



Centralized Connectivity Solutions

For Broadband Deployments

COMMSCOPE®

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Introduction

CommScope's Commitment to Rural Broadband

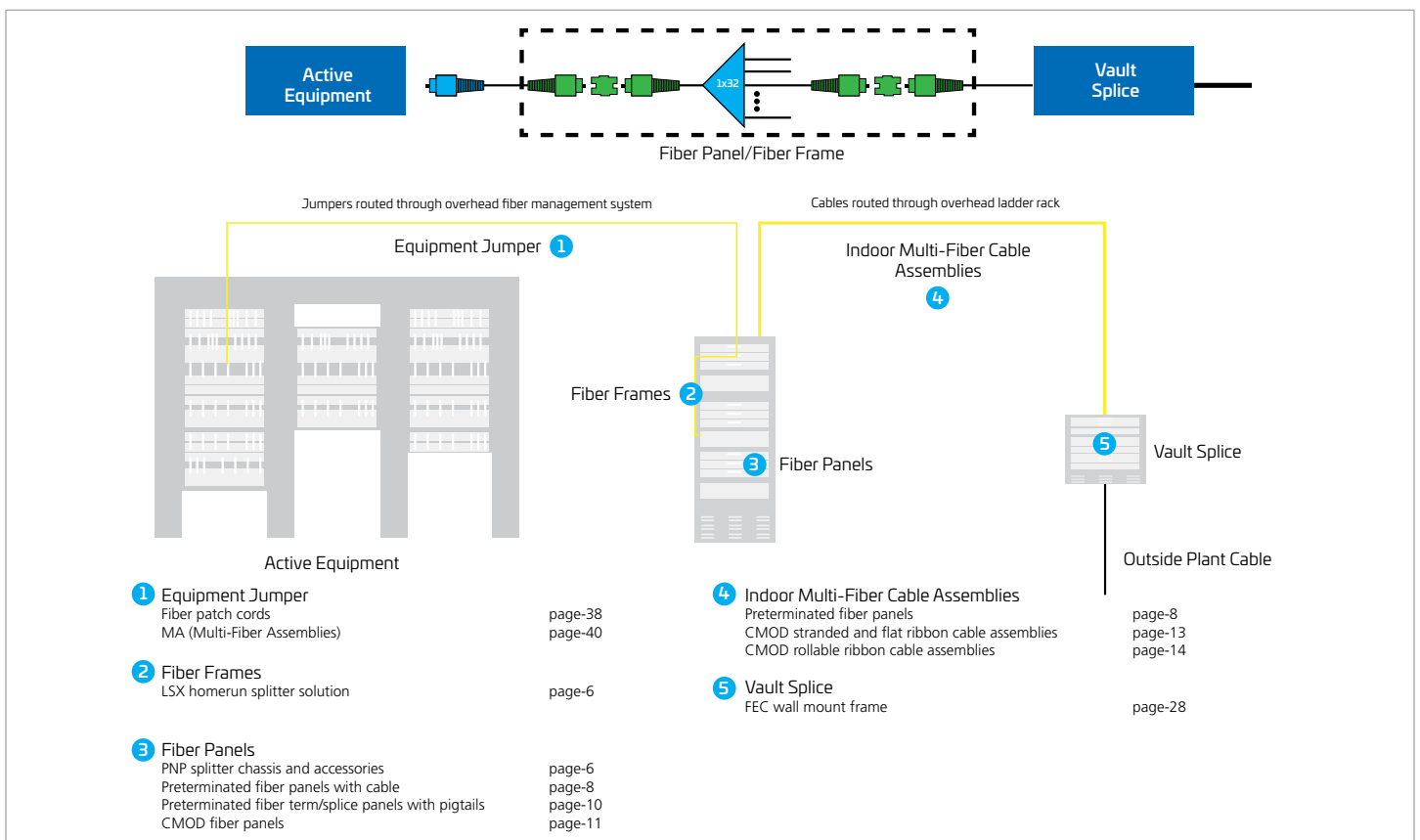
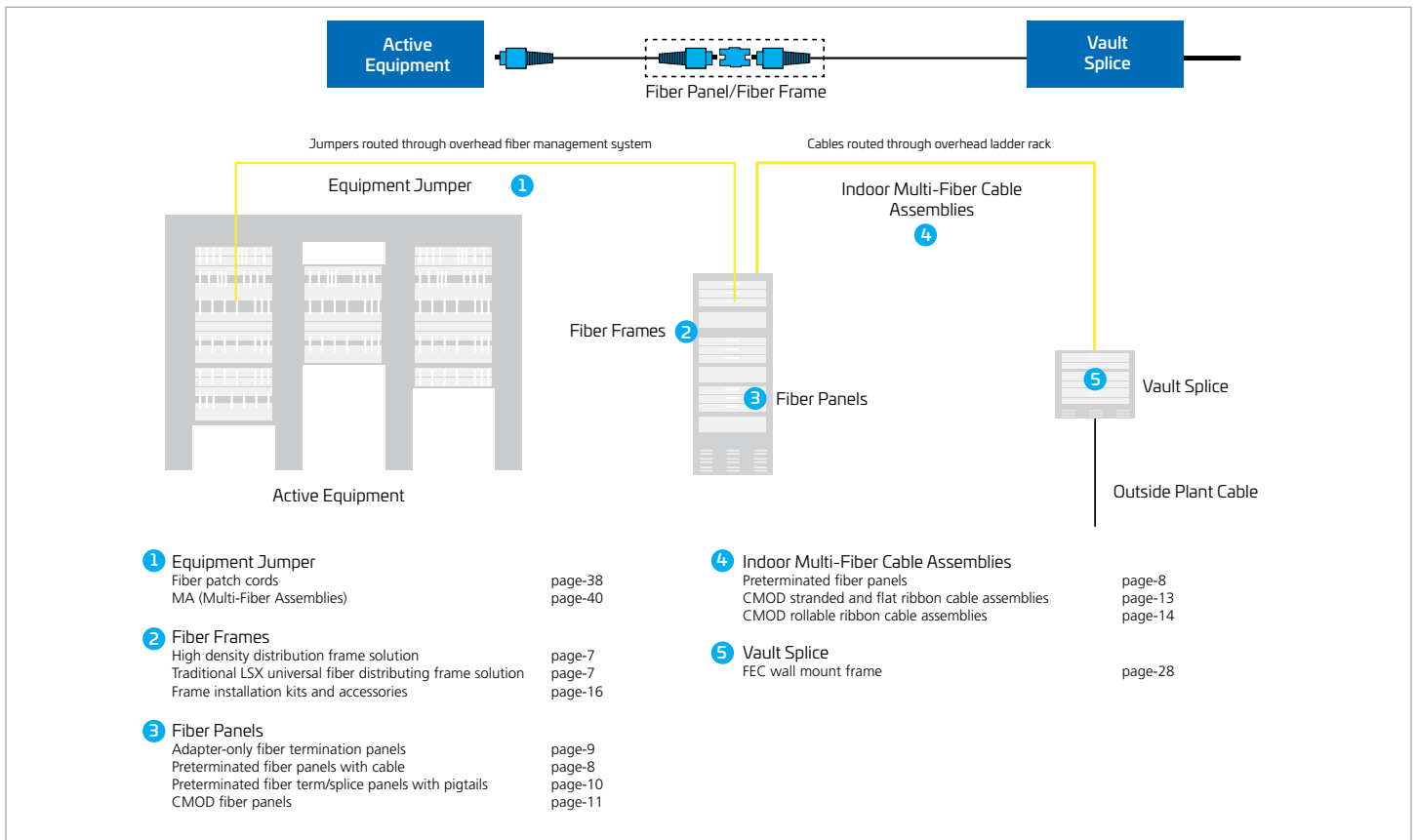
At CommScope, our dedication to rural broadband goes beyond technology. We recognize that every connection matters. By harnessing solutions tailored for lower-density deployment, service providers can extend the benefits of broadband to even the most remote corners of our world.

CommScope's suite of solutions is purposefully designed to address the unique challenges faced by small central offices, equipment rooms, huts, and shelters. Here's how our offerings can enhance connectivity and streamline operations in these critical hubs:

- Seamless connectivity
- Scalability
- Efficient deployment
- Simplified fiber management
- Simplified installation
- Reliability

CommScope's commitment to rural broadband extends beyond technology; it's about connecting people, even in the most remote corners of our world. Whether it's enabling high-speed internet access or simplifying fiber management, our solutions empower small deployments to make a big impact.

Introduction



Introduction

Fiber Cable Assembly

CommScope produces a wide variety of fiber optical cable assemblies and accessories designed to meet the specific application needs of our customers in the Central Office and Headend Inside-Plant (ISP) environments - from simplex and duplex patch cords, multi-fiber cable assemblies to connectors and adapters.

Frame

CommScope's LSX solution is designed to fit a variety of termination, splice and storage applications. Each frame option is built to industry standards to ensure commonality with patch cord routing, slack storage and fiber protection.

Termination panel

The LSX panel is available in adaptor only versions in configurations of 24, 48, 72, 96, 144, and 288. Preterminated panels are available in 48, 72, 96, 144, and 288 fiber versions with either intrafacility (IFC) or outside plant (OSP) cables for ease of installation.

Termination and Splice panel

LSX preterminated fiber termination/splice panels are available with a splicing area integrated into the panel. Termination and splice panels are available in configurations of 144 and 288 fibers.

Value-added module (VAM) chassis

Adding signal management and enhancement functions, such as splitters, couplers and wavelength division multiplexers, optimizes the value of your fiber network, by providing nonintrusive access to the optical signal for monitoring and testing signal integrity. The LGX compatible VAM chassis accommodates various splitter and WDM modules.

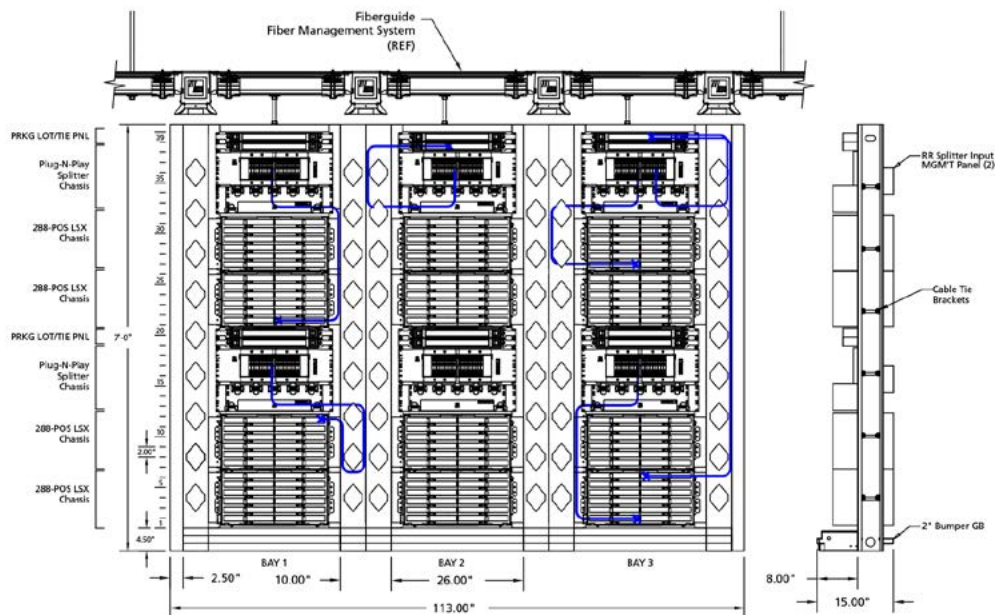
LSX Product overview

Recommended applications	Small to medium fiber count applications. Minimal cable management features. Lowest cost solution.
Description	LGX compatible
Number of fibers, future growth potential	Up to 5,000
Interconnect	Good
Cross-connect	Good, no rear cable management
Accommodates on-frame splicing	Good
Accommodates off-frame splicing	Good
Rear access	Must have full access to front and rear
Density – terminations per frame	1,728 terminations per frame
Front access to rear connector	No
VAM capabilities	Yes
Slack storage location	Utilizes positive radius control or drip loop method
Connector access	Straight adapter

* LGX is a registered trademark of Furukawa Electric North America.

LSX Optical Distribution Frames

CommScope's homerun splitter solution incorporates the LSX 288-position distribution panel along with plug and play splitter modules for central office/headend splitting. Able to effectively manage 1,152 homes within a seven-foot frame, this solution offers excellent density with CommScope's cable management and radius control. In addition, these same plug and play splitter modules are commonly used within CommScope's outdoor Fiber Distribution Hubs (FDHs), allowing for easy-to-manage inventory with one splitter type versatile enough for both inside and outside environments.

