIDTH (B) (INCHES)	HEIGHT (C) (INCHES)	RACK UNITS	SPLICE CAPACITY	UNLOADED WEIGHT	MATERIAL GAUGE
SPL3RU	3	11	17	5.25	3	144 single, 432 mass	8.4 lbs.	2.03 mm
SPL4RU	6	11	17	7.00	4	288 single, 864 mass	9.0 lbs.	2.03 mm



Ordering Information

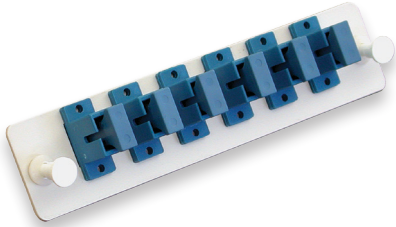
DESCRIPTION	AFL NO.
SPL3RU	
CO White, 3RU (5.25") Optical Splice Shelf - Empty	C211777 - W
Black, 3RU (5.25") Optical Splice Shelf - Empty	C211777 - B
CO White, 3RU (5.25") Optical Splice Shelf - with 3 telescoping splice drawers	C211781 - W
Black, 3RU (5.25") Optical Splice Shelf - with 3 telescoping splice drawers	C211781 - B
SPL4RU	
CO White, 4RU (7.00") Optical Splice Shelf - Empty	C211795 - W
Black, 4RU (7.00") Optical Splice Shelf - Empty	C211795 - B
CO White, 4RU (7.00") Optical Splice Shelf - with 6 telescoping splice drawers	C211799 - W
Black, 4RU (7.00") Optical Splice Shelf - with 6 telescoping splice drawers	C211799 - B

Accessories

DESCRIPTION	MODEL	AFL NO.
Telescoping Splice Drawer, up to 48 single fused or 144 mass fused splices	STF-48	911442-00-00
1x8 Universal Core Tube Fiber Routing Kit	1x8-UCT-FR-Kit	FC000008
1x6 Universal Ribbon or Loose Tube Fiber Routing Kit	1x6-URL-FR-Kit	FC000070

LightLink Adapter Plates

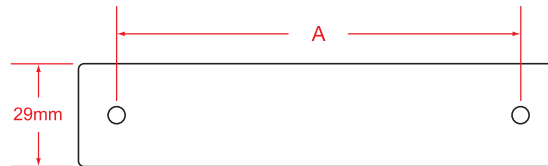
LightLink Adapter Plates add versatility to the AFL's panel product line. Adapter plates are compatible with industry standard platforms allowing for easy upgrades of existing panels. Adapter Plates come preloaded and are available in 6, 8, and 12 pack versions.



Features

- Metal Plate with Nylatches
- Polyurethane powder coated (CO white or Black)
- LGX® compatible

Specifications



DIMENSION A
118 mm LGX®
170 mm LGX®

MULTIPLE UNIT ORDERING OPTION

To order multiple units of the same part, select the base number from the ordering charts and add the quantity extension.

Example: FM000086 – 12Z

ORDERING MULTIPLE UNITS

1 = 1	6 = 6
2 = 2	8 = 8
3 = 3	12 = 12
4 = 4	XX = Specify

Ordering Information

AFL NO.	PLATE CAPACITY / STYLE	PLATE COLOR	SLEEVE MATERIAL	FOOTPRINT	ADAPTER ORIENTATION	ADAPTER TYPE	ADAPTER COLOR
SC							
C215503	Blank	White	N/A	LGX 118	N/A	N/A	N/A
C215507	Blank	Black	N/A	LGX 118	N/A	N/A	N/A
FM002271	6 SC Duplex	White	Ceramic	LGX 118	Vertical	SC SM	Blue
FM002274	6 SC Duplex	Black	Ceramic	LGX 118	Vertical	SC SM	Blue
FM002273	6 SC Duplex	White	Metal	LGX 118	Vertical	SC MM	Beige
FM002276	6 SC Duplex	Black	Metal	LGX 118	Vertical	SC MM	Beige
FM002272	6 SC Duplex	White	Ceramic	LGX 118	Vertical	SC MM	Aqua
FM002275	6 SC Duplex	Black	Ceramic	LGX 118	Vertical	SC MM	Aqua
FM002634	6 SC Duplex	White	Ceramic	LGX 118	Vertical	SC MM	Green
FM002633	6 SC Duplex	Black	Ceramic	LGX 118	Vertical	SC MM	Green
FM002632-TB	6 SC Duplex	Black	N/A	LGX 118	Vertical	Empty	Empty
FM002632-TW	6 SC Duplex	White	N/A	LGX 118	Vertical	Empty	Empty
C215512	3 SC Duplex	White	Ceramic	LGX 118	Vertical	SC SM	Blue
C215521	3 SC Duplex	Black	Ceramic	LGX 118	Vertical	SC SM	Blue
C215536	3 SC Duplex	White	Metal	LGX 118	Vertical	SC MM	Beige
C215543	3 SC Duplex	Black	Metal	LGX 118	Vertical	SC MM	Beige
FM000115	3 SC Duplex	White	Ceramic	LGX 118	Vertical	SC MM	Green
FM000114	3 SC Duplex	White	Ceramic	LGX 118	Vertical	SC MM	Green
C215548	3 SC Duplex	Black	N/A	LGX 118	Vertical	Empty	Empty
C215554	3 SC Duplex	White	N/A	LGX 118	Vertical	Empty	Empty
C215602	6 SC Simplex	White	Ceramic	LGX 118	Straight	SC SM	Blue
C215611	6 SC Simplex	Black	Ceramic	LGX 118	Straight	SC SM	Blue
C215626	6 SC Simplex	White	Metal	LGX 118	Straight	SC MM	Beige
C215633	6 SC Simplex	Black	Metal	LGX 118	Straight	SC MM	Beige
C215638	6 SC Simplex	White	Ceramic	LGX 118	Straight	SC SM AP	Green
C215644	6 SC Simplex	Black	Ceramic	LGX 118	Straight	SC SM AP	Green
C215647	6 SC Simplex	Black	N/A	LGX 118	Straight	Empty	Empty
C215651	6 SC Simplex	White	N/A	LGX 118	Straight	Empty	Empty

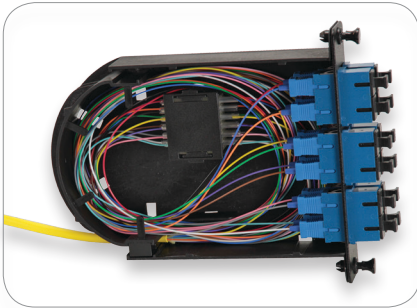
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LightLink Adapter Plates

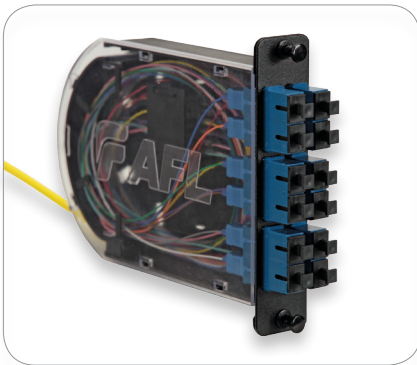
Ordering Information (cont.)