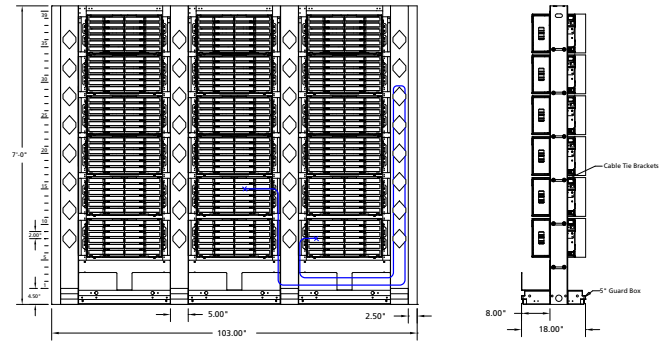


ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	CATALOG NUMBER
7' unequal flange network non-seismic rack, front 8"D GB, (39) 2.00" WECC mtg. spaces	2.1 m x 660 mm x 381 mm (7' x 26" x 15")	RAC-7A0160
15" D Interbay Management Panel	2.1 m x 127 mm x 381 mm (7' x 5" x 15")	E-501-L139-HD
15" D Universal-Style End Guard	2.1 m x 64 mm x 381 mm (7' x 2.5" x 15")	RAC-7B0162
Plug-and-Play Splitter Chassis and Accessories		
Rack Mount Chassis and Management Kit – 24-position rack mount PNP splitter chassis. Front and rear cable management	311.15 mm x 482/584 mm x 304.8 mm (12.25" x 19"/23" x 12")	FPS-MPPRACKMKT
SC/APC PNP 1x32 Splitter – Mini PNP splitter module plug-in. Single 1x32 standard, 54" pigtail length		FPS-MPP1AJ
32-Position Tie Panel – 1.75" H term-only panel with SC/APC adapters	44.45 mm x 482/584 mm x 279.4mm (1.75" x 19"/23" x 11")	FMT-DRT0J0A00-A32P
Parking Lot 1.75" H for pigtail parking	44.45 mm x 482/584 mm x 279.4mm (1.75" x 19"/23" x 11")	FMT-DPK000000-A00P
19"/23" 2 RU Parking Lot	89 mm x 482/584 mm x 152.4mm (3.5" x 19"/23" x 6")	ACE-ACC200-PKLT3

LSX 288 termination/splice applications require guard box and end guard extenders. See termination/splice ordering information.

HIGH-DENSITY DISTRIBUTION FRAME SOLUTION (USING 288-TERMINATION/SPLICE PANEL)

The termination and splice LSX-288 solution utilizes a traditional frame designed to fit a variety of termination, splice and storage applications. This front load frame is built to ensure commonality with patch cord routing, slack storage and fiber protection. Available accessories include panels, lower trough, interbay management panels (IMPs) and end guards.

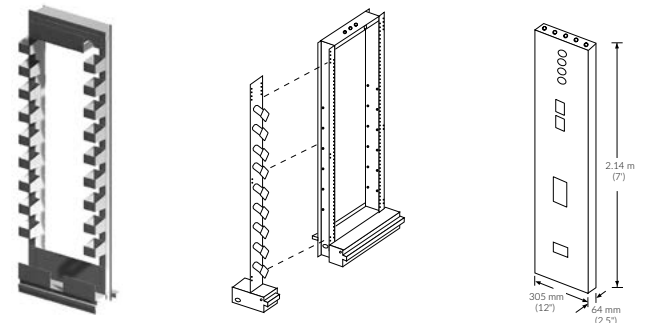


The standard practice for a LSX-288 fiber frame lineup uses three frames with 1.7 mm fiber jumpers to maintain the industry standard 2-inch patch cord pile-up

ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	CATALOG NUMBER
7' unequal flange network non-seismic rack, front 8"D GB, (39) 2.00" WECCO mtg. spaces	2.1 m x 660 mm x 381 mm (7' x 26" x 15")	RAC-7A0160
Lower horizontal cable trough	215 mm x 203.2 mm x 203.2 mm (8.46" x 8" x 8")	E-501-11115
5"D x 26"W rear guard box	101.6 mm x 660.4 mm x 127 mm (4" x 26" x 5")	RAC-0X0439
15"D interbay management panel, 8"D spools, overhead/under floor access	2.1 m x 127 mm x 381 mm (7' x 5" x 15")	E-501-L139-HD
5" rear guard box	101.6mm x 127 mm x 127 mm (4" x 5" x 5")	RAC-0X0440
15"D end guard-universal-style end guard	2.1 m x 64 mm x 381 mm (7' x 2.5" x 15")	RAC-7B0162
3" universal end guard extender	2.1 m x 64 mm x 76 mm (7' x 2.5" x 3")	E-501-12002

TRADITIONAL LSX UNIVERSAL FIBER DISTRIBUTING FRAME SOLUTION

The traditional LSX universal frame provides the framework for managing a cross-connect or interconnect fiber system. Use this frame for applications requiring lower density panels (12-144 terminations).



E-501-LGX
(Includes cable rings)

E-501-L139-A

UEGP-7PW

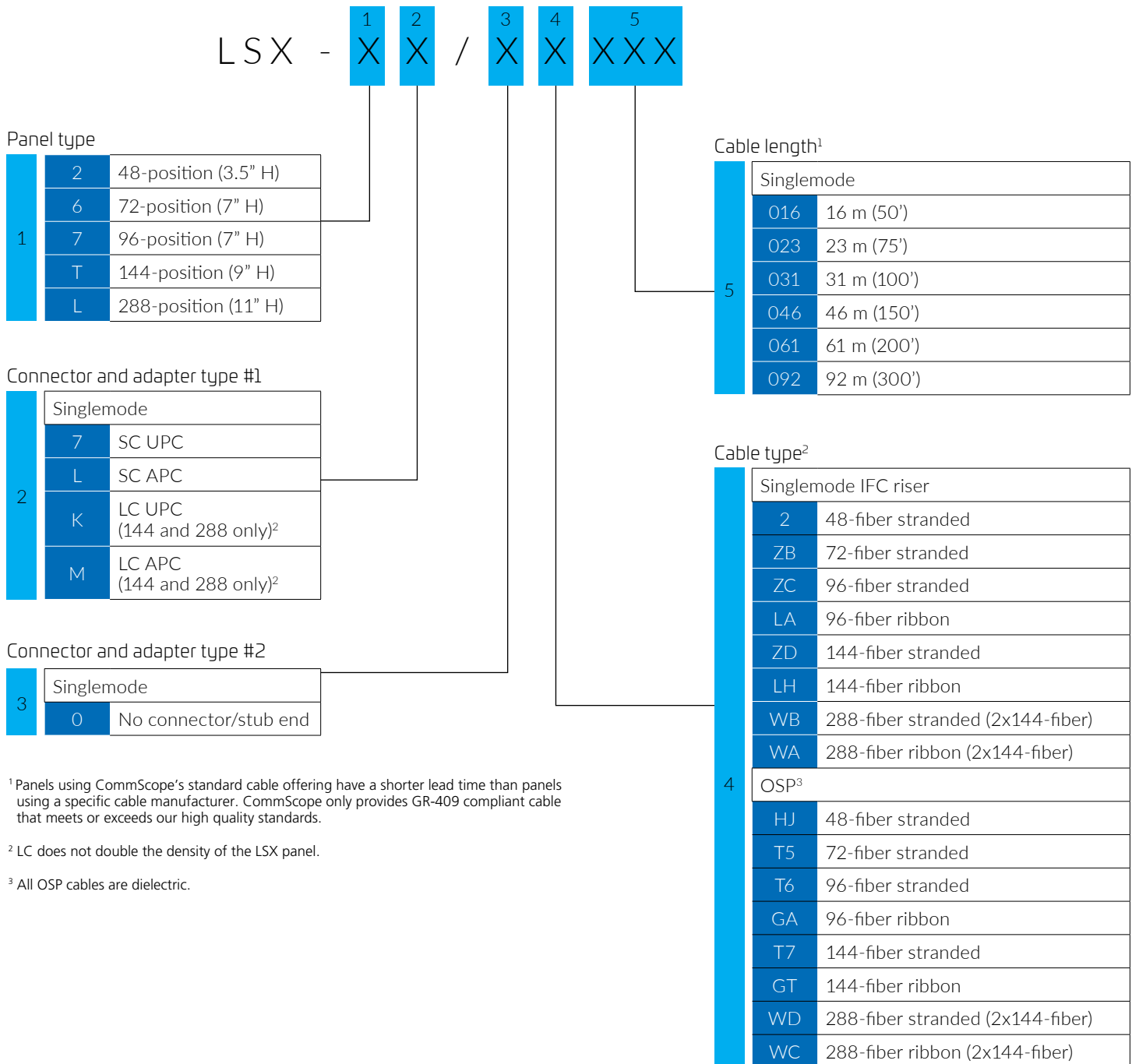
ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	CATALOG NUMBER
Traditional LSX universal frame; putty white (include anchor bolts for concrete floors)	2.1 m x 584 mm x 305 mm (7' x 23" x 12")	E-501-LGX
Interbay management panel (IMP)	2.1 m x 127 mm x 305 mm (7' x 5" x 12")	E-501-L139-A
End guard (mounts on an IMP or network frame)	2.1 m x 64 mm x 305 mm (7' x 2.5" x 12")	UEGP-7PW

DEFINITION OF VARIABLES

1	Connector and adapter type #1—specific adapter/connector type required at the LSX
2	Connector type #2—specific connector type required at the far end opposite the LSX
3	Cable type—type of cable to be terminated to the LSX
4	Cable length required—length of the cable terminated to the LSX

PRETERMINATED FIBER TERMINATION PANELS WITH MULTI-FIBER CABLE

The LSX panel can be pre-loaded with intrafacility cable (IFC) or outside plant (OSP) cable. The panel adapts to 19- or 23-inch rack mounting, WECO or EIA spacing. The 288-position panel can only be mounted in a 23-inch rack.



¹ Panels using CommScope's standard cable offering have a shorter lead time than panels using a specific cable manufacturer. CommScope only provides GR-409 compliant cable that meets or exceeds our high quality standards.

² LC does not double the density of the LSX panel.

³ All OSP cables are dielectric.

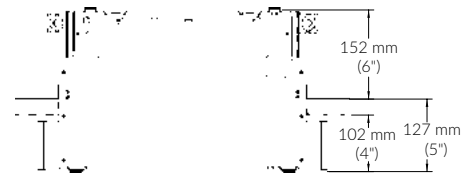
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ADAPTER-ONLY FIBER TERMINATION PANELS

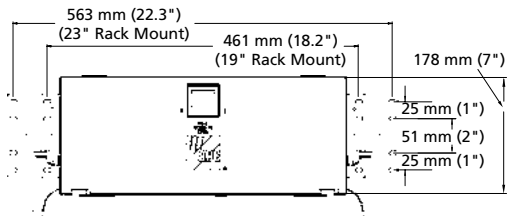
The LSX panel has the same mounting dimensions as an LGX compatible panel.

ORDERING INFORMATION		
NUMBER OF TERMINATIONS	ADAPTER TYPE	CATALOG NUMBER
24 44 mm (1.75") height	Singlemode	
	SC UPC	LSX-170000
	SC APC	LSX-1L0000
48 89 mm (3.5") height	Singlemode	
	SC UPC	LSX-270000
	SC APC	LSX-2L0000
72 178 mm (7") height	Singlemode	
	SC UPC	LSX-670000
	SC APC	LSX-6L0000
96 178 mm (7") height	Singlemode	
	SC UPC	LSX-770000
	SC APC	LSX-7L0000
144 228 mm (9") height	Singlemode	
	SC UPC	LSX-T70000
	SC APC	LSX-TL0000
	LC UPC ¹	LSX-TK0000
	LC APC ¹	LSX-TM0000
288 279 mm (11") height	Singlemode	
	SC UPC	LSX-L70000
	SC APC	LSX-LL0000
	LC UPC ¹	LSX-LK0000
	LC APC ¹	LSX-LM0000

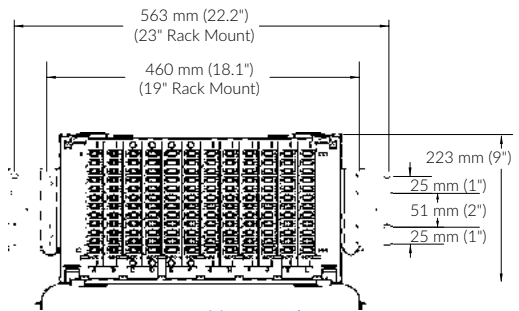
¹ LC Connectors do not double the density of the LSX panel



LSX panel
(Top view)



72- or 96-position panel
(Front view)



144-position panel
(Front view)

PRETERMINATED FIBER TERMINATION/SPLICE PANELS WITH PIGTAILS

LSX preterminated fiber termination/splice panels are available with a splicing area integrated into the panel. These panels include a rear flip-down splicing compartment. The panels can be ordered with 12-fiber ribbon or 12-fiber stranded pigtails.



288-Position termination/splice panel

ORDERING INFORMATION			
NUMBER OF TERMINATIONS	ADAPTER TYPE	LOADED WITH 12-FIBER RIBBON PIGTAILS	LOADED WITH 12-FIBER STRANDED PIGTAILS
144 9" height 19/23"W x 15"D (229 mm x 483/584 mm x 381mm)	Singlemode		
	SC UPC	LSX-T75123-A-SPL	LSX-T71122-A-SPL
	SC APC	LSX-TL5123-A-SPL	LSX-TL1122-A-SPL
	LC UPC ¹	LSX-TK5123-A-SPL	LSX-TK1122-A-SPL
	LC APC ¹	LSX-TM5123-A-SPL	LSX-TM1122-A-SPL
288* 11" height 23"W x 15"D (279 mm x 584 mm x 381 mm)	Singlemode		
	SC UPC	LSX-L75243-A-SPL	LSX-L71242-A-SPL
	SC APC	LSX-LL5243-A-SPL	LSX-LL1242-A-SPL
	LC UPC ¹	LSX-LK5243-A-SPL	LSX-LK1242-A-SPL
	LC APC ¹	LSX-LM5243-A-SPL	LSX-LM1242-A-SPL

¹ LC Connectors do not double the density of the LSX panel

* 288 Termination /splice panel does not fit 19-inch frames. For 23-inch frames only.

9-INCH LSX OPTICAL DISTRIBUTION FRAME FIBER TERMINATION PANEL FEATURING CABLED MODULES (CMODS)

The 9-inch LSX ODF Fiber Termination Panel updates the LGX style chassis using high density CMODs for plug-and-play installation.

- Chassis designed to be mounted in a 19" or 23" rack or cabinet.
- Up to 288 LC or 144 SC terminations (12 CMODs).
- Each panel opening fits a cabled module, MPO module, or VAM module with tray adapter insert.
- Modules may be mixed and matched in the same chassis.
- Front and rear cable management features.

ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	PART NUMBER
LSX 288 C-MOD EMPTY PANEL	229 x 483 x 279 mm (9" X 19" X 11")	LSX-70000-CMOD



LSX-70000-CMOD
(Front)



LSX-70000-CMOD
(Back)

5.25" (3RU) LSX OPTICAL DISTRIBUTION FRAME FIBER TERMINATION PANEL FEATURING NG4access® CMODS

The 5-inch LSX ODF Fiber Termination Panel updates the LGX style chassis using high density CMODs for plug-and-play installation.

- Chassis designed to be mounted in a 19" or 23" rack or cabinet.
- Up to 144 LC or 72 SC terminations (6 CMODs).
- Each panel opening fits a cabled module, MPO module, or VAM module with tray adapter insert.
- Modules may be mixed and matched in the same chassis.
- Front and rear cable management features.

ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	PART NUMBER
LSX 144 C-MOD EMPTY PANEL	132 x 483 x 279 mm (5.2" X 19" X 11")	LSX-300000-CMOD



LSX-300000-CMOD
(Front)



LSX-300000-CMOD
(Back)

Stranded Fiber and Flat Matrix Ribbon CMOD Cable Assemblies

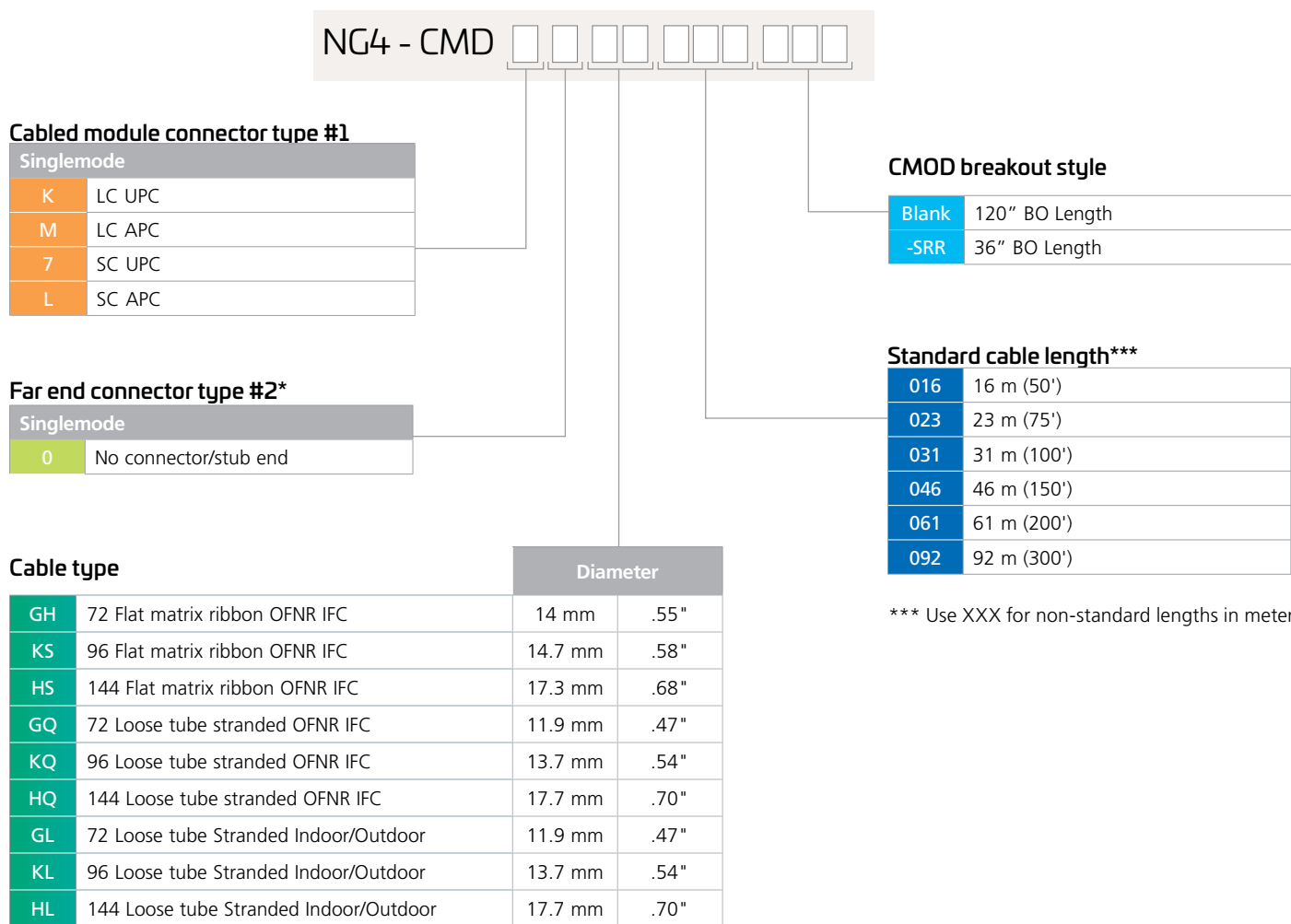
CABLED MODULES (CMODS) WITH PRETERMINATED FIBER CABLE

With cabled module solutions, multiple CMODs are preterminated to an indoor or indoor/outdoor rated cable. For example, a 144 LC configuration would include six 24-fiber cabled modules secured to a 144 IFC cable. Rather than handling and installing 144 discrete connectors, the six cabled modules quickly snap into place on access trays saving installation time and greatly reducing wiring errors and the potential for breaking adjacent fiber connectors. Cabled modules with fiber cables are available with stub ends. CMOD cable assemblies utilize reduced bend radius fiber and have the appropriate break out length to be installed in a wide variety of chassis sizes.



LC Cabled Module with Preterminated Fiber Cable

STRANDED FIBER AND FLAT MATRIX RIBBON ORDERING INFORMATION



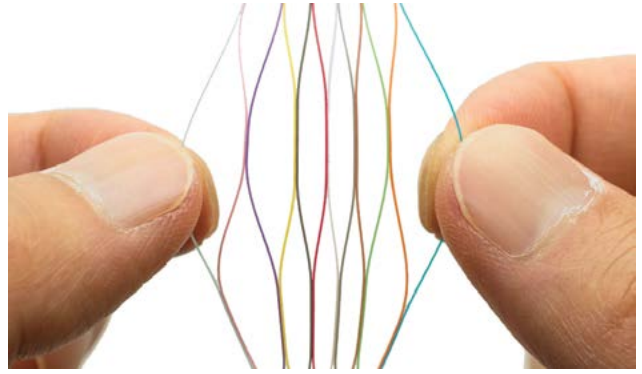
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CABLED MODULES WITH INDOOR/OUTDOOR DIELECTRIC ROLLABLE RIBBON OSP CABLE

Pre-Connectorized Cables for Splicing to OSP Cables

CommScope offers a revolutionary pre-connectorized ribbon fiber cable to stub solution utilizing unique cabled modules or CMODs. A CMOD is a prewired 24-fiber (LC) adapter pack that snaps into the back of a wide variety of available fiber panels. CMODs with rollable ribbon are pre-terminated at the factory to 72, 96, 144, 216, 288, 432, 576 or 864-fiber. The indoor/outdoor OFNR dielectric OSP cable ensures:

- Faster cable termination into fiber chassis (minutes compared to hours)
- Less potential for fiber damage to adjacent circuits
- Less chance of wiring errors (e.g. port 5 conn in port 6)
- Easier installation by snapping in CMODs instead of installing individual LC connectors
- Can repair and replace a connector in CMOD if needed



Rollable Ribbon Cable

What is Rollable Ribbon?

- Partially bonded individual fibers to construct a 12-fiber ribbon bundle
- Enables ribbon to be "rolled" into a cylinder resulting in a smaller overall cable diameter

Benefits

- Enables 2x the fiber density over flat ribbon for duct real estate
- Full mass fusion 12 fiber splice compatibility
- Gel free construction

Ordering information

Cabled module connector type #1

Singlemode	
K	LC UPC
M	LC APC
7	SC UPC
L	SC APC

Far end connector type #2*

Singlemode	
0	No connector/stub end

Cable type

	Number of Fibers	Outer Diameter		Cable Type
RG	72	10.5 mm	.41"	Indoor/Outdoor OFNR Rated Dielectric Rollable Ribbon Cable
RK	96	10.5 mm	.41"	
R3	144	10.5 mm	.41"	
RJ	216	12.5 mm	.49"	
R4	288	12.5 mm	.49"	
R5	432	15.5 mm	.61"	
R6	576	17.0 mm	.67"	
R8	864	19.5 mm	.77"	

NG4 - CMD

BO options

Blank	76" BO Length
-SRR	36" BO Length

Standard cable length***

016	16 m (50')
023	23 m (75')
031	31 m (100')
046	46 m (150')
061	61 m (200')
092	92 m (300')
122	122 m (400')
138	138 m (450')
153	153 m (500')
183	183 m (600')
305	305 m (1000')

***Use XXX for non-standard lengths in meters

Contact [CommScope technical assistance center for availability of other options.](https://www.commscope.com/support) <https://www.commscope.com/support>

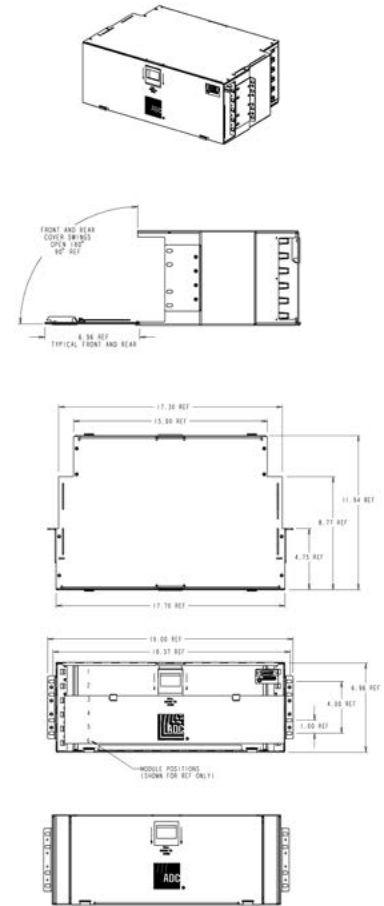
WIDEVAM CHASSIS

FVM WideVAM chassis fit into both industry-standard 19- or 23-inch frames.

The 8"H FDF WideVAM chassis fits into in FDF Rear load frames or 23" unequal flange racks with rear mounting rail.

The WideVAM chassis continues to provide high density along with the utmost protection, modularity and flexibility for all optical component needs.

ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	PART NUMBER
1RU WideVAM Chassis 19/23", Holds one WideVAM Module	44.45 x 482.6 x 304.8 mm (1.75" X 19/23" X 12")	FVM-19X175W
4RU WideVAM Chassis, 19/23", Holds six Wide VAM Modules	177.8 x 482.6 x 304.8 mm (7" X 19/23" X 12")	FVM-19X700W
Rear load FDF frame mounting, holds seven WideVAM Modules	203.2 x 584.2 x 304.8 mm (8" X 23" X 12")	FDF-FCMWWAM-7M

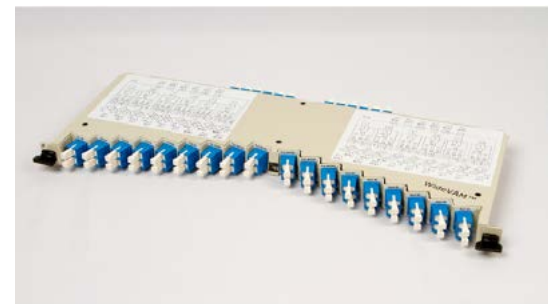


FVM-19X700W

WIDEVAM FIBER OPTIC SPLITTER MODULE, 1 X 32, SC/APC, SINGLE MODE

Fits in WideVAM chassis listed above

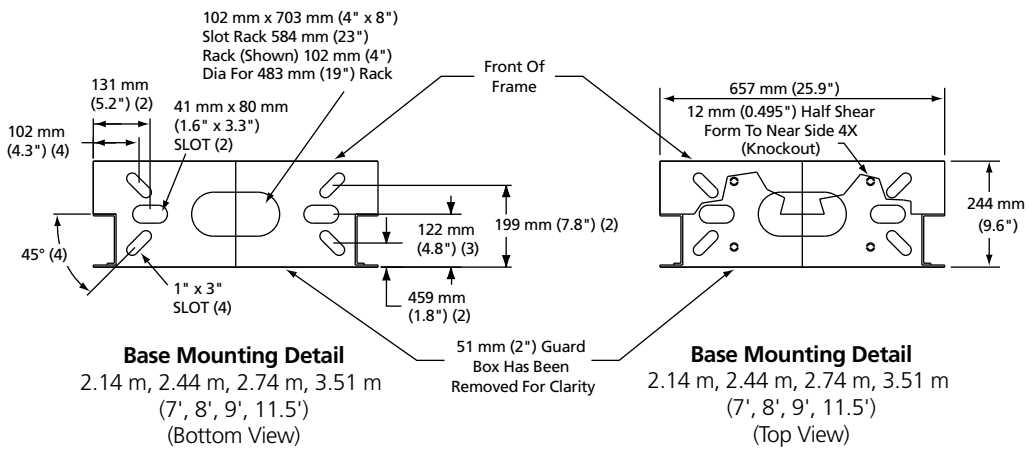
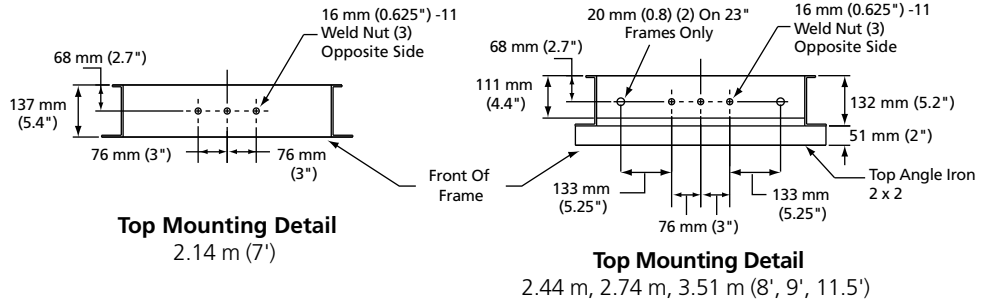
ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	PART NUMBER
WideVAM Fiber Optic Splitter Module, 1 x 32, SC/APC, singlemode	1.06" x 17.38" x 6.02"	FPS-SPB1AJJ-HD
WideVAM Fiber Optic Splitter Module, 2 - 1 x 16, SC/APC, singlemode	1.06" x 17.38" x 6.02"	FPS-SPB1MJJ-HD