AFL NO.	PLATE CAPACITY / STYLE	PLATE COLOR	SLEEVE MATERIAL	FOOTPRINT	ADAPTER ORIENTATION	ADAPTER TYPE	ADAPTER COLOR
FC							
C215926	6 FC Simplex	White	Ceramic	LGX 118	Straight	FC SM D Mount	Plated metal
C215935	6 FC Simplex	Black	Ceramic	LGX 118	Straight	FC SM D Mount	Plated metal
C215953	6 FC Simplex	White	N/A	LGX 118	Straight	Empty	Empty
C215957	6 FC Simplex	Black	N/A	LGX 118	Straight	Empty	Empty
C223765	12 FC Simplex	White	Ceramic	LGX 118	Staggered	FC SM D Mount	Plated metal
C223774	12 FC Simplex	Black	Ceramic	LGX 118	Staggered	FC SM D Mount	Plated metal
C223672-TW	12 FC Simplex	White	N/A	LGX 118	Staggered	Empty	Empty
C223672-TB	12 FC Simplex	Black	N/A	LGX 118	Staggered	Empty	Empty
ST							
C215962	6 ST Simplex	White	Ceramic	LGX 118	Straight	ST SM D Mount	Plated metal
C215975	6 ST Simplex	Black	Ceramic	LGX 118	Straight	ST MM D Mount	Plated metal
C215980	6 ST Simplex	White	N/A	LGX 118	Straight	Empty	Empty
C215986	6 ST Simplex	Black	N/A	LGX 118	Straight	Empty	Empty
C223564	12 ST Simplex	White	Ceramic	LGX 118	Staggered	ST SM D Mount	Plated metal
C223567	12 ST Simplex	White	Ceramic	LGX 118	Staggered	ST MM D Mount	Plated metal
C223571	12 ST Simplex	Black	Ceramic	LGX 118	Staggered	ST SM D Mount	Plated metal
C223576	12 ST Simplex	Black	Ceramic	LGX 118	Staggered	ST MM D Mount	Plated metal
LC							
FM000289	3 LC Duplex	White	Ceramic	LGX 118	Straight	LC SM	Blue
FM000290	3 LC Duplex	Black	Ceramic	LGX 118	Straight	LC SM	Blue
FM000291	3 LC Duplex	White	Metal	LGX 118	Straight	LC MM	Beige
FM000292	3 LC Duplex	Black	Metal	LGX 118	Straight	LC MM	Beige
FM000293	3 LC Duplex	White	Ceramic	LGX 118	Straight	LC SM AP	Green
FM000294	3 LC Duplex	Black	Ceramic	LGX 118	Straight	LC SM AP	Green
FM000295	3 LC Duplex	White	N/A	LGX 118	Straight	Empty	Empty
FM000296	3 LC Duplex	Black	N/A	LGX 118	Straight	Empty	Empty
C215989	6 LC Duplex	White	Ceramic	LGX 118	Straight	LC SM	Blue
C215993	6 LC Duplex	Black	Ceramic	LGX 118	Straight	LC SM	Blue
C215998	6 LC Duplex	White	Metal	LGX 118	Straight	LC MM	Beige
C216004	6 LC Duplex	Black	Metal	LGX 118	Straight	LC MM	Beige
FM001303	6 LC Duplex	White	Ceramic	LGX 118	Straight	LC MM 10G	Aqua
FM001302	6 LC Duplex	Black	Ceramic	LGX 118	Straight	LC MM 10G	Aqua
FM001004	6 LC Duplex	White	Ceramic	LGX 118	Straight	LC SM AP	Green
FM001005	6 LC Duplex	Black	Ceramic	LGX 118	Straight	LC SM AP	Green
C216007	6 LC Duplex	White	N/A	LGX 118	Straight	Empty	Empty
C216011	6 LC Duplex	Black	N/A	LGX 118	Straight	Empty	Empty
FM000853	12 LC Duplex	White	Ceramic	LGX 118	Straight Dual Column	LC MM 10G	Aqua
FM000852	12 LC Duplex	Black	Ceramic	LGX 118	Straight Dual Column	LC MM 10G	Aqua

AFL NO.	PLATE CAPACITY / STYLE	PLATE COLOR	SLEEVE MATERIAL	FOOTPRINT	ADAPTER ORIENTATION	ADAPTER STYLE	ADAPTER TYPE	ADAPTER COLOR
MTP								
C216043	3 MTP	White	Polymer	LGX 118	Straight	MTP (key up / key down)	MTP SM/MM	Black
C216047	3 MTP	Black	Polymer	LGX 118	Straight	MTP (key up / key down)	MTP SM/MM	Black
C216052	3 MTP	White	N/A	LGX 118	Straight	Empty	N/A	Empty
C216058	3 MTP	Black	N/A	LGX 118	Straight	Empty	N/A	Empty
FM001606	6 MTP	Black	Polymer	LGX 118	Straight	MTP (key up / key down)	MTP SM/MM	Black



12-Fiber SCIUPC Configuration



DAS Poli-MOD



Poli-MOD® Patch and Splice Module

AFL's new Poli-MOD is an innovative patch and splice module, which offers an inventive and effective means to accommodate up to 24 fiber interconnections in an industry-standard, single-slot LGX®118 footprint. The new Poli-MOD offers a unique and robust way to secure cable without the need for time-wasting, tie-wrap alternatives. Additionally, the module leverages a creative snap-in splice sleeve cradle to securely manage both single and ribbon fiber arrangements. These features provide the capacity to outfit a standard 4RU rack-mount panel with up to 288-fiber interconnections.

The Poli-MOD is also offered in an arrangement that supports the low loss budget requirements of Distributed Antenna System (DAS) networks. This is accomplished through the elimination of an interconnection point while providing a robust splicing environment for rack and wall-mount panel applications.

Features

- 24-fiber interconnection capacity
- LGX 118 compatibility (single-slot module)
- Effective and time-saving cable mounting mechanism (no tie-wraps necessary)
- Inventive splice sleeve cradle
- Available in SC, LC, ST and FC connector arrangements
- Organized fiber routing
- Fixed solution, no moving parts
- Multi-directional cable entry access

Applications

- Telecommunications Closets
- Data Centers
- Customer Premise
- Local Area Networks
- Wide Area Networks
- Central Offices
- Hub Sites
- Cabinets
- Remote Terminals
- Distributed Antenna Systems (DAS)

LGX is a registered trademark of Furukawa Electric North America, Inc.

Poli-MOD® Patch and Splice Module

Ordering Information

Example: PM-L-12-ASC-0-S-01

PM	L	12	ASC	0	S	01
Configuration	Fiber/Connector Count	Connector Type	Fiber Type	Fiber Arrangement	Packaging	
E = Empty (Splicing Only) H = Half Loaded (Adapter Plate only) L = Loaded (Adapter Plate & Pigtails) D = DAS Poli-MOD*	06 = 6 Fibers/Connectors 12 = 12 Fibers/Connectors 24 = 24 Fibers/Connectors XX = Empty	ASC = Angle-Polished SC USC = Ultra-Polished SC PSC = Multimode SC ALC = Angle-Polished LC ULC = Ultra-Polished LC PLC = Multimode LC UST = Ultra-Polished ST PST = Multimode ST AFC = Angle-Polished FC UFC = Ultra-Polished FC PFC = Multimode FC XXX = Empty	0 = Single-mode (G.657.A1 BIF) 1 = 62.5 μm (OM1) 2 = 50 μm (OM2) 3 = 50 μm (OM3) 4 = 50 μm (OM4) X = Empty	S = Single/Standard R = Ribbon 3 = 3 mm, 3 meter DAS X = No Fiber (Half Loaded or Empty)	01 = 1 Poli-MOD per box* 06 = 6 Poli-MODs per box 12 = 12 Poli-MODs per box	

* DAS Poli-MOD requires specialty packaging and is packaged as "1 Poli-MOD per box" ONLY.

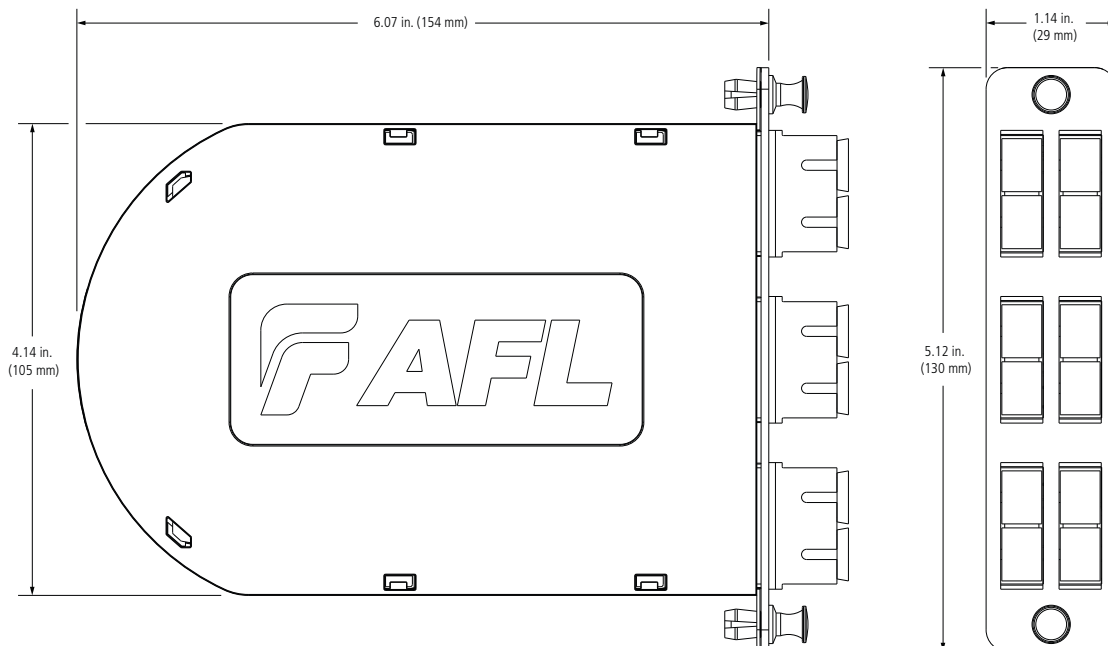
Connector Color Codes

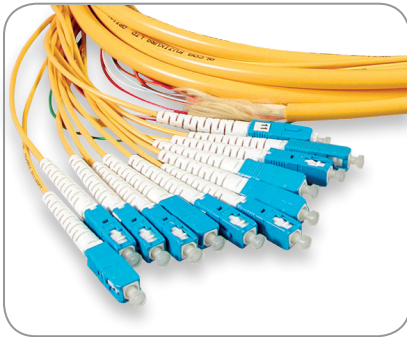
CONNECTOR	COLOR
APC	Green
UPC	Blue
PC-OM1	Beige
PC-OM2	Black
PC-OM3 / PC-OM4	Aqua