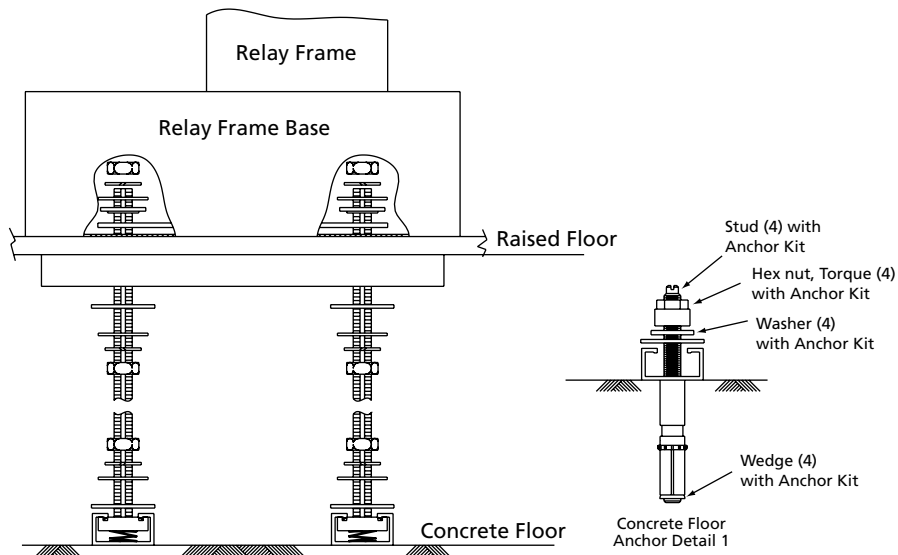
FPS-SPB1AJJ-HD

Frame Accessories

FRAME INSTALLATION KIT



Network Type Unequal Flange Frame Mounting Details

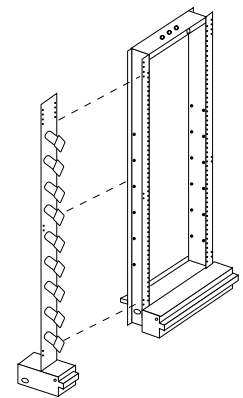


Frame installation kits may be used on network frames and are seismic zone 4 rated.

ORDERING INFORMATION	
DESCRIPTION	CATALOG NUMBER
Frame installation kit for 2.14 m (7') frames, includes; 1 floor mounting kit 1 top attachment kit for 2.14 m (7') frames 12 frame tie brackets kits 1 frame ground kit for 2.14 m (7') frames	RINST-DSX7-PW
Universal anchor kit, for all UEF frames includes; 4 anchor assemblies 2 universal hold down bars 8 anchor plate washers 8 shim plates 2 mm (0.063") 4 shim plates 3 mm (0.125")	RINST-FLR
Isolation Pad accomodates: 1 UEF 23" network frame 2 end guards 2 interbay management panels	FDF-ISOTEMPLATE

INTERBAY MANAGEMENT PANEL

ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	CATALOG NUMBER
Interbay Management panel (IMP)	2.14 m x 127 mm x 305 mm (7' x 5" x 12")	E-501-L139-A

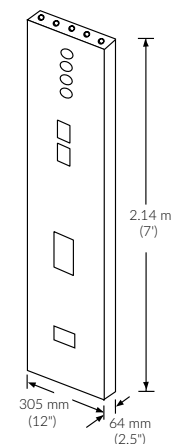


Interbay management panel

END GUARD

End guards provide protection and a finished appearance at the start and end of frame lineups. They attach to either a frame or an interbay management panel. End guards serve as a mounting place for outlets and switches and are used interchangeable for either left or right applications.

ORDERING INFORMATION	
DESCRIPTION	CATALOG NUMBER
End guard Mounts on to IMP or network frame 2.14 m x 64 mm x 305 mm (7' H x 2.5" W x 12" D)	UEGP-7PW



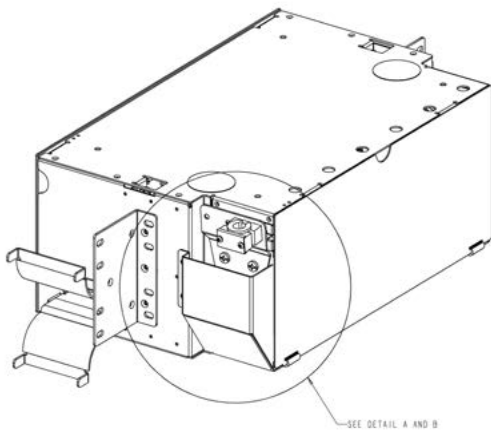
End guard

Panel Accessories

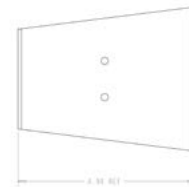
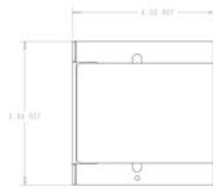
CABLE CLAMP KIT AND CABLE RING KIT

The cable clamp kit provides a means of securing the end of an OSP or IFC cable to the side of an LSX panel. The cable ring protects and manages jumpers on the frame.

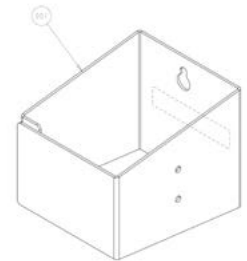
ORDERING INFORMATION	
DESCRIPTION	CATALOG NUMBER
Cable clamp kit includes 1 dual bracket and 1 cable clamp	LSX-CBLCLMPKIT
Cable ring kit includes 2 cable rings and appropriate hardware	LSX-ACCVCGKIT



LSX-CBLCLMPKIT



LSX-ACCVCGKIT

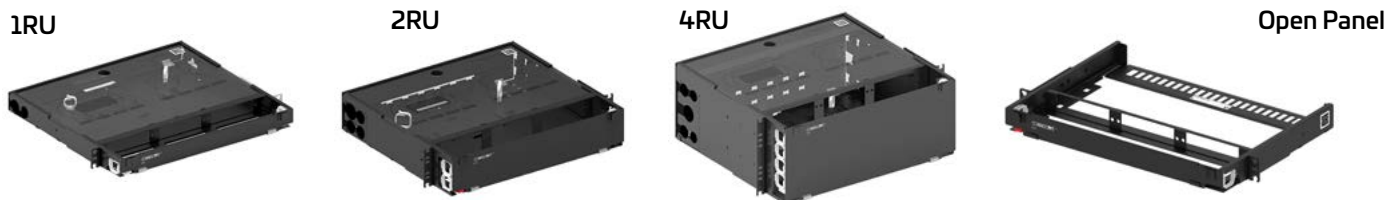


EPX Fiber Panels

CommScope EPX fiber panels offer great application flexibility with the use of interchangeable adapter packs, splice cassettes and splitter modules.

Features and Benefits:

- Compact, lightweight panel designed for operational simplicity
- Interchangeable adapter packs, splice cassettes and/or splitter modules
- Available with LGX adapter styles in 1U, 2U or 4U in either fixed or sliding configurations
- Legacy LGX compatibility



MID	Description	RU	Bulkhead	# of Adapter plates	H"	W"	D"
Enclosed Panels							
760249997	EPX-1U-PNL-ENC	1	Sliding	3	1.75	19	16.25
760251043	EPX-1U-PNL-ENC-FX	1	Fixed	3	1.75	19	16.25
760251045	EPX-2U-PNL-ENC	2	Sliding	6	3.5	19	16.25
760251047	EPX-2U-PNL-ENC-FX	2	Fixed	6	3.5	19	16.25
760251049	EPX-4U-PNL-ENC	4	Sliding	12	7.0	19	16.25
760251051	EPX-4U-PNL-ENC-FX	4	Fixed	12	7.0	19	16.25
Open Panel							
760254919	EPX-1U-PNL-OPEN	1	Sliding	3	1.75	19	12.91

Wall Boxes



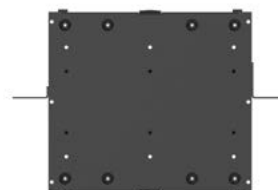
MID	Description	# of Adapter plates	H"	W"	D"
760248905	WB2-EMT-BK-2P-PNL	2	11.22	14.46	2.08
760248907	WB2-EMT-BK-8P-PNL	8	11.22	14.46	6.25

LGX Rack Mounting Solutions

4RU back-to-back chassis

Features:

- The LGX 4RU back-to-back chassis holds 14 single-width LGX modules per side or seven dual-width LGX modules per side
- Maximum density of 28 single-width LGX modules or 14 dual-width LGX modules
- 19-in. or 23-in. rack mount
- 2.5-in., 5-in., or 8-in. recess mounting options
- Dimensions (H x W x D): 6.9 x 17 x 15 inches / 175 x 432 x 381 mm
- LGX pass-through module: Pass-through modules (included) can be mounted anywhere in chassis to allow cables from rear modules to pass to front of chassis.



Description	Color	CommScope P/N
LGX 4RU back-to-back chassis, for holding up to 28 single-width LGX modules or 14 dual-width LGX modules	Black	FBPS-LGX-4RU-BLK

Front patching shelf

Description	Color	CommScope P/N
FPS-OCM -I-F-4U-SHELF Front patching shelf, 19" (4RU) with pigtail routing rings, for holding up to 12 single-width LGX modules or 6 dual-width LGX modules, 7"H x 19/23"W x 12"D	Black	1777268-1



3RU chassis

Features:

- Maximum density of 14 single-width LGX modules or 7 dual-width LGX modules
- 19-in. rack mount
- Dimensions (H x W x D): 5.2 x 19 x 9.3 inches / 132.5 x 482 x 235 mm

Description	Color	CommScope P/N
FPS-OCM-I-F-BLK - 3RU LGX Open Chassis	Black	760252747



1RU chassis

Features:

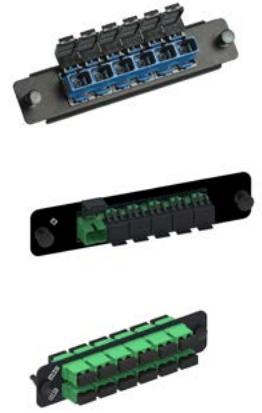
- Holds three single-width LGX modules
- 19-inch rack mount
- Dimensions (H x W x D): 1.7 x 18.9 x 8.9 inches / 44 x 481 x 225 mm

Description	Color	CommScope P/N
FPS-OCM-K-F-BLK - 1RU LGX Open Chassis	Black	760250917



Adapter Plates

MID	Description	Adapter style	Interface	# of Fibers	Patching style
760148213	PNL-BK-006-SFA-SC06-BL	SC	UPC	6	Simplex
760027714	PNL-BK-012-SFA-SC02-BL	SC	UPC	12	Duplex
760147652	PNL-BK-006-AFA-SC06-GR	SC	APC	6	Simplex
760117267	PNL-BK-012-AFA-SC02-GR	SC	APC	12	Duplex
760245075	PNL-BK-006-SFA-LC02-BL-NS	LC	UPC	6	Duplex
760149351	PNL-BK-012-SFA-LC02-BL-NS	LC	UPC	12	Duplex
760148361	PNL-BK-024-SFA-LC02-BL-NS	LC	UPC	24	Duplex
760149328	PNL-BK-012-AFA-LC02-GR-NS	LC	APC	12	Duplex
760150094	PNL-BK-024-AFA-LC02-GR-NS	LC	APC	24	Duplex



Splicing cassette

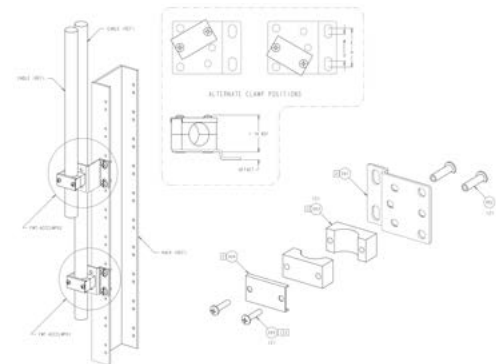
MID	Description	Adapter style	Interface	# of Fibers	Pigtail
760258120	CO-SPL-12SCW-PT SM-SPLX	SC	UPC	12	Stranded 900um
760258123	CO-SPL-12SAW-PT SM-SPLX	SC	APC	12	
760258119	CO-SPL-12LCW-PT SM-SPLX	LC	UPC	12	
760258118	CO-SPL-24LCW-PT SM-SPLX	LC	UPC	24	
760258122	CO-SPL-12LAW-PT SM-SPLX	LC	APC	12	
760258121	CO-SPL-24LAW-PT SM-SPLX	LC	APC	24	



Cable Clamp Kit and Vertical Cable Guide

The cable clamp kit provides a means of securing cable entering the drawer. Vertical cable guide safely routes fiber cable on the frame.

MID	Description
FMT-ACCCLMP01	6 mm (0.25") offset from frame
FMT-ACCCLMP02	32 mm (1.25") offset frame



Vertical Cable Guide

19" to 23" Extender Brackets

MID	Description
EB-17B	1RU 19" to 23" Extender Bracket Kit, Color: Black
EB-35B	2RU 19" to 23" Extender Bracket Kit, Color: Black
EB-52B	3RU 19" to 23" Extender Bracket Kit, Color: Black
EB-70B	4RU 19" to 23" Extender Bracket Kit, Color: Black

LGX and 1RU splitters

Overview

Passive optical components can have a significant impact on the efficiency of communication network rollouts. The incorporation of fiber-optic splitters reduces the number of fibers in the network—decreasing both the footprint and investment cost of network rollouts. In existing networks, these components allow capacity upgrades at a relatively low cost without additional construction work.

CommScope's LGX and 1RU splitter portfolio is based on planar lightwave circuit (PLC) technology used to split and combine light. The LGX and 1RU housings support a variety of split ratios: 1:N and 2:N configurations where N=1 to 64. LGX and 1RU configurations are released with LC/APC, LC/UPC, SC/APC, and SC/UPC connectors.

CommScope's portfolio of LGX and 1RU splitters meets OSP operating temperature and environment requirements of -40°C to +70°C.

LGX and 1RU splitter products are tested to GR-63-CORE packaging requirements and IEC 61300-2-1, 61300-2-4, 61300-2-5, 61300-2-9, 61300-2-19, 61300-2-21, 61300-2-22, 61300-2-4 and 61300-2-45.

Advantages

- Low insertion loss
- Consistent performance
- Small footprint
- Excellent uniformity
- Low PDL

Applications

- Passive optical networks (PONs)—FTTH and FTTx
- Telecommunications networks
- CATV / MSOs

The incorporation of fiber-optic splitters reduces the number of fibers in the network—decreasing both the footprint and investment cost of network rollouts.



LGX and 1RU splitter optical performance

Split ratio	Bandpass (nm)	Insertion loss max (dB) with connectors	Uniformity max (dB)	RL min (dB)	PDL max (dB)	Directivity min (dB)
1x2 (50/50)	1260-1650	4.2	0.85	50	0.2	55
1x4	1260-1650	7.6	0.95	50	0.2	55
1x8	1260-1650	10.9	1.3	50	0.2	55
1x16	1260-1650	14.2	1.55	50	0.3	55
1x32	1260-1650	17.5	1.85	50	0.3	55
1x64	1260-1650	21.0	2.3	50	0.4	55
2x2 (50/50)	1260-1650	4.7	1.45	50	0.3	55
2x4	1260-1650	8.0	1.65	50	0.3	55
2x8	1260-1650	11.4	1.85	50	0.3	55
2x16	1260-1650	14.8	2.3	50	0.4	55
2x32	1260-1650	18.2	2.65	50	0.4	55
2x64	1260-1650	21.8	3.2	50	0.4	55



Example of 1RU Panel with SC adapters



Example of a single width LGX Module with LC adapters

Housing types and dimensions

Split ratio	Number of splitters with LC	Number of splitters with SC	Housing type 1RU panel (19-inch rack mount)		
			Depth (mm/in)	Width (mm/in) *including bracket	Height (mm/in)
1x16	4	4	199.89 (7.87")	482.60 (19")	43.69 (1.72")
1x32	1 or 2	1			
2x32	2	1			
1x64	1	1			
2x64	1	N/A			

Split ratio	Number of splitters	Housing type LGX: single width and double width with LC connectors		
		Length (mm/in)	Width (mm/in)	Height (mm/in)
1x2	6	127.00 (5")	28.70 (1.13")	130.05 (5.12")
1x4	4			
1x8	2			
1x16	1			
2x2	6			
2x4	4			
2x8	2			
2x16	1			
1x32	1	127.00 (5")	57.91 (2.36")	130.05 (5.12")
2x32	1			

Split ratio	Number of splitters	Housing type LGX: single width and double width with SC connectors		
		Length (mm/in)	Width (mm/in)	Height (mm/in)
1x2	3	127.00 (5")	28.70 (1.13")	130.05 (5.12")
1x4	2			
1x8	1			
2x2	3			
2x4	2			
2x8	1			
1x16	1	127.00 (5")	57.91 (2.36")	130.05 (5.12")
2x16	1			

LGX splitter ordering information



LGX splitter module with LC/APC

MID	Description
LX2SSP1232001	Double width LGX module, 2x32 split ratio, 1 splitter, LC/APC connectors
LX1SSP1216001	Single width LGX module, 2x16 split ratio, 1 splitter, LC/APC connectors
LX1SSP1208002	Single width LGX module, 2x8 split ratio, 2 splitters, LC/APC connectors
LX1SSP1204004	Single width LGX module, 2x4 split ratio, 4 splitters, LC/APC connectors
LX1SSP1202006	Single width LGX module, 2x2 symmetrical split ratio, 6 splitters, LC/APC connectors
LX2SSP1132001	Double width LGX module, 1x32 split ratio, 1 splitter, LC/APC connectors
LX1SSP1116001	Single width LGX module, 1x16 split ratio, 1 splitter, LC/APC connectors
LX1SSP1108002	Single width LGX module, 1x8 split ratio, 2 splitters, LC/APC connectors
LX1SSP1104004	Single width LGX module, 1x4 split ratio, 4 splitters, LC/APC connectors
LX1SSP1102006	Single width LGX module, 1x2 symmetrical split ratio, 6 splitters, LC/APC connectors

LGX splitter module with LC/UPC

MID	Description
LX2SSP2232001	Double width LGX module, 2x32 split ratio, 1 splitter, LC/UPC connectors
LX1SSP2216001	Single width LGX module, 2x16 split ratio, 1 splitter, LC/UPC connectors
LX1SSP2208002	Single width LGX module, 2x8 split ratio, 2 splitters, LC/UPC connectors
LX1SSP2204004	Single width LGX module, 2x4 split ratio, 4 splitters, LC/UPC connectors
LX1SSP2202006	Single width LGX module, 2x2 symmetrical split ratio, 6 splitters, LC/UPC connectors
LX2SSP2132001	Double width LGX module, 1x32 split ratio, 1 splitter, LC/UPC connectors
LX1SSP2116001	Single width LGX module, 1x16 split ratio, 1 splitter, LC/UPC connectors
LX1SSP2108002	Single width LGX module, 1x8 split ratio, 2 splitters, LC/UPC connectors
LX1SSP2104004	Single width LGX module, 1x4 split ratio, 4 splitters, LC/UPC connectors
LX1SSP2102006	Single width LGX module, 1x2 symmetrical split ratio, 6 splitters, LC/UPC connectors

LGX splitter ordering information

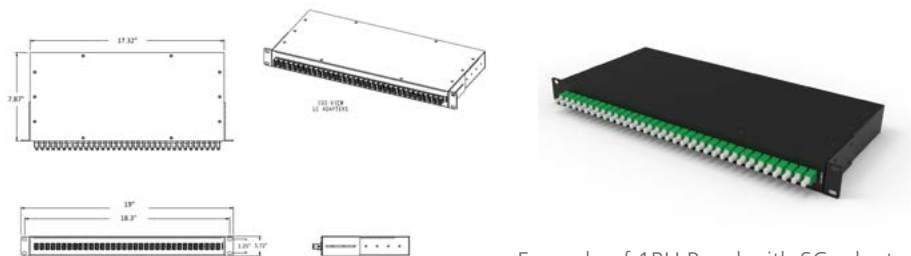
LGX Splitter Module with SC/APC

MID	Description
LX1SSP3102003	Single Width LGX module, 1x2 symmetrical split ratio, 3 splitters, SC/APC connectors
LX1SSP3104002	Single Width LGX module, 1x4 split ratio, 2 splitters, SC/APC connectors
LX1SSP3108001	Single Width LGX module, 1x8 split ratio, 1 splitter, SC/APC connectors
LX2SSP3116001	Double Width LGX module, 1x16 split ratio, 1 splitter, SC/APC connectors
LX1SSP3202003	Single Width LGX module, 2x2 symmetrical split ratio, 3 splitters, SC/APC connectors
LX1SSP3204002	Single Width LGX module, 2x4 split ratio, 2 splitters, SC/APC connectors
LX1SSP3208001	Single Width LGX module, 2x8 split ratio, 1 splitter, SC/APC connectors
LX2SSP3216001	Double Width LGX module, 2x16 split ratio, 1 splitter, SC/APC connectors

LGX Splitter Module with SC/UPC

MID	Description
LX1SSP4102003	Single Width LGX module, 1x2 symmetrical split ratio, 3 splitters, SC/UPC connectors
LX1SSP4104002	Single Width LGX module, 1x4 split ratio, 2 splitters, SC/UPC connectors
LX1SSP4108001	Single Width LGX module, 1x8 split ratio, 1 splitter, SC/UPC connectors
LX2SSP4116001	Double Width LGX module, 1x16 split ratio, 1 splitter, SC/UPC connectors
LX1SSP4202003	Single Width LGX module, 2x2 symmetrical split ratio, 3 splitters, SC/UPC connectors
LX1SSP4204002	Single Width LGX module, 2x4 split ratio, 2 splitters, SC/UPC connectors
LX1SSP4208001	Single Width LGX module, 2x8 split ratio, 1 splitter, SC/UPC connectors

1RU splitter ordering information



Example of 1RU Panel with SC adapters

1RU Splitter Panel with LC/APC

MID	Description
1RU-SP1264001	1RU panel, 2x64 split ratio, 1 splitter, LC/APC connectors
1RU-SP1164001	1RU panel, 1x64 split ratio, 1 splitter, LC/APC connectors
1RU-SP1232002	1RU panel, 2x32 split ratio, 2 splitters, LC/APC connectors
1RU-SP1132002	1RU panel, 1x32 split ratio, 2 splitters, LC/APC connectors
1RU-SP1132001	1RU panel, 1x32 split ratio, 1 splitter, LC/APC connectors
1RU-SP1116004	1RU panel, 1x16 split ratio, 4 splitters, LC/APC connectors
1RU-SP1232001	1RU panel, 2x32 split ratio, 1 splitter, LC/APC connectors

1RU Splitter Panel with LC/UPC

MID	Description
1RU-SP2164001	1RU panel, 1x64 split ratio, 1 splitter, LC/UPC connectors
1RU-SP2232002	1RU panel, 2x32 split ratio, 2 splitters, LC/UPC connectors
1RU-SP2132002	1RU panel, 1x32 split ratio, 2 splitters, LC/UPC connectors
1RU-SP2132001	1RU panel, 1x32 split ratio, 1 splitter, LC/UPC connectors
1RU-SP2264001	1RU panel, 2x64 split ratio, 1 splitter, LC/UPC connectors
1RU-SP2232001	1RU panel, 2x32 split ratio, 1 splitter, LC/UPC connectors

1RU Splitter Panel with SC/APC

MID	Description
1RU-SP3132001	1RU panel, 1X32 split ratio, 1 splitter, SC/APC connectors
1RU-SP3232001	1RU panel, 2X32 split ratio, 1 splitter, SC/APC connectors
1RU-SP3116004	1RU panel, 1x16 split ratio, 4 splitters, SC/APC connectors
1RU-SP3164001	1RU panel, 1X64 split ratio, 1 splitter, SC/APC connectors

1RU Splitter Panel with SC/UPC

MID	Description
1RU-SP4132001	1RU panel, 1X32 split ratio, 1 splitter, SC/UPC connectors
1RU-SP4232001	1RU panel, 2X32 split ratio, 1 splitter, SC/UPC connectors

FEC Wall Mount Frame

CommScope's FEC Wall Mount Frame provides splicing, administration and storage for outside plant (OSP) and intrafacility cables (IFC). The cabinets are designed for deployment in a building equipment area and offers a cost-effective, space-saving alternative to splicing on the fiber frame.

Equipped with splice drawers and available in several configurations, the FEC's largest configuration accommodates up to 3456 stranded fibers or 10,368 ribbon fibers. Bend radius protection and discrete subunit routing paths ensure easy access and prevent excess attenuation.

The FEC cabinets accommodates a wide variety of cable types and splicing methods. The FEC is safety listed in UL file E114344 Volume 4 Section 1. All plastic components are V-0 rated material.

PRODUCT OVERVIEW

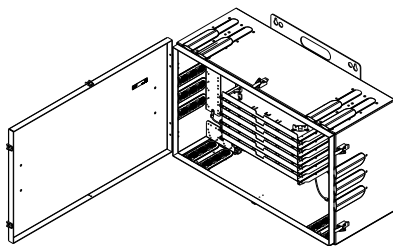
RECOMMENDED APPLICATIONS	Off-frame splice location for outside plant (OSP) cables to be spliced to intrafacility (IFC) cable
DESCRIPTION	Accommodates multiple fiber splicing requirements with various cabinet sizes
CABLE MANAGEMENT	Superior
ROUTING PATHS	Clear
PHYSICAL PROTECTION	Robust
ACCESS SPLICE POINT	Easy

DETERMINE THE CABINET CONFIGURATION THAT BEST SUITS YOUR APPLICATION.