Poli-MOD Kits/Accessories

DESCRIPTION	AFL NO.
Poli-MOD Cable Mounting Clip Kit	FM003053
Fusion Splice Sleeve, FP-03, 40 mm	S000206
Adapter Bracket for Mounting Single Poli-MOD	FM000948-B
Corning CCH and PCH 145 mm Adapter Bracket	FM001636

Dimensions





Pigtail Assemblies for Patch and Splice Panels

AFL's pigtail assemblies help eliminate labor-intensive field termination, yet guarantee reliable performance. Featuring a unified construction allowing for easy fiber identification and rapid installation, these assemblies are built to exceed all TIA and Telcordia requirements.

Splicer Connector Specifications

PARAMETER	VALUE
Cable Type	250 μm, 900 μm
Insertion Loss	< 0.15 dB
Return Loss	> 40 dB
Operating Temperature (900 μm Fiber Coating)	
PVC	-40°C to 75°C
Nylon	0°C to 75°C
TPEE	-25°C to 75°C

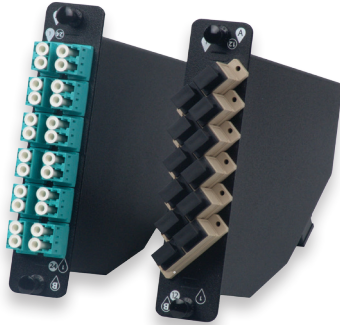
Ordering Information

POLISH	FIBER TYPE	CONNECTOR INTERFACE AFL NO.		
		SC	ST	LC
CPC PIGTAIL KITS, 3 METER, 12-FIBER				
APC	SMF	C152906-0003	—	CS007719-0003
UPC	SMF	C165943-0003	C152671-0003	C223369-0003
PC	62.5 μm	C165463-0003	C223366-0003	C223373-0003
PC	50 μm	CS007672-0003	CS007674-0003	CS007676-0003
PC	50 μm LO	CS007673-0003	CS007675-0003	CS007677-0003

900 M TIGHT-BUFFERED PIGTAIL KITS, 3 METER, 12-FIBER				
APC	SMF	C223312-0003	—	CS003981-0003
UPC	SMF	C223492-0003	CS003979-0003	CS001037-0003
PC	62.5 μm	CS000386-0003	CS002150-0003	CS002067-0003
PC	50 μm	CS001373-0003	CS002136-0003	CS002081-0003
PC	50 μm LO	CS003056-0003	CS003980-0003	CS003058-0003

Jumper Specifications

PARAMETER		VALUE						
		LC	SC	ST	FC	LC-APC	SC-APC	MT
Insertion Loss								
SM	max	0.3	0.3	0.5	0.3	0.3	0.5	0.75
MM	max	0.5	0.5	0.5	0.5			0.6
Return Loss								
SM	max	-55.0 dB	-55.0 dB	-55.0 dB	-55.0 dB	-65.0 dB	-65.0 dB	-55.0 dB
MM	max	-20.0 dB						-20.0 dB
Cable Bend Radius								
Standard	min	<30 mm						
Bend Insensitive	min	<15 mm						
Durability		200 cycles						500 cycles
Operating Temperature		-40°C to +85°C						
Storage Temperature		-40°C to +85°C						



Xpress Fiber Management® (XFM) MPO Optical Cassettes

AFL's Xpress Fiber Management Optical Cassette product line is a family of preterminated fanout modules that streamline the deployment of optical network infrastructure. The primary function of these products is to break out multi-fiber ribbon connectors to simplex or duplex style connectors for connection to adjacent network elements.

The Xpress Fiber Management Optical Cassette solution features low-loss MPO style trunk cable assemblies. These cassettes are available in the industry standard LGX® footprint as well as a selection of Corning Cable Systems™ footprints to support embedded base installations. All modules feature a durable powder coat finish, and are compatible with all 1U-4U LANSysystem platforms. All modules are clearly labeled with a silk-screened "A" and "B" positioning reference to ensure proper polarity is maintained in the network, referenced to the polarity convention being deployed.

Applications

- Data centers
- LAN, WAN and SAN
- Interoffice cross-connects
- Campus environments

Features

- 12- and 24- port configurations
- ANSI/TIA/EIA-568-B.3 compliant
- Single-slot LGX packages
- Compatible with LANSysystem and WME hardware
- Available in black with rear MPO connection(s)
- SMF, 62.5 μm MMF and 50 μm MMF supported
- SC- and LC-MPO standard configurations
- ST- and FC-MPO configurations available on special order

Optical Performance Data

PARAMETER	Single-mode Fiber (OS1)					Multimode Fiber (OM1, OM2 and 50 μm Laser Optimized)		
	LC - MPO	LCAPC - MPO	SC - MPO	SCAPC - MPO	ST - MPO	LC - MPO	SC - MPO	ST - MPO
Max IL (dB)	1.15	1.15	1.3	1.3	1.3	1.15	1.3	1.3
Typical IL (dB)	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Reflectance (dB)	-55	-65	-55	-65	-55	-30	-30	-30

Notes:

1. Single-mode IL test wavelengths 1310 nm and 1550 nm
2. Multimode IL test wavelengths 850 nm and 1300 nm
3. Single-mode RL test wavelengths 1310 nm and 1550 nm
4. Multimode RL test wavelengths 850 nm and 1300 nm

Technical Specifications:

1. ANSI/TIA/EIA-568-B.3
2. Telcordia® GR-326-CORE compliant single fiber connectors
3. Telcordia GR-1435-CORE compliant multi-fiber connectors

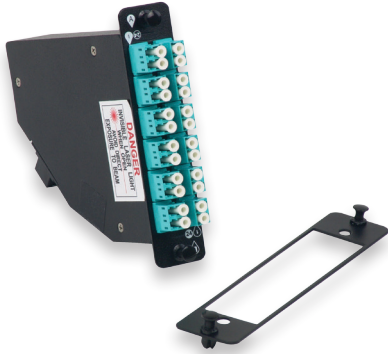
Ordering Information

FIBER COUNT, CONNECTOR OPTION	SINGLE-MODE		MULTIMODE	
	UPC - MPO (MALE, APC)	APC - MPO (Male, APC)	50 μm LOMMF OM4 PC - MPO (Male, PC)	62.5 μm OM1 PC - MPO (Male, PC)
12F, LC	FM000090-B	FM001437-B	FM000273-B	FM000092-B
24F, LC	FM000691-B	FM001653-B	FM000692-B	FM000663-B
12F, SC	FM000087-B	FM001465-B	FM000272-B	FM000089-B
12F, ST	FM000093-B	N/A	FM000274-B	FM000095-B

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Telcordia is a registered trademark of Telcordia Technologies, Inc.

Xpress Fiber Management® (XFM) MPO Optical Cassettes

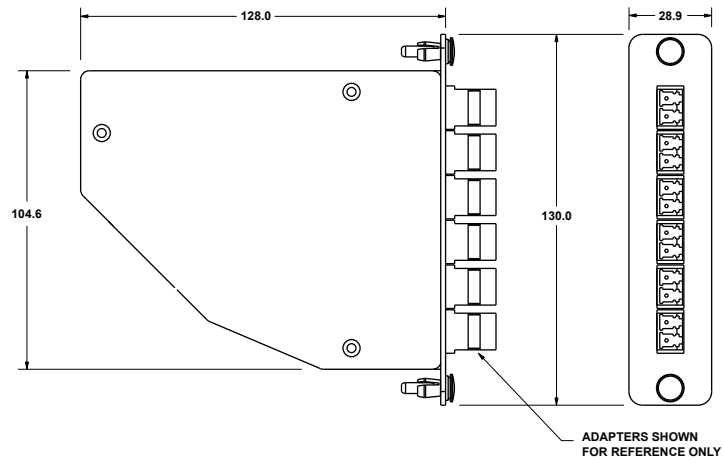


Ordering Information – Accessories

DESCRIPTION	AFL NO.
145 mm Adapter Bracket	FM001636

NOTE: Allows standard LGX modules, such as AFL's Poli-Mod Interconnect Module and the XFM Optical Cassette, to be mounted into existing Corning Cable Systems™ CCH series and PCH series racks and wall mount products.