Enhanced FEC solutions					Same overall size	Old FEC solutions		
New MID	# of Splice Drawers	Splice Capacity			Dimensions (W x D x H)	Mounting Option	Old MID	Old Splice Capacity (Stranded/Ribbon)
		Stranded 2 x 48	Ribbon (Flat or RR) 288	Rollable Ribbon 432				
FEC-6	6	576	1728	2592	32"x13"x20"	Wall Mount	FEC-144	144/432
FEC-12	12	1152	3456	5184	32"x13"x28"	Wall Mount	FEC-288	288/864
FEC-18-RM	18	1728	5184	7776	26"x15"x36"	Rack Mount	FEC-432RM	432/1296
FEC-XL-RM	18	1728	5184	7776	26"x20"x36"	Rack Mount	FEC-432RM	432/1296
FEC-24	24	2304	6912	10368	32"x13"x45"	Wall Mount	FEC-576	576/1728
FEC-36	36	3456	10368	15552	32"x13"x62"	Wall Mount	FEC-864	864/2592
FEC-36	36	3456	10368	15552	32"x13"x62"	Wall Mount	FEC-10K	NA/10368

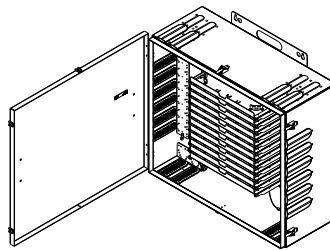
QTY of fibers spliced depends on splice tray capacity.

Example FEC-12: 288 fibers per tray multiplied by 12 trays is 3456 fibers.
 $288 * 12 = 3456$



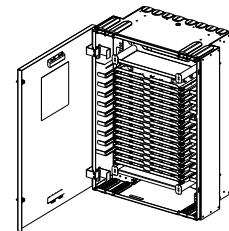
FEC-6

- Equipped with 6 drawers
- * wall and unistrut mount only



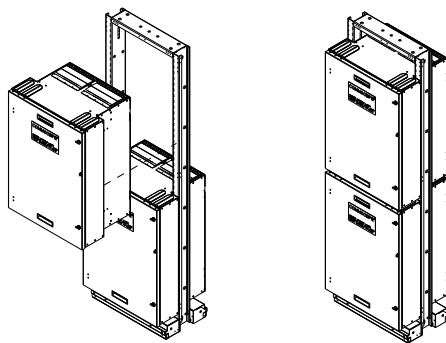
FEC-12

- Equipped with 12 drawers
- * wall and unistrut mount only



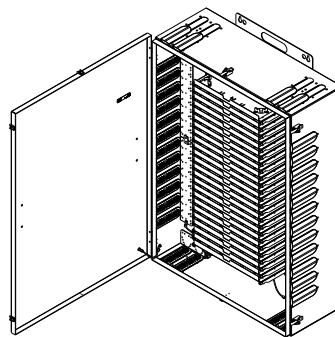
FEC-18-RM

- Equipped with 18 drawers
- 23-INCH RACK MOUNT ONLY
- EIA and WECO rack spacing compatible
- Depth 15"



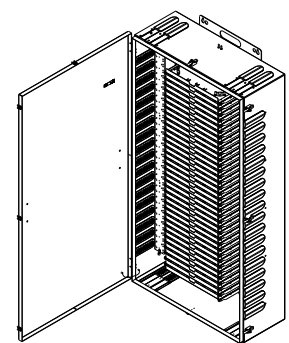
FEC-XL-RM

- Equipped with 18 drawers
- 23-INCH RACK MOUNT ONLY
- EIA and WECO rack spacing compatible
- Depth 20"
- Enhanced routing
- (Rack shown is not included)



FEC-24

- Equipped with 24 drawers
- * wall and unistrut mount only



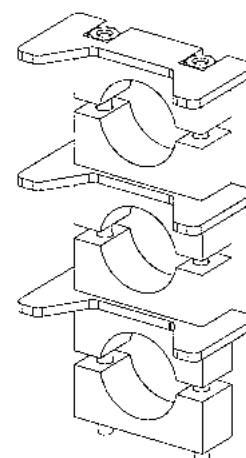
FEC-36

- Equipped with 36 drawers
- * wall and unistrut mount only

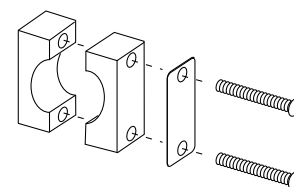
FEC Wall Mount Frame Accessories

CABLE CLAMPING KIT

CATALOG NUMBER	DESCRIPTION	QUANTITY
	IFC/OSP cable clamp kit for wall mount configurations. Secure three cables to a single cable entry point on the cabinet. Clamp kits can be separated and used as single clamps.	
OSP-CLPFEC-LG	Cables with a maximum diameter of 10 mm (0.4") to 30 mm (1.2")	3
OSP-CLPFEC	Cables with a maximum diameter of 5 mm (0.2") to 18 mm (0.7")	3
	Individual IFC/OSP cable clamp for wall mount configurations. Secure one cable to a single cable entry point on the cabinet.	
OSP-CLPSST	Cables with a maximum diameter of 5 mm (0.2") to 18 mm (0.7")	1
	Individual IFC/OSP cable clamp for rack or wall mount configurations. Secure one cable to a single cable entry point on the cabinet.	
FEC-ACCCLMP01	Cables with a maximum diameter of 10 mm (0.4") to 30 mm (1.2")	1
	Individual soft IFC only cable clamp for wall mount configurations. Secure one cable to a single cable entry point on the cabinet.	
OSP-CLPSST-IFCL	Cables with a maximum diameter of 20 mm (0.8") to 28 mm (1.1")	1
OSP-CLPSST-IFCS	Cables with a maximum diameter of 5 mm (0.2") to 18 mm (0.7")	1
	Secure one cable to a single cable entry point on the cabinet (kit of 6).	
OSP-CLPFEC-XL	Cables with a maximum diameter of 32mm (1.25") to 38mm (1.5")	6
OSP-CLPFEC-XL-1	Cables with a maximum diameter of 32mm (1.25") to 38mm (1.5")	1



IFC/OSP Cable Clamp Kit
(OSP-CLPFEC-LG Shown)



Individual IFC/OSP Cable Clamp
(OSP-CLPSST Shown)

SPLICE TRAY

DESCRIPTION	MAX FIBERS SPLICED PER TRAY	MAX TRAYS PER DRAWER	MATERIAL ID	SPLICE SLEEVE PROTECTOR	DIMENSIONS
Heat Shrink Fusion (single fiber fusion)	12	3	FST-HS	FST-ACC001	0.3" x 11.75" x 5" (9 mm x 299 mm x 127 mm)
	24	2	FST-D-HS		0.5" x 11.75" x 5" (14 mm x 299 mm x 127 mm)
	48	2	FST-HS-48		0.5" x 11.75" x 5" (14 mm x 299 mm x 127 mm)
Mass Fusion Ribbon	72	3	FST-MT	FST-ACC006	0.3" x 11.75" x 5" (9 mm x 299 mm x 127 mm)
	144	2	FST-D-MT		0.5" x 11.75" x 5" (14 mm x 299 mm x 127 mm)
	288	1	FST-XD-MT	757849-000 SMOUV-1120-R2/12-02*	0.95" x 11.75" x 5" (24.13 mm x 299 mm x 127 mm)
Rollable Ribbon Mass Fusion	432	1	FST-HD-RR		0.95" x 11.75" x 5" (24.13 mm x 299 mm x 127 mm)

Building Entrance Breakout Kits

MESH BREAKOUT KITS

Mesh Breakout Kits create a simple and craft friendly installation with a significant reduction in time compared to plastic, transportation tube style breakout kits.

- Supports both standard matrix style ribbon and pliable ribbon fibers.
- Allows for easier routing with reduced congestion.
- Lower cost versus plastic transportation tube style breakout kits.

MID	DESCRIPTOR	DESCRIPTION
760244143	RIBCOUT-1/4-35-144	Cable count 144F - 35 foot
760244150	RIBCOUT-3/8-50-144/288/432/576	Cable counts 144F, 288F, 432F, 576F - 50 foot
760244144	RIBCOUT-3/8-50-864/1152	Cable counts 864F, 1152F - 50 foot
760244145	RIBCOUT-3/8-100-864/1152	Cable counts 864F, 1152F - 100 foot
760244149	RIBCOUT-3/8-75-1728	Cable count 1728F - 75 foot
760244147	RIBCOUT-3/8-125-3456	Cable count 3456 - 125 foot
760244148	RIBCOUT-3/8-150-1728	Cable count 1728F - 150 foot
760244146	RIBCOUT-3/8-300-3456	Cable count 3456 - 300 foot

ACCESSORIES	
NG4-SNKT-BULK	Snap-in Cable Retention Rings (Qty. 40)
NG4-SPCAB-MTBKT	Optional External Trunk Mounting Bracket
NG4-CBOUT-288	Breakout kit 288 fiber cable
NG4-CBOUT-1728	Kit of 6 - 288 fiber breakouts
NG4-CBOUT-BULK	Kit of 24 - 288 fiber breakouts



Commscope Product Line	RIBBON FIBER CABLE COUNT								
	144	288	432	576	864	1152	1728	3456	
Universal Mounted Splice Cabinet	RIBCOUT-3/8-50-144/288/432/576				RIBCOUT-3/8-50-864/1152		RIBCOUT-3/8-75-1728		RIBCOUT-3/8-125-3456
Fiber Entrance Cabinet (FEC) Wall Mount Optical Fiber Splice Cabinet									
Fiber Entrance Cabinet Floor Mount Optical Fiber Splice Cabinet (OMX)									
SD Series 4RU Optical Fiber Splice Only Panel									
NG4access Optical Fiber Distribution Frame	RIBCOUT-1/4-35-144								

Building Entrance Breakout Kits Accessories

Breakout Kit for Ribbon in Loose Buffer Tube (RLBT) OSP Cable

Ribbon in loose buffer tube OSP cables are constructed as shown in Figure 1. All RLBT cables feature six subunits surrounding a central strength member. Depending on the fiber count of the cable, some of the subunits may be used as filler subunits (a solid plastic unit without any fiber). Each subunit containing fiber is comprised of six or twelve ribbons featuring 12 fibers per ribbon.

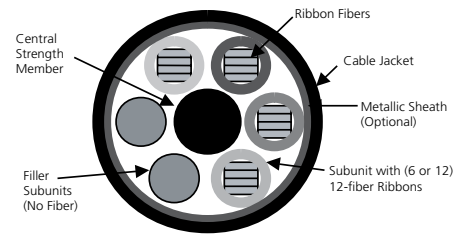


Figure 1

Ribbon buffer tube (RLBT) OSP cable

Breakout kits for RLBT cables contain multiple breakout bases, each with 5-meter lengths of protective tubing (see Figure 2). The protective tubing accommodates up to six ribbons. One breakout kit fits into each individual subunit. For mass fusion ribbon splicing applications in the FEC, CommScope recommends splicing up to 72 fibers (six ribbons) in a dual splice tray. The tray should be equipped with an “MT” splice chip (see page 94 for information on mechanical or mass fusion ribbon trays). For single fusion splicing applications, CommScope recommends 24 fibers per drawer using either two single trays or one dual tray. This kit is used to protect fiber ribbons between the cable clamp and the splice tray.

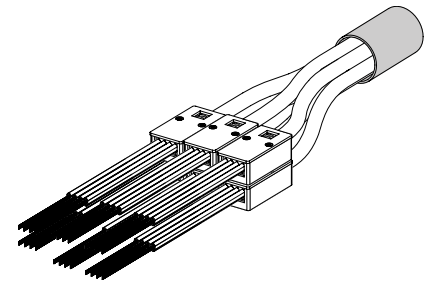
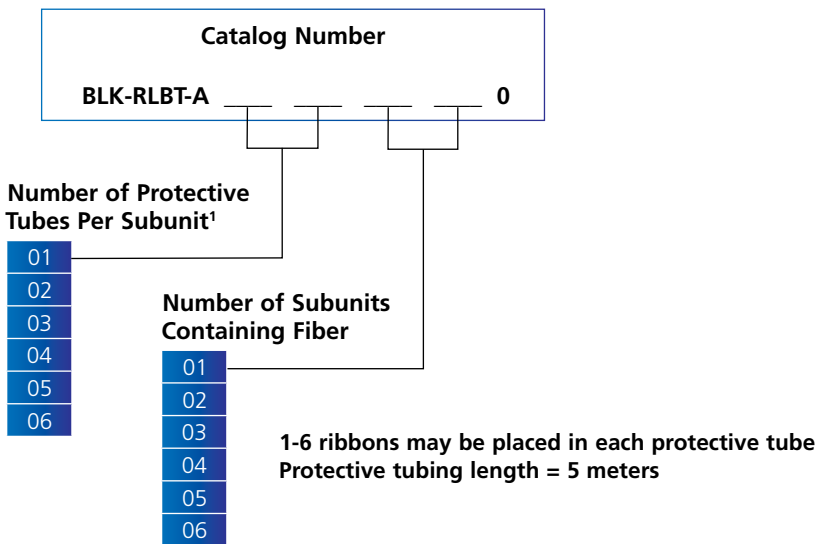


Figure 2

Breakout kit for RLBT OSP Cable

Breakout kits are designed for use in controlled environments only.



¹ The number of protective tubes per subunit is calculated as follows:

Divide the number of fibers per subunit (typically 72 or 144) by the number of fibers (12, 24, 36, 48, 72) to be spliced in each splice tray.

Example: If each subunit has 144 fibers with 36 fibers per tray, then each subunit would require four protective tubes.

Other configurations are available upon request. Please contact CommScope Technical Assistance Center.

<https://www.commscope.com/support>

Breakout Kit for Ribbon Central Tube (RCT) OSP Cable

Ribbon central tube OSP cables are constructed as shown in Figure 1. The ribbons in RCT cables feature 12 or 24 fibers per ribbon. Cables with 288 or more fibers are typically built with ribbons featuring 24 fibers per ribbon. Each cable consists of a single central tube that encloses the ribbons.