Dimensions



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Xpress Fiber Management® High Density Products (XFM®-HD)

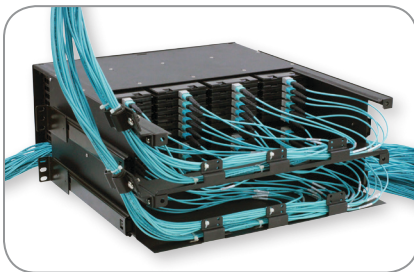
The XFM-HD family of products is designed to offer intuitive fiber management and unmatched fiber port accessibility in both the front and rear of the panel to extreme density applications in an optical interconnect environment. Readily supporting the management of densities up to 576 fibers in a traditional 4 rack-unit (4RU) space, the XFM-HD solution easily matches the highest port densities available in the market. The completely modular solution features low-loss MPO style trunk cable assemblies, Optical Fan-out cassettes with integrated fiber management and Uniboot 2.0 mm LC jumper assemblies. This combination of products cohesively equates to efficient moves, adds and changes and more accurate cost budgeting as there are no other products or accessories required to complete or modify an installation. A unique Uniboot LC connector allows for reversal of polarity in the field without requiring the use of any tools, easing assimilation into existing installations. Microcore trunk cables offer operators a reduced cable diameter which eases congestion in busy raceways, and feature an innovative protective pulling eye solution designed to add efficiency and security to moving the trunks through densely-packed ducts and conduits.



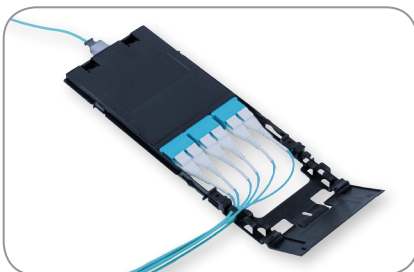
XFM-HD 1RU front view



XFM-HD 2RU front view with trays pulled out



XFM-HD 4RU rear view



XFM-HD Optical Cassette

Components

- Cassettes
- Panels
- Trunk cable assemblies
- Patch cord assemblies

Features

- Self contained fiber management
- Low loss MPO connectors
- High Density: 1RU/144F, 2RU/288F and 4RU/576F
- Uniboot LC assemblies with field-reversible polarity
- Reduced O.D. Microcore Trunk cable assemblies with enhanced pulling eye option
- Unsurpassed port density
- Simplified front and rear port access by design

Xpress Fiber Management® High Density (XFM®-HD) Patch Panels



XFM-HD Patch Panels in Rack

Made in USA

AFL's XFM-HD patch panels are available in 1RU, 2RU and 4RU sizes with fully-loaded densities of 144 fiber, 288 fiber and 576 fiber, respectively. Designed to support incremental growth or a full-scale deployment in a self-contained manner, the XFM-HD panels consist of the XFM High Density Optical Cassette as a building block, which ensures that both front-side and back-side cabling is secured, protected and well managed.

All panels are 19/23" rack mountable and constructed using a heavy gauge steel with a durable black powder coat finish for an extended service life. The front doors consist of optional locks, are removable without tools, and hinge on the bottom of the panel. The unique sliding rail system locks into a standard rack mounting position yet also allows the user to place the panel into a service position allowing simplified access to "behind-the-wall" components. In tandem with the sliding rail system, the rear door and rear half of the panel lid are joined. When the rear door is removed for service, the rear section of the lid is also removed, enabling unobstructed access from the rear of the panel all the way to the MPO connector interfaces on the module plane.

The trunk cable management area (rear of the panel) features multiple tie-points and lances that are positioned to work well with a predefined trunk breakout length to securely manage slack sub-units while still allowing the modules to slide in/out for installation and service. The 4RU panel features a dual plane design which separates the back-side cabling into two separate 288 fiber groups to aid in installation and ease post-installation maintenance activities.

Features

- Self contained fiber management
- Low loss MPO connectors
- High Density: 1RU/144F, 2RU/288F and 4RU/576F
- Uniboot LC assemblies with field-reversible polarity
- Reduced O.D. Microcore Trunk cable assemblies with enhanced pulling eye option
- Unsurpassed port density
- Simplified front and rear port access by design

Ordering Information

DESCRIPTION	AFL NO.
XFM-HD Panel, 1RU, Empty, 12 Cassette / 144F Capacity, Black	XFM-HD-1U
XFM-HD Panel, 2RU, Empty, 24 Cassette / 288F Capacity, Black	XFM-HD-2U
XFM-HD Panel, 4RU, Empty, 48 Cassette / 576F Capacity, Black	XFM-HD-4U

Continued
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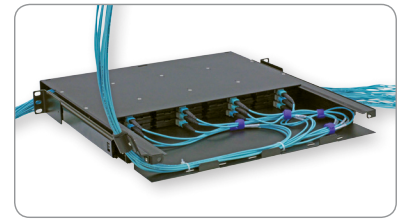
Xpress Fiber Management® High Density (XFM®-HD) Patch Panels (cont.)



XFM-HD 1RU



XFM-HD 1RU front



XFM-HD 1RU rear



XFM-HD 2RU



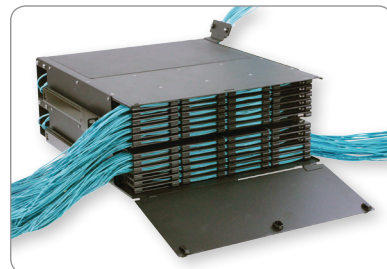
XFM-HD 2RU front



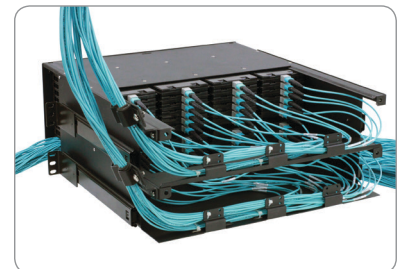
XFM-HD 2RU rear



XFM-HD 4RU



XFM-HD 4RU front



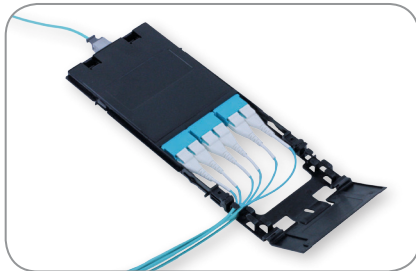
XFM-HD 4RU rear

Specifications

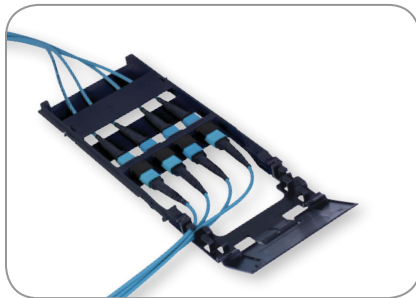
PARAMETER	MODEL		
	XFM-HD 1U	XFM-HD 2U	XFM-HD 4U
Rack Space Requirement	1 RU (1.75 in)	2 RU (3.50 in)	4 RU (7.00 in)
Managed Density	144F Front Side - 72 Micro-Dual 2F Assemblies Back Side - 12 x 12F trunk – 1 x 144F (any increment of 12F)	288F Front Side - 144 Micro-Dual 2F Assemblies Back Side - 24 x 12F trunk – 2 x 144F (any increment of 12F)	576F Front Side - 288 Dual-Link 2F Assemblies Back Side - 48 x 12F trunk – 4 x 144F (any increment of 12F)
Module Capacity	12 x 12 fiber	24 x 12 fiber	48 x 12 fiber
Dimensions* (HxWxD)	1.72 x 16.25 x 18.66 in	3.47 x 16.25 x 18.66 in	6.97 x 16.25 x 18.66 in
Shipping Dimensions (HxWxD)	24.5 x 21 x 5 in	24.5 x 21 x 6.8 in	24.5 x 21 x 10.3 in
Weight	18 lbs.	21 lbs.	34 lbs.
Color	Black	Black	Black
Material	Metal Components: 16 GA Steel per ASTM A366 Plastic Components: UL 94 V0 rated PBT	Metal Components: 16 GA Steel per ASTM A366 Plastic Components: UL 94 V0 rated PBT	Metal Components: 16 GA Steel per ASTM A366 Plastic Components: UL 94 V0 rated PBT

* Not including mounting ears

Xpress Fiber Management® High Density (XFM®-HD) Optical Cassettes



XFM-HD LC Module



XFM-HD MTP Module

Features

- Self contained fiber management
- Low loss MPO connectors

AFL's XFM-HD Optical Cassettes are the building-blocks of the XFM-HD system. Optical Cassettes can be installed into all three XFM-HD panels from the front or rear and mount independently on an integral card guide rail system. This mounting system features a mechanical stop at the position where the connector / adapter mating point extends beyond the leading edge of the patch panel, preventing inadvertent removal of the module from the front side once installed. A self-contained fiber manager is incorporated into each cassette ensuring that the exiting cables are well-managed and organized, regardless of fiber exit direction. The fiber manager is reversible in the field to support both an Alpha and Beta module position, depending on the polarity management practice being employed.

Each cassette ships with a field-installable clip which links multiple cassettes together within a patch panel to form a shelf. This shelf slides inwards and outwards allowing access to each individual fiber connection while not disturbing any fiber connection in that shelf. These clips are field-removable at any time should the need arise to remove a module for service, to move a link, or to upgrade to a new fiber type.

XFM-HD Optical Cassettes are designed to function exclusively within the XFM-HD product line, and are compatible with all patch panels in the line.

Specifications

PARAMETER	SINGLE-MODE FIBER (OS1) LC/UPC - MTP	MULTIMODE FIBER (OM4) LC/PC - MTP
Max IL	1.15 dB	1.15 dB
Typical IL	0.6 dB	0.6 dB
Reflectance	-55 dB	-30 dB
Shipping Dimensions	12 x 6 x 2 in.	12 x 6 x 2 in.
Weight	1.6 lbs.	1.6 lbs.

Ordering Information

DESCRIPTION	AFL NO.
XFM-HD High Density Optical Cassette, 4 Position MPO	HDOC-MPO-4A
XFM-HD High Density Optical Cassette, 12F Single-mode, LC/UPC - MPO Connectors	HDOC-SM-ULC
XFM-HD High Density Optical Cassette, 12F 10G 50 μm MM, LC/PC - MPO Connector	HDOC-50-PLC

Xpress Fiber Management® High Density (XFM®-HD) Trunk Cable Assemblies



XFM-HD trunk cable assemblies consist of sub-unitized MicroCore® fiber optic cable in fiber counts ranging from 12-144. This reduced diameter, high performance cable is comprised of multiple 12-fiber sub-unit tubes, each containing twelve 250 µm colored fibers enclosed by a high performance PVC jacket. The reduced diameter offers the installer many advantages over traditional tight-buffered cable options – higher tolerance to bends during and after installation; requires less space in cable trays, raceways, ducts and conduits; and enables more efficient airflow in congested, high density cabling applications.

Trunk cables are available in a variety of configurations to align with customer needs. High-precision MPO ferrules ensure that optical performance specifications are met without requiring components to be paired, offering customers the utmost in flexibility when consuming inventory or ordering new product. No transition is required on MPO-terminated trunk cables due to cable design. An epoxy-filled, reduced OD transition piece is standard on trunk cables terminated with single-fiber connectors. MPO-terminated trunk cable ends have a single, predefined breakout length, regardless of fiber count, which functions in perfect harmony with any XFM-HD patch panel, eliminating guesswork and virtually guaranteeing a clean and well-organized installation.

Features

- Self contained fiber management
- Low loss MPO connectors
- Uniboot LC assemblies with field-reversible polarity
- Reduced O.D. Microcore Trunk cable assemblies with enhanced pulling eye option
- Unsurpassed port density

Specifications

CONNECTOR	CONNECTOR ORDERING CODE	CONNECTOR HOUSING COLOR	BOOT COLOR	FIBER TYPE	CABLE JACKET COLOR	FLAME RATING	IL (TYPICAL dB)***	RL (TYPICAL dB)***
LC/UPC	UDL	Blue	White	Single-mode G.657.A1 (BIF)	Yellow	Plenum	0.15	-60
LC/PC	PDL	Beige	White	50 µm OM3, OM4	Aqua	Plenum	0.15	-35
Angled MTP (unpinned)	ATF	Green	Black	Single-mode G.657.A1 (BIF)	Yellow	Plenum	0.35	-65
Angled MTP (pinned)	ATM	Green	Black	Single-mode G.657.A1 (BIF)	Yellow	Plenum	0.35	-65
Angled MTP (unpinned), Low Loss	ETF	Green	Black	Single-mode G.657.A1 (BIF)	Yellow	Plenum	0.15	-65
Angled MTP (pinned), Low Loss	ETM	Green	Black	Single-mode G.657.A1 (BIF)	Yellow	Plenum	0.15	-65
MTP (unpinned), Low Loss	FTF	Aqua	Black	50 µm OM3, OM4	Aqua	Plenum	0.15	-30
MTP (pinned), Low Loss	FTM	Aqua	Black	50 µm OM3, OM4	Aqua	Plenum	0.15	-30

NOTES: Typical values based on equal quality connectors

Continued
→

Xpress Fiber Management® High Density (XFM®-HD) Trunk Cable Assemblies (cont.)

Ordering Information

XFM-HD MTP Trunks

CONNECTOR	FIBER COUNT	APC SM	APC SM - ELITE	PC MM 50 μm OM3	PC MM 50 μm OM4
MTP (No Pins) - MTP (No Pins)	12	XFM000057-XXXX	XFM000071-XXXX	XFM000085-XXXX	XFM000099-XXXX
	24	XFM000058-XXXX	XFM000072-XXXX	XFM000086-XXXX	XFM000100-XXXX
	48	XFM000060-XXXX	XFM000074-XXXX	XFM000088-XXXX	XFM000102-XXXX
	72	XFM000061-XXXX	XFM000075-XXXX	XFM000089-XXXX	XFM000103-XXXX
	96	XFM000062-XXXX	XFM000076-XXXX	XFM000090-XXXX	XFM000104-XXXX
	144	XFM000063-XXXX	XFM000077-XXXX	XFM000091-XXXX	XFM000105-XXXX

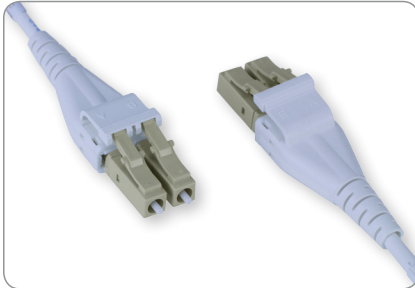
XXXX = length in meters and XXXXFT = length in feet

XFM-HD MTP Extender Trunks

CONNECTOR	FIBER COUNT	APC SM	APC SM - ELITE	PC MM 50 μm OM3	PC MM 50 μm OM4
MTP (No Pins) - MTP (Pins)	12	XFM000064-XXXX	XFM000078-XXXX	XFM000092-XXXX	XFM000106-XXXX
	24	XFM000065-XXXX	XFM000079-XXXX	XFM000093-XXXX	XFM000107-XXXX
	48	XFM000067-XXXX	XFM000081-XXXX	XFM000095-XXXX	XFM000109-XXXX
	72	XFM000068-XXXX	XFM000082-XXXX	XFM000096-XXXX	XFM000110-XXXX
	96	XFM000069-XXXX	XFM000083-XXXX	XFM000097-XXXX	XFM000111-XXXX
	144	XFM000070-XXXX	XFM000084-XXXX	XFM000098-XXXX	XFM000112-XXXX

XXXX = length in meters and XXXXFT = length in feet
 XXXX = length in meters and XXXXFT = length in feet

Xpress Fiber Management® High Density (XFM®-HD) Patch Cord Assemblies



XFM-HD patch cords are assembled with AFL's Micro-Dual (2-fiber) cable and are terminated with a unique, field-reversible LC Uniboot connector. This round cable design coupled with the Uniboot LC connector minimizes the front-side cabling footprint and reduces the impact on airflow up and down the rack, and between racks. A 2.0 mm and 2.4 mm OD option is available, enabling both 250 μm and 900 μm fiber coating options within the cable. Riser- and plenum-rated jackets are available and all major fiber types are supported.