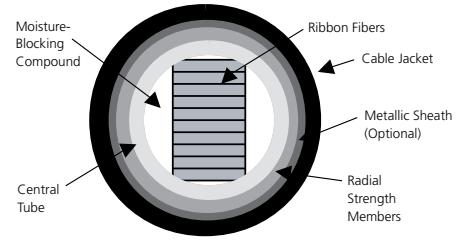


Figure 1
Ribbon central tube (RCT)
OSP cable construction

Breakout kits for RCT cables contain a single breakout base attached to the central tube. Protective tubing is attached to the breakout base in 5-meter lengths (see Figure 2). Smaller protective tubing can accommodate up to six ribbons featuring 12 fibers per ribbon. Larger tubing is used for ribbons with 24 fibers per ribbon.

For mass fusion ribbon splicing in the FEC, CommScope recommends splicing 72 fibers per drawer. For ribbon featuring 12 fibers per ribbon, six ribbons would be spliced in each drawer. For ribbon featuring 24 fibers per ribbon, three ribbons would be spliced in each drawer. An “MT” chip is required for mass fusion ribbon splicing in a dual splice tray.

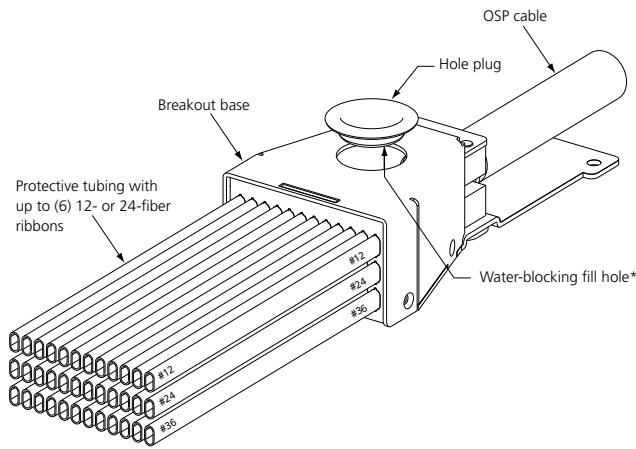


Figure 2
Breakout kit for RCT cable

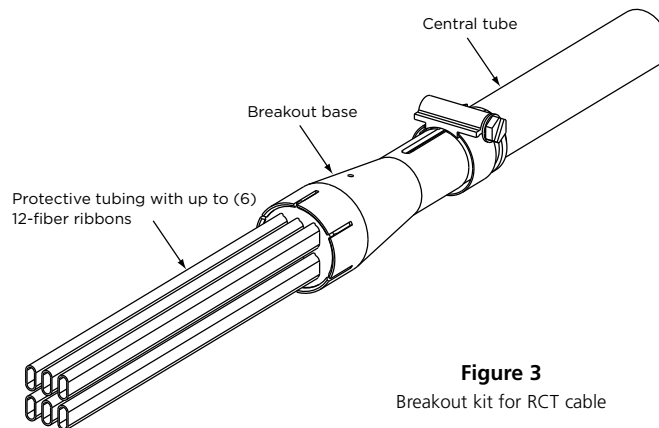


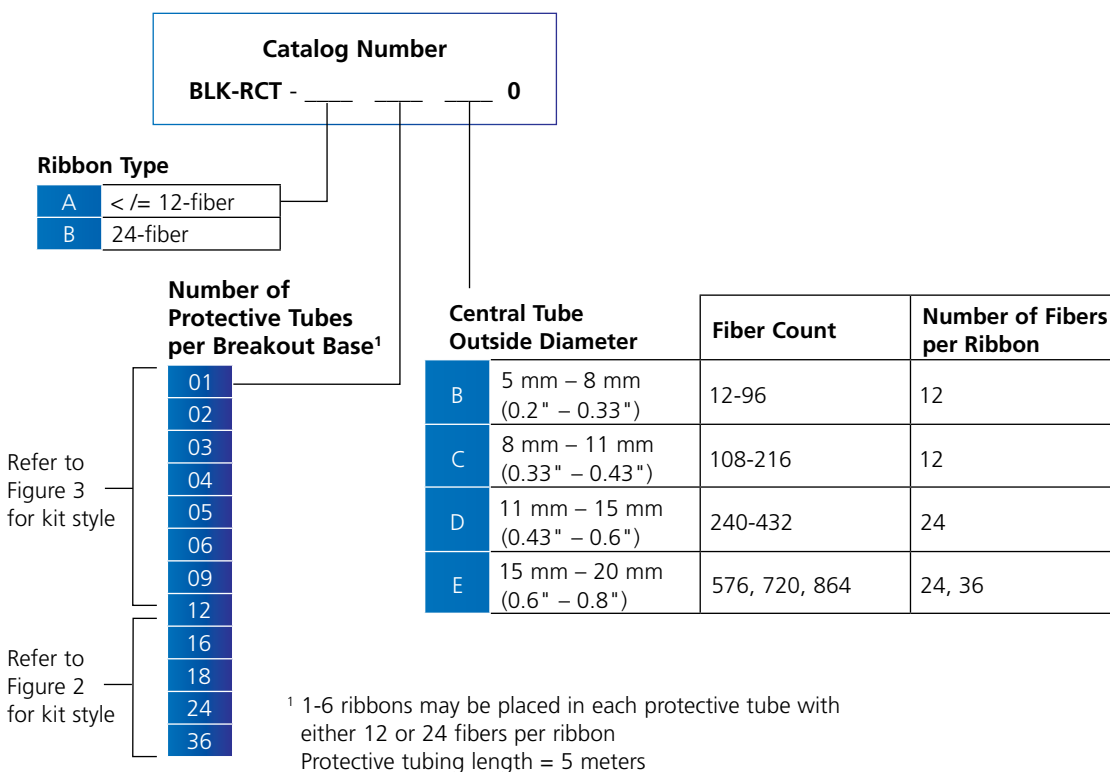
Figure 3
Breakout kit for RCT cable

RCT Breakout Kit Typical Configurations

432- and 864-fiber ribbon in central tube (RCT) OSP cables featuring 24 fibers per ribbon are common. The table below shows the number of protective tubes per breakout base required for 432- and 864-fiber cables based on the number of fibers per tray. This kit is used to protect fiber ribbons between the cable clamp and splice tray.

NUMBER OF FIBERS PER TRAY	NUMBER OF RIBBONS PER PROTECTIVE TUBE	432-FIBER CENTRAL TUBE OSP CABLE, 24-FIBER RIBBON	864-FIBER CENTRAL TUBE OSP CABLE, 24-FIBER RIBBON
24	1	18	36
48	2	9	18
72	3	6	12
96	4	N/A	9
144	6	3	6

Breakout kits with 36 protective tubes use a large breakout base, kits with 9–18 protective tubes use a medium breakout base and kits with 6 protective tubes use a small breakout base.



¹ The number of protective tubes per central tube is calculated as follows:

Divide the number of fibers per central tube (typically between 144 and 864) by the number of fibers (12, 24, 36, 48, 72) to be spliced in each splice tray.

Example: If the central tube has 864 fibers with 36 fibers per splice tray, then the breakout base would require 24 protective tubes.

Other configurations are available upon request. Please contact [CommScope's Technical Assistance Center](https://www.commscope.com/support).

<https://www.commscope.com/support>

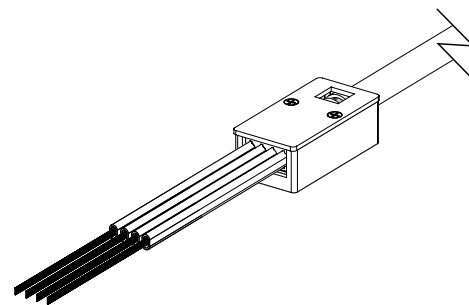
Breakout Kit for Intrafacility (IFC) Ribbon Cables

CommScope's ribbon IFC cables have a central tube construction. The ribbons in IFC cables feature 12 fibers per ribbon. A central tube encloses the ribbons and features fiber counts ranging from 24 fibers to 216 fibers. Central tubes with 72, 96, 144 and 216 fibers are most common. IFC ribbon cables are used in off-frame splicing applications where mass fusion ribbon splicing is used.

The breakout kits for IFC cables contain a single breakout base attached to the central tube. Protective tubing is attached to the breakout base in 5-meter lengths and can accommodate up to six ribbons featuring 12 fibers per ribbon.

For mass fusion ribbon splicing in the FEC, CommScope recommends splicing 72 fibers per drawer. For ribbon featuring 12 fibers per ribbon, six ribbons would be spliced in each drawer. For ribbon featuring 24 fibers per ribbon, three ribbons would be spliced in each drawer. An "MT" chip is required for mass fusion ribbon splicing in a dual splice tray.

The breakout kits for 72, 96, 144, 216 and 432 fiber IFC cables are shown in the table below. This kit is used to protect fiber ribbons between the cable clamp and the splice tray.

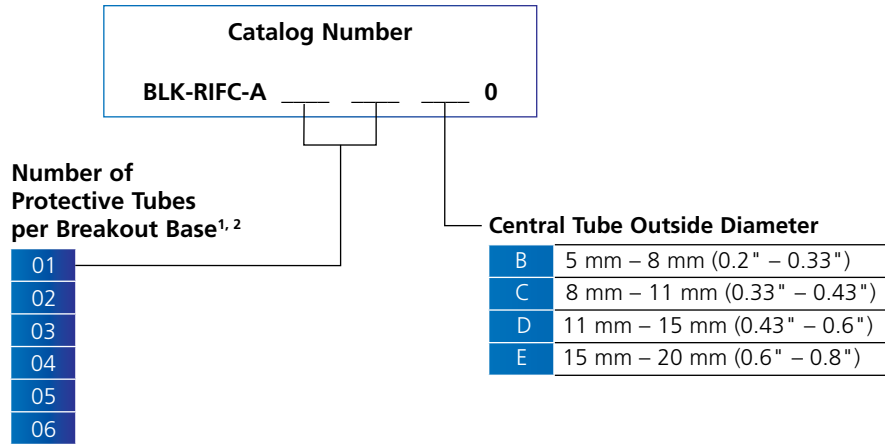


**Breakout Kit for IFC
Ribbon Cables**

CATALOG NUMBER	IFC CABLE FIBER COUNT	NUMBER OF FIBERS PER TRAY
BLK-RIFC-A02B0	72	36
BLK-RIFC-A01B0	72	72
BLK-RIFC-A02B0	96	48
BLK-RIFC-A04C0	144	36
BLK-RIFC-A02C0	144	72
BLK-RIFC-A06C0	216	36
BLK-RIFC-A03C0	216	72
BLK-RIFC-A06E0	432	72

IFC Breakout Kit Typical Configurations

When splicing IFC ribbon cables in the FEC cabinet, CommScope recommends 72 fibers per drawer. Fewer splices can be used, but the FEC easily accommodates 72 fibers per drawer in mass fusion ribbon splicing applications.



¹ 1–6 ribbons may be placed in each protective tube CommScope recommends 6 ribbon units (72 fibers) per tube. Protective tubing length = 5 meters

² **The number of protective tubes per central tube is calculated as follows:**

Divide the number of fibers per central tube (typically between 72 and 216) by the number of fibers (12, 24, 36, 48, 72) to be spliced in each splice tray.

Example: If the central tube has 144 fibers with 36 fibers per splice tray, then the breakout base would require four protective tubes.

Other configurations are available upon request. Please contact CommScope's Technical Assistance Center. <https://www.commscope.com/support>

Protective Tubing Cutting Tool

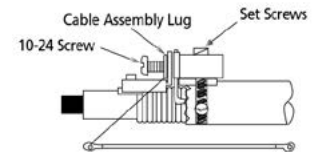
The protective tubing cutting tool is used to score the protective tubing so the tubing can be cut to the appropriate lengths for the final installation.

CATALOG NUMBER	DESCRIPTION
BLK-BKOTUB	Protective tubing cutting tool

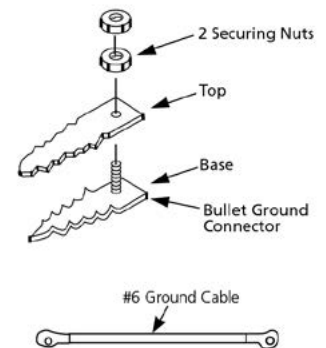
Grounding Kits

Kit used to ground armored fiber cable.