In addition to being field-reversible, the Uniboot LC connector also supports both the SFP and Mini-SFP transceiver footprints. Virtually all polarity management methods and active component connections are supported, enabling the end user to utilize a single product across new, existing and acquired network installations.

Features

- Self contained fiber management
- Low loss MPO connectors
- Uniboot LC assemblies with field-reversible polarity
- Reduced O.D. Microcore Trunk cable assemblies with enhanced pulling eye option
- Unsurpassed port density

Specifications

CONNECTOR	CONNECTOR ORDERING CODE	CONNECTOR HOUSING COLOR	BOOT COLOR	FIBER TYPE	CABLE JACKET COLOR	FLAME RATING	IL	RL
LC/UPC	ULU ¹	Blue	White	Single-mode G.657.A1 (BIF)	Yellow	Plenum	0.3 dB	>55 dB
LC/PC	PLU ²	Beige	White	50 μm OM3, OM4	Aqua	Plenum	0.5 dB	>30 dB

1 - Single-mode only

2 - Multimode only

Ordering Information

MTP-LC Fanouts

CONNECTOR	FIBER COUNT	APC SM	PC MM 50 μm OM3	PC MM 50 μm OM4
MTP (Pins) - LC Duplex	12	CS009521-XXXX	CS011510-XXXX	CS009519-XXXX

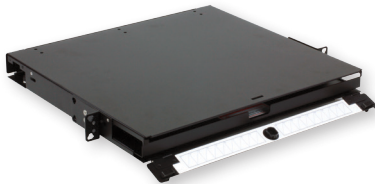
XXXX = length in meters and XXXXFT = length in feet

LC Uniboot Assemblies

CONNECTOR	FIBER COUNT	UPC SM	PC MM 50 μm OM3	PC MM 50 μm OM4
LC Uniboot - LC Uniboot Assembly, 2.0 mm Plenum	2	CS011378-XXXX	CS010640-XXXX	CS011386-XXXX
LC Uniboot - LC Uniboot Assembly, 2.4 mm Plenum	2	CS011389-XXXX	CS011397-XXXX	CS011400-XXXX

XXXX = length in meters and XXXXFT = length in feet

Xpress Fiber Management® (XFM) 1RU Patch Panel



The Xpress Fiber Management (XFM) 1U patch panel is a rack mountable interconnect point specifically designed to manage dense fiber applications. Based on the LGX® intermateability platform, the panel is fully compatible with AFL's XFM Optical Cassette, Passive Optical Coupler Modules, and Poli-MOD solutions. This panel offers enhanced management of densities up to 72 fibers using MTP-LC XFM Optical Cassettes (24 fibers).

Features

- Steel construction
- Textured black powder coat finish
- Universal WECO/TIA 19"/23" rack compatibility
- (3) LGX 118 adapter plate / module mounting positions
- Slide-out tray with relief cut-outs for simplified connector access
- Optional front door key lock for heightened protection of internal components

Applications

- Data Centers
- Enterprise Networks
- Telecommunications Closets
- Central Offices / Headends

Specifications

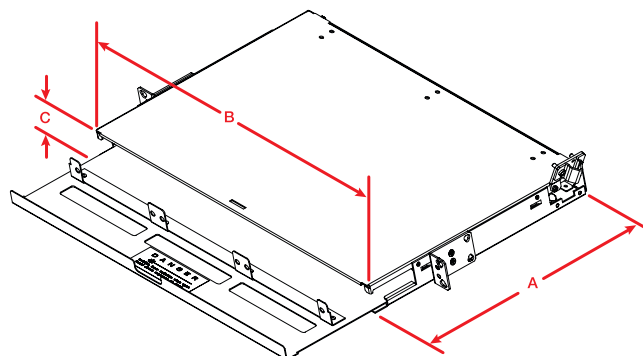
DEPTH (A) (inches)	WIDTH (B) (inches)	HEIGHT (C) (inches)	RACK UNITS	CAPACITY	UNLOADED WEIGHT
15.5	17	1.7	1	(3) LGX 118	13 lbs.

Ordering Information

DESCRIPTION	MODEL NUMBER	AFL NO.
Xpress® Fiber Management 1U Patch Panel, Black, Empty	XFM-1-U-B-0	FM002711-BE

Accessories

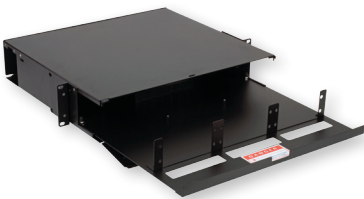
DESCRIPTION	AFL NO.
Kit, Lock, for CON/CNS Panels	FM001318



Made in USA

LGX is a registered trademark of Furukawa Electric North America, Inc.

Xpress Fiber Management® (XFM) 2RU Patch Panel



The Xpress Fiber Management (XFM) 2U patch panel is a rack mountable interconnect point specifically designed to manage dense fiber applications. Based on the LGX® intermateability platform, the panel is fully compatible with AFL's XFM Optical Cassette, Passive Optical Coupler Modules, and Poli-MOD solutions. This panel offers enhanced management of densities up to 144 fibers using MTP-LC XFM Optical Cassettes (24 fibers).

Features

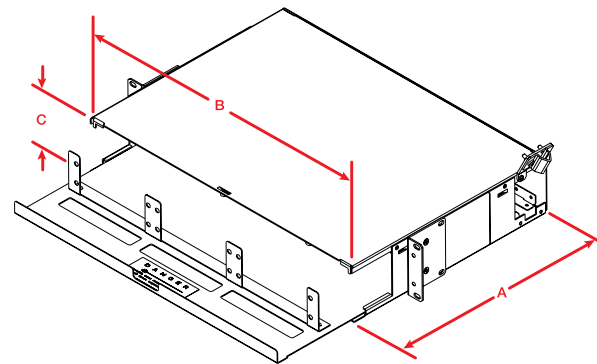
- Steel construction
- Textured black powder coat finish
- Universal WECO/TIA 19"/23" rack compatibility
- (6) LGX 118 adapter plate / module mounting positions
- Slide-out tray with relief cut-outs for simplified connector access
- Optional front door key lock for heightened protection of internal components

Applications

- Data Centers
- Enterprise Networks
- Telecommunications Closets
- Central Offices / Headends

Specifications

DEPTH (A) IN INCHES	WIDTH (B) IN INCHES	HEIGHT (C) IN INCHES	RACK UNITS	CAPACITY	UNLOADED WEIGHT
15.5	17	3.5	2	(6) LGX 118	15 lbs.



FM002712-BE
FM001318

Ordering Information

DESCRIPTION	MODEL NUMBER	AFL NO.
Xpress™ Fiber Management 2U Patch Panel, Black, Empty	XFM-2-U-B-0	FM002712-BE

Accessories

DESCRIPTION	AFL NO.
Kit, Lock, for CON/CNS Panels	FM001318

Made in USA

LGX is a registered trademark of Furukawa Electric North America, Inc.



Xpress Fiber Management® (XFM) 4RU Patch Panel

The Xpress Fiber Management (XFM) 4U patch panel is a rack mountable interconnect point specifically designed to manage dense fiber applications. Based on the LGX® intermateability platform, the panel is fully compatible with AFL's XFM Optical Cassette and Poli-MOD solutions, offering enhanced management of densities up to 288F using MTP/MPO, single fiber, or patch and splice methodologies. A hinged fiber management panel can be secured in an upright or lowered position, which provides enhanced cable routing exiting the panel to the left or right, and also allows cable assemblies to be routed up and across the front of the panel for extreme density management. This panel can be provisioned with a key lock at the time of order for secure environments.

Features

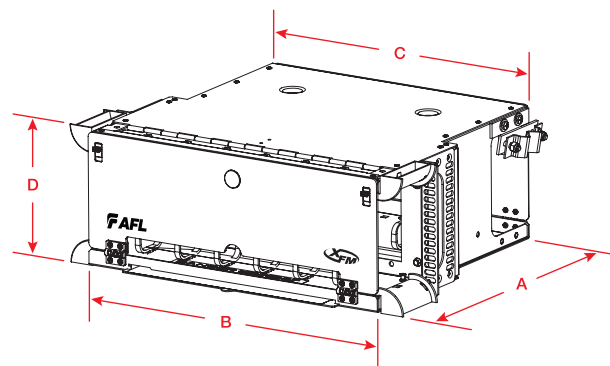
- Aluminum construction
- Textured black powder coat finish
- Universal WECO/TIA 19"/23" rack compatibility
- (12) LGX 118 adapter plate / module mounting positions
- Mounting depth adjustable from flush to 8" in 1" increments

Applications

- Data Centers
- Enterprise Networks
- Telecommunications Closets
- Central Offices / Headends

Specifications

DEPTH (A) IN INCHES	FRONT WIDTH (B) IN INCHES	REAR WIDTH (C) IN INCHES	HEIGHT (D) IN INCHES	RACK UNITS	CAPACITY	UNLOADED WEIGHT
15.5	17	15	7	4	(12) LGX 118	9 lbs.



Ordering Information

DESCRIPTION	MODEL NO.	AFL NO.
Xpress Fiber Management 4U Patch Panel, Black, Empty	XFM-4U-B-0	FM001090-B
Xpress Fiber Management 4U Patch Panel, Black, Empty, Key Lock	XFM-4U-B-K	FM001218-B

LGX is a registered trademark of Furukawa Electric North America, Inc.



WME-02



WME-02 shown empty



WME-02 shown fully loaded

Wall Mount Interconnect Enclosure (WME) with Two LGX® Mounting Positions

AFL's wall mount interconnect enclosure (WME-02) provides a convenient convergence point for interconnecting and/or splicing in wall mount applications. Provisioned for up to two LGX compatible adapter plates or optical modules, the enclosure features a well-engineered solution for fiber and cable management on both the ingress and egress openings of the enclosure. Robust steel construction ensures the highest level of protection for sensitive components while integrated roll-formed hinges eliminate possible fiber pinch points while deploying or servicing components within. All WME series enclosures feature discrete access doors for provider and customer access which are independently lockable with a common pad-lock or tube-style keyed lock.

Features

- Fits comfortably into new and existing interconnect, cross-connect and co-location environments
- U-shaped cable entry eliminates the need to feed preconnectorized cables through an inconvenient access port
- Modular design fully compatible with PoliMOD™ products and XFM optical cassettes
- Dual doors with separate locking options for flexibility and security
- Available empty, with adapters, or with adapters, splice trays and pigtails pre-installed
- LGX 118 compatible
- Optional splice tray and holder (ordered separately)
- All major connector types are supported

Applications

- Co-Location sites
- Customer premise
- Hub/OTN sites
- Telecommunication closets
- Campus/enterprise environments

Specifications

- Solid steel construction
- Powder coat black textured finish
- Top or bottom cable entry with dust resistant grommets
- Dual-hasp locking/security system
- 12 to 24 fiber patch and splice density
- Two LGX mounting positions
- Physical dimensions: 12.0"H x 14.0"W x 2.5"D
- Empty version weight: 10.65 lbs.

LGX is a registered trademark of Furukawa Electric North America, Inc.

Wall Mount Interconnect Enclosure (WME) with Two LGX® Mounting Positions

Ordering Information

EMPTY	
DESCRIPTION	AFL NO.
WME02 Empty	WME02E

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL	Ultra Polish LC Duplex (ZR) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

HALF LOADED: WME WITH ADAPTER PLATES AND ADAPTERS ONLY				
CONNECTOR TYPE	FIBER COUNT	AFL NO.		
		UPC SM (BLUE)	APC SM (GREEN)	PC MM (BEIGE)
SC	6	WME02AS-USCSM-006000	WME02AS-ASCSM-006000	WME02AS-PSCM6-006000
	12	WME02AS-USCSM-012000	WME02AS-ASCSM-012000	WME02AS-PSCM6-012000
	24	WME02AH-USFSM-024000	WME02AH-ASFSM-024000	WME02AH-PSFM6-024000
LC	6	WME02AS-UDLSM-006000	WME02AS-ADLSM-006000	WME02AS-PDLM6-006000
	12	WME02AS-UDLSM-012000	WME02AS-ADLSM-012000	WME02AS-PDLM6-012000
	24	WME02AH-UDLSM-024000	WME02AH-ADLSM-024000	WME02AH-PDLM6-024000
ST	6	WME02AS-USTSM-006000	—	WME02AS-PSTM6-006000
	12	WME02AS-USTSM-012000	—	WME02AS-PSTM6-012000
	24	WME02AH-USTSM-024000	—	WME02AH-PSTM6-024000
FC	6	WME02AS-UFCSM-006000	WME02AS-AFCSM-006000	WME02AS-PFCM5-006000
	12	WME02AS-UFCSM-012000	WME02AS-AFCSM-012000	WME02AS-PFCM5-012000
	24	WME02AH-UFCSM-024000	WME02AH-AFCSM-024000	WME02AH-PFCM5-024000

LOADED: WME WITH ADAPTER PLATES/ADAPTERS/SPLICE TRAYS/PIGTAIL (900 µm TIGHT BUFFERED FIBERS 3 METERS IN LENGTH)					
CONNECTOR TYPE	FIBER COUNT	AFL NO.			
		UPC SM (BLUE)	APC SM (GREEN)	PC MM 62.5 µm (BEIGE)	PC MM 50 µm (BLACK)
SC	6	WME02FS-USCSM-006110	WME02FS-ASCSM-006110	WME02FS-PSCM6-006110	WME02FS-PSCM5-006110
	12	WME02FS-USCSM-012110	WME02FS-ASCSM-012110	WME02FS-PSCM6-012110	WME02FS-PSCM5-012110
	24	WME02FH-USFSM-024120	WME02FH-ASFSM-024120	WME02FH-PSFM6-024120	WME02FH-PSFM5-024120
LC	6	WME02FS-UDLSM-006110	WME02FS-ADLSM-006110	WME02FS-PDLM6-006110	WME02FS-PDLM5-006110
	12	WME02FS-UDLSM-012110	WME02FS-ADLSM-012110	WME02FS-PDLM6-012110	WME02FS-PDLM5-012110
	24	WME02FH-UDLSM-024120	WME02FH-ADLSM-024120	WME02FH-PDLM6-024120	WME02FH-PDLM5-024120
ST	6	WME02FS-USTSM-006110	—	WME02FS-PSTM6-006110	WME02FS-PSTM5-006110
	12	WME02FS-USTSM-012110	—	WME02FS-PSTM6-012110	WME02FS-PSTM5-012110
	24	WME02FH-USTSM-024120	—	WME02FH-PSTM6-024120	WME02FH-PSTM5-024120
FC	6	WME02FS-UFCSM-006110	WME02FS-AFCSM-006110	WME02FS-PFCM6-006110	WME02FS-PFCM5-006110
	12	WME02FS-UFCSM-012110	WME02FS-AFCSM-012110	WME02FS-PFCM6-012110	WME02FS-PFCM5-012110
	24	WME02FH-UFCSM-024120	WME02FH-AFCSM-024120	WME02FH-PFCM6-024120	WME02FH-PFCM5-024120

ACCESSORIES	
DESCRIPTION	AFL NO.
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 1 Splice Tray	FM002827-1
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 2 Splice Trays	FM002827-2

LGX is a registered trademark of Furukawa Electric North America, Inc.



WME-04



WME-04 shown empty



WME-04 shown fully loaded

Wall Mount Interconnect Enclosure (WME) with Four LGX® Mounting Positions

AFL's wall mount interconnect enclosure (WME-04) provides a convenient convergence point for interconnecting and/or splicing in wall mount applications. Provisioned for up to four LGX compatible adapter plates or optical modules, the enclosure features a well-engineered solution for fiber and cable management on both the ingress and egress openings of the enclosure. Robust steel construction ensures the highest level of protection for sensitive components while integrated roll-formed hinges eliminate possible fiber pinch points while deploying or servicing components within. All WME series enclosures feature discrete access doors for provider and customer access which are independently lockable with a common pad-lock or tube-style keyed lock.

Features

- Fits comfortably into new and existing interconnect, cross-connect and co-location environments
- U-shaped cable entry eliminates the need to feed preconnectorized cables through an inconvenient access port
- Modular design fully compatible with PoliMOD™ products and XFM optical cassettes
- Dual doors with separate locking options for flexibility and security
- Available empty, with adapters, or with adapters, splice trays and pigtails pre-installed
- LGX 118 compatible
- Optional splice tray and holder (ordered separately)
- All major connector types are supported

Applications

- Co-Location sites
- Customer premise
- Hub/OTN sites
- Telecommunication closets
- Campus/enterprise environments

Specifications

- Solid steel construction
- Powder coat black textured finish
- Top or bottom cable entry with dust resistant grommets
- Dual-hasp locking/security system
- 24 to 48 fiber patch and splice density
- Four LGX mounting positions
- Physical dimensions: 12.0" H x 16.0" W x 3.63" D

Wall Mount Interconnect Enclosure (WME) with Four LGX® Mounting Positions

Ordering Information

EMPTY	
DESCRIPTION	AFL NO.
WME04 Empty	WME04E

HALF LOADED: WME WITH ADAPTER PLATES AND ADAPTERS ONLY				
CONNECTOR TYPE	FIBER COUNT	AFL NO.		
		UPC SM (BLUE)	APC SM (GREEN)	PC MM (BEIGE)
SC	24	WME04AS-USCSM-024000	WME04AS-ASCSM-024000	WME04AS-PSCM6-024000
	48	WME04AH-USFSM-048000	WME04AH-ASFSM-048000	WME04AH-PSFM6-048000
LC	24	WME04AS-UDLSM-024000	WME04AS-ADLSM-024000	WME04AS-PDLM6-024000
	48	WME04AH-UDLSM-048000	WME04AH-ADLSM-048000	WME04AH-PDLM6-048000
ST	24	WME04AS-USTSM-024000	—	WME04AS-PSTM6-024000
	48	WME04AH-USTSM-048000	—	WME04AH-PSTM6-048000
FC	24	WME04AS-UFCSM-024000	WME04AS-AFCSM-024000	WME04AS-PFCM5-024000
	48	WME04AH-UFCSM-048000	WME04AH-AFCSM-048000	WME04AH-PFCM5-048000

Connector/Adapter Key

TYPE	DESCRIPTION
ASC	Angle Polish SC (ZR) sleeve-SM
ASF	Angle Polish SC Duplex (ZR) sleeve-SM
PSC	Physical Polish SC (PB) sleeve-MM
PSF	Physical Polish SC Duplex (PB) sleeve-MM
USC	Ultra Polish SC with (ZR) sleeve-SM
USF	Ultra Polish SC Duplex (ZR) sleeve-SM
PST	Physical Polish ST (PB) sleeve-MM
UST	Ultra Polish ST (ZR) sleeve-SM
AFC	Angle Polish FC (ZR) sleeve-SM
PFC	Physical Polish FC (PB) sleeve-MM
UFC	Ultra Polish FC (ZR) sleeve-SM
ADL	Angle Polish LC Duplex (ZR) sleeve-SM
PDL	Physical Polish LC Duplex (PB) sleeve-MM
PLC	Physical Polish LC (PB) sleeve-MM
UDL	Ultra Polish LC Duplex (ZR) sleeve-SM
ULC	Ultra Polish LC (ZR) sleeve-SM

LOADED: WME WITH ADAPTER PLATES/ADAPTERS/SPLICE TRAYS/PIGTAIL (900 µm TIGHT BUFFERED FIBERS 3 METERS IN LENGTH)					
CONNECTOR TYPE	FIBER COUNT	AFL NO.			
		UPC SM (BLUE)	APC SM (GREEN)	PC MM 62.5 µm (BEIGE)	PC MM 50 µm (BLACK)
SC	24	WME04FS-USCSM-024120	WME04FS-ASCSM-024120	WME04FS-PSCM6-024120	WME04FS-PSCM5-024120
	48	WME04FH-USFSM-048140	WME04FH-ASFSM-048140	WME04FH-PSFM6-048140	WME04FH-PSFM5-048140
LC	24	WME04FS-UDLSM-024120	WME04FS-ADLSM-024120	WME04FS-PDLM6-024120	WME04FS-PDLM5-024120
	48	WME04FH-UDLSM-048140	WME04FH-ADLSM-048140	WME04FH-PDLM6-048140	WME04FH-PDLM5-048140
ST	24	WME04FS-USTSM-024120	—	WME04FS-PSTM6-024120	WME04FS-PSTM5-024120
	48	WME04FH-USTSM-048140	—	WME04FH-PSTM6-048140	WME04FH-PSTM5-048140
FC	24	WME04FS-UFCSM-024120	WME04FS-AFCSM-024120	WME04FS-PFCM6-024120	WME04FS-PFCM5-024120
	48	WME04FH-UFCSM-048140	WME04FH-AFCSM-048140	WME04FH-PFCM6-048140	WME04FH-PFCM5-048140

ACCESSORIES	
DESCRIPTION	AFL NO.
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 3 Splice Trays	FM002827-3
Splice Tray Kit: Single Fusion 12F, 2RU, WME02, WME04, 4 Splice Trays	FM002827-4

The Leader in Fiber Optic Training

Since 1987, the Light Brigade, AFL's training division, has trained more than 45,000 technicians, installers, engineers, and designers from a wide variety of industries: telephony, broadband cable, utilities, media broadcast, industrial, manufacturing, mining, government, aerospace, along with various branches of the military.

Whether your application is voice, video, and/or data, or you are a service provider, contractor, or end user, The Light Brigade can provide critical training for your personnel to lower operating costs and improve installation efficiency.

Instructors

Our professional instructors and technicians are technically skilled and have a variety of real world practical experience in all aspects of fiber optics. With experience in applications such as communications, signaling, security, and network control, our instructors provide valuable insight into the design, installation, and operation of state-of-the-art fiber optic systems.

Hands-on Training

Extensive hands-on training sessions help our attendees to learn fiber optics by doing rather than watching. Attendees spend class time building, testing, and troubleshooting an actual fiber optic system. In each of our courses, the ratio of students to instructors during the hands-on sessions assures that there is direct personal interaction and attention to each student.

Technology-based

In our training classes, you receive an objective viewpoint, not a sales pitch. We teach fiber techniques that are applicable to any product, and select the best available equipment and supplies from many different manufacturers. You can choose to develop your skills using our state-of-the-art equipment and accessories, or bring your own to learn how to use it more effectively.

Relevant

Our course materials are constantly updated to stay in step with current and emerging technologies. All of our materials and techniques are written and taught based on the latest standards, recommendations, and codes from ANSI, ITU, TIA/EIA, IEEE, IEC, Telcordia, MSHA, NEC, NESC, and others.

Continuing Support

To assure continued long-term support, we offer technical assistance to our class attendees. If you have a question or need help after the class is over, our staff is there to help.



Certification Options

Light Brigade Certificate of Completion

Everyone who completes one of our courses will receive a Light Brigade Certificate of Completion, signed by the course instructor. This certificate specifies the content and total number of instructional hours for both the classroom and hands-on portion and is traceable to the class attended.

Third-party Credits and Certification

Many of our classes are eligible for independent certifications through third-party industry organizations and groups. These certifications are typically progressive levels and show competency in hands-on skills and technical knowledge. See individual course for more information.

In addition, many of our courses are eligible for BICSI Continuing Education Credits (CECs), SCTE Recertification Units (RUs), IMSA Technical Advancement Recognition Points (TARPs), and Infocomm Recertification Units (RUs).



Fiber Optic Association (FOA)



Electronics Technicians Association (ETA)



International Municipal Signal Association (IMSA)



Utilities Telecom Council (UTC)



Infocomm

	Page	ETA FOI	ETA FOT-OSP	FOA CFOT	FTTH Council CFHP	IMSA Level I	IMSA Level II	IMSA Level III	UTC Level 1	UTC Level 2	UTC Level 3	BICSI CECs	SCTE RUs	Infocomm RUs
Fiber Optics 1-2-3	10	•										•	•	
Advanced Hands-on Modules	11		•									•	•	
Certified Fiber to the Home Professional	12				•								•	
FTTx for Installers and Technicians	13		•									•	•	
Fiber Characterization	14												•	
Emergency Restoration	15												•	
Fiber Optics for Utilities Level 1	16								•					
Fiber Optics for Utilities Level 2	17									•				
Fiber Optics for Utilities Level 3 (Custom)	–										•			
Fiber Optics for Traffic Systems Level I	18					•								
Fiber Optics for Traffic Systems Level II	18						•							
Fiber Optics for Traffic Systems Level III	18							•						
Fiber Optics for Oil/Gas	19	•												
Fiber Optics for Mining Applications	20	•												
Fiber Optics for Pro-AV	21													•
Premises/LAN Installation & Maintenance	22			•								•		
Staff Development DVDs	26											•	•	



FTTH Council



Society of Cable Telecommunications Engineers (SCTE)



Building Industry Consulting Service International, Inc. (BICSI)

Please contact your AFL Sales Representative for information about our other products or services.

**FIBER OPTIC CABLE
(OPGW, ADSS, Loose Tube)**



**TEST AND INSPECTION
EQUIPMENT**



**FUSION SPLICING
SYSTEMS AND ACCESSORIES**



**FIBER OUTSIDE PLANT
EQUIPMENT**



Along with a broad range of products, we also offer professional training through The Light Brigade®. Over 45,000 people have completed a Light Brigade training course making us the leading fiber optic training provider in the world. Visit www.lightbrigade for more information.