CATALOG NUMBER	DESCRIPTION
GAK-FEC001	Grounding kit for Armored OSP cable Includes: One cable assembly lug type ground kit One #6 ground cable 229 mm (9") long
GND-STPKIT	Any armored loose tube or buffer tubed fiber OSP cable Includes: One bullet ground connector One #6 ground cable 127 mm (5") long
FEC-ACCGND02	Frame mount configuration Any armored loose tube or buffer tubed OSP cable Includes: One bullet ground connector One #6 ground cable 305 mm (12") long



Grounding Kit (GAK-FEC001 Shown)



Grounding Kit (GND-STPKIT Shown)

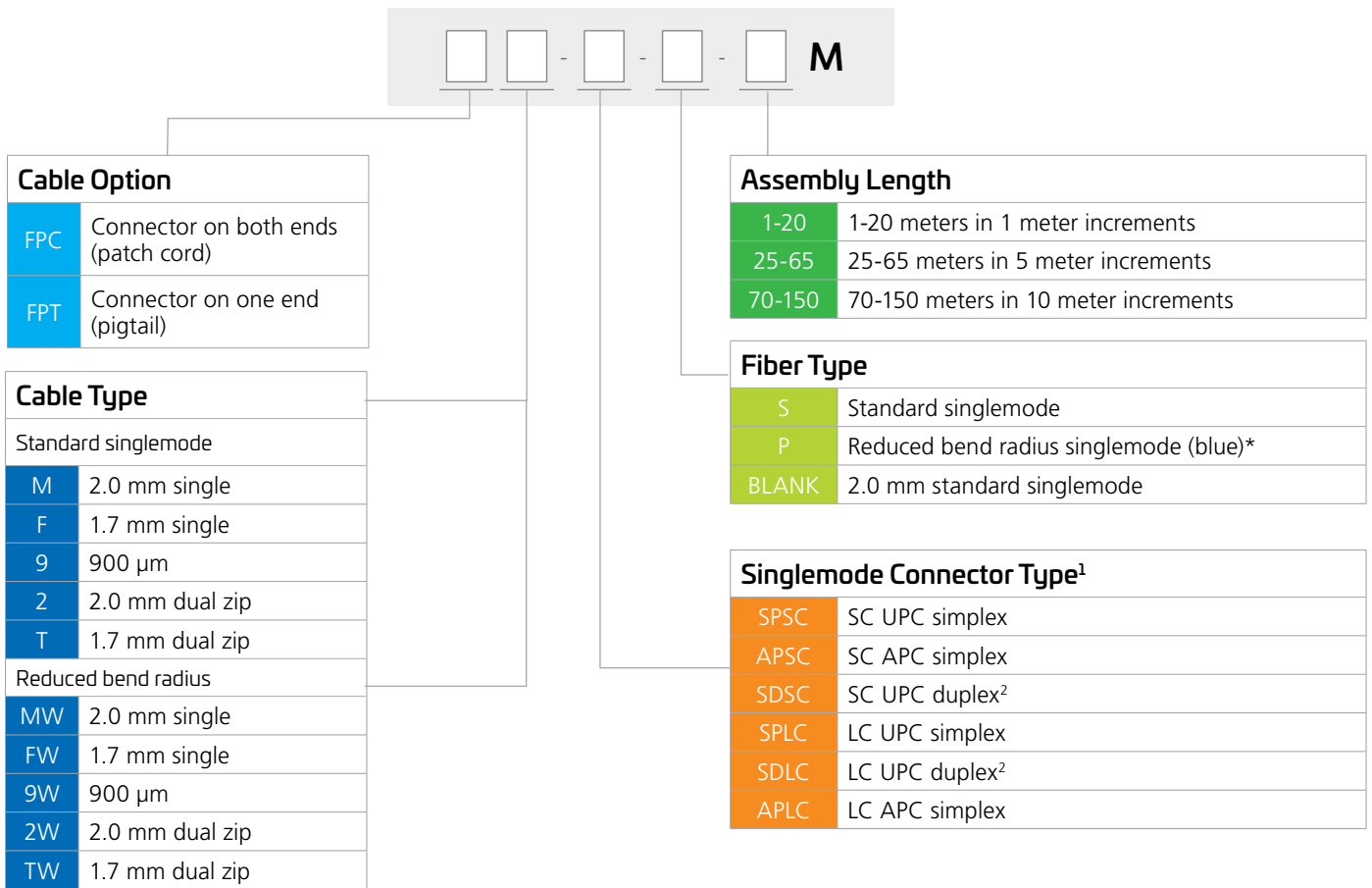
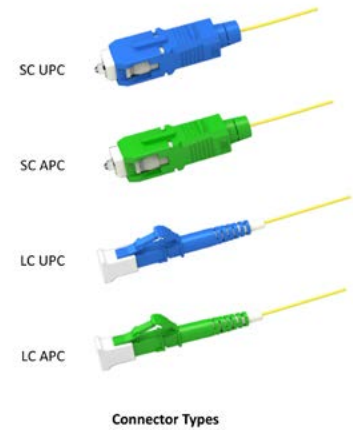
Grounding/Moisture Blocking Kits

Kit used to properly block gel filled stranded and ribbon cables.

CATALOG NUMBER	DESCRIPTION
FBK-OSP002	Grounding/Moisture blocking kit; Includes components for grounding and blocking gel filled fiber cables: blocking gel, heat shrink and grounding accessories
BLK-MSTRKIT	Moisture blocking kit; Includes components for blocking gel filled fiber cables: syringe, blocking gel

Fiber Patch Cords (1- & 2-fibers)

All patch cords undergo stringent testing for both insertion loss and return loss at the factory before shipment to ensure that only quality product is delivered to the customer. CommScope offers ultra physical contact (UPC) polish and angled physical contact (APC) on the SC, LC and MPO connector styles. APC should be used in applications that require better control of return loss. CommScope has tight tolerances regarding the rotation of the single-fiber ferrule to maintain low insertion loss values.



Ordering Examples

FPC2-SPSC-10M: Singlemode 2.0 mm dual zip patch cord with SC UPC connectors on both ends, 10 meters in length with standard breakout length of 0.31 m (12") on both ends.

¹ For hybrid patch cords, enter both connector types in this field and separate them with a slash mark; remove 's' from the UPC option.

FPCF-SPSC/PLC-S-10M: Singlemode 1.7 mm simplex patch cord with SC UPC connector on one end and LC UPC connector on the other end, 10 meters in length.

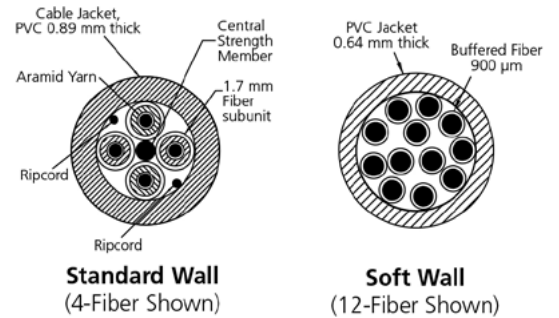
² One connector per end; requires dual zip cable

* Not a substitute for well-engineered cable management.

Other connector styles are available upon request. Please contact [CommScope Technical Assistance Center](https://www.commscope.com/support). <https://www.commscope.com/support>

Multi-Fiber Patch Cords (4- to 24-fibers)

Multi-fiber patch cords are available with 4, 6, 8, 12 or 24 tight buffered 1.7 mm fibers enclosed in a standard wall outer jacket. Each 1.7 mm fiber is labeled for easy identification of individual fibers. Multi-fiber patch cords are also available with 6, 8 or 12 tight buffered 900 µm fibers with a thin softwall outer jacket.



Connector Type (1st and 2nd end)	
0	Stub (only on 2nd end)
7	SC UPC
E	SC APC
K	LC UPC
M	LC APC

Breakout Length	
X	Length in inches
BLANK	Both ends 0.31 m (12")

Assembly Length	
001-020	1-20 meters in 1 meter increments
025-065	25-65 meters in 5 meter increments
070-150	70-150 meters in 10 meter increments

Cable Type	
D	4-fiber standard wall with 1.7 mm subunits
R	4-fiber reduced bend radius with 1.7 mm subunits (blue)
E	6-fiber standard wall with 1.7 mm subunits
P	6-fiber soft wall with 900 µm buffered fiber
AH	8-fiber standard wall with 1.7 mm subunits
L	8-fiber soft wall with 900 µm buffered fiber
N	8-fiber reduced bend radius with 1.7 mm subunits (blue)
F	12-fiber standard wall with 1.7 mm subunits
M	12-fiber soft wall with 900 µm buffered fiber
FP	12-fiber reduced bend radius with 1.7 mm subunits (blue)
AD	24-fiber standard wall with 1.7 mm subunits
GP	24-fiber reduced bend radius with 1.7 mm subunits (blue)

Ordering Examples

FPM-07/0-P005M: Singlemode multi-fiber patch cord with SC UPC connectors on one end, no connectors on the other end (pigtail), 6-fiber soft wall, 5 meters long with standard breakout.

Other connector styles and breakout lengths are available upon request. Please contact [CommScope Technical Assistance Center](https://www.commscope.com/support).
<https://www.commscope.com/support>

MA (Multi-Fiber Cable Assemblies)

With CommScope's pre-terminated 1.2mm multi-fiber cable assemblies, you can increase density in your optical distribution frames (ODFs) and accelerate fiber deployment. Our portfolio of cable assemblies are designed for a wide variety of in-building applications and can be configured for your specific needs. These multi-fiber cable assemblies provide fast plug-and-play turn up of new customers and services. They are designed for use with all ODF systems, including CommScope's popular NG4access® frame, enabling you to support greater fiber density without sacrificing manageability.

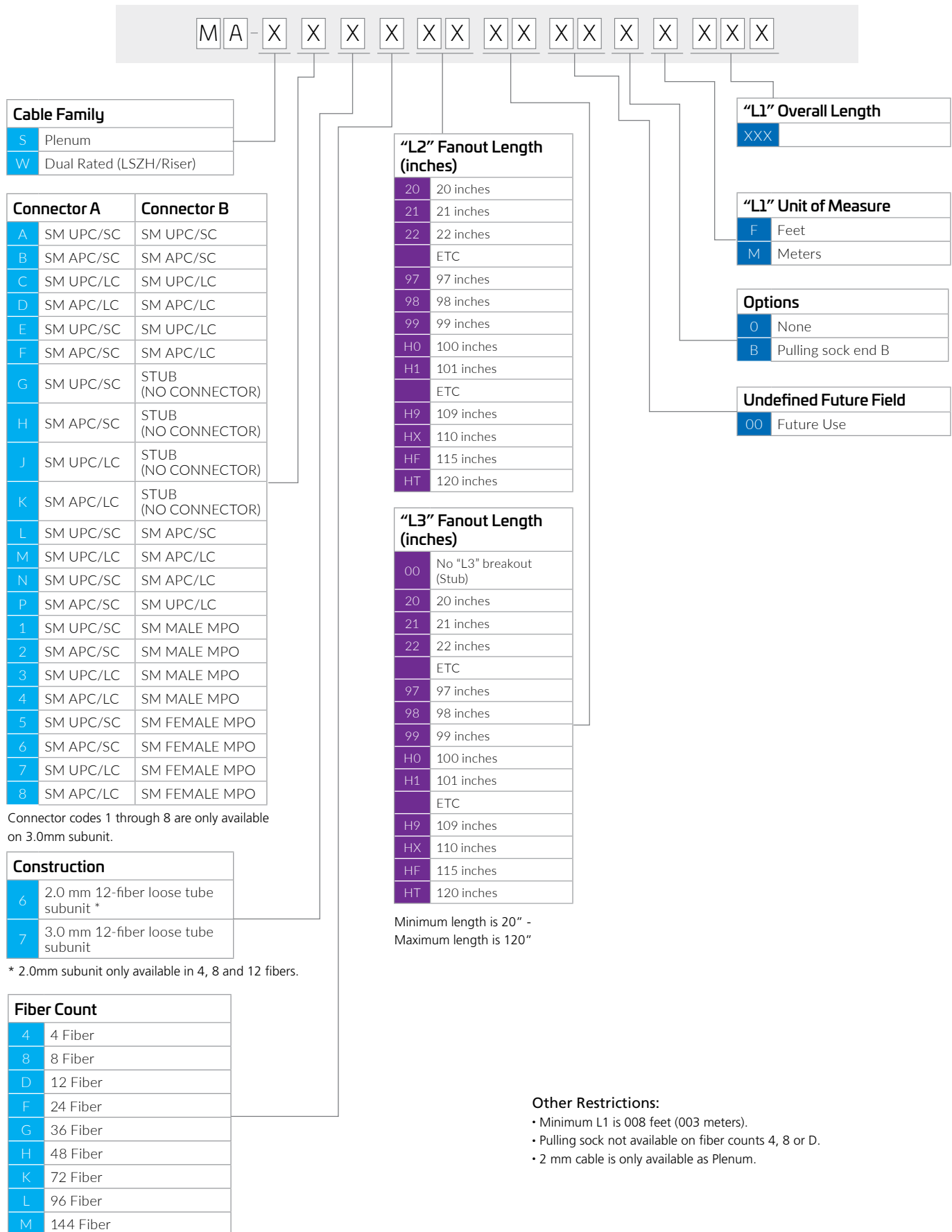
These in-building assemblies use no metallic strength members and are designed to meet the fire-resistant characteristics required in a variety of central office applications. All assembly components have passed the rigorous requirements of the Telcordia GR specifications.

Features

- Breakout types: Double-ended breakouts or breakouts-to-stub end
- Fiber counts: 4, 8, 12, 24, 36, 48, 72, 96 and 144 stranded fibers
- Use ratings: Plenum- or Dual Rated (LSZH/Riser)
- Connector: 22 combinations using ultra-polished or angle-polished MPO, SC, LC and stub end
- Breakout lengths: 20 inches to 120 inches
- Available with or without pulling socks
- All fiber optic cable is tested in accordance with GR-409
- All single fiber connectors are tested to GR-326 performance specifications
- All MPO fiber connectors are tested to GR-1435 performance specifications

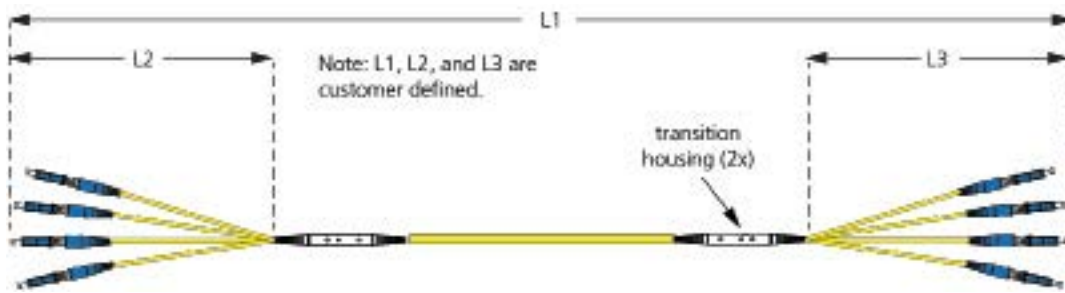


MA (Multi-Fiber Cable Assemblies)

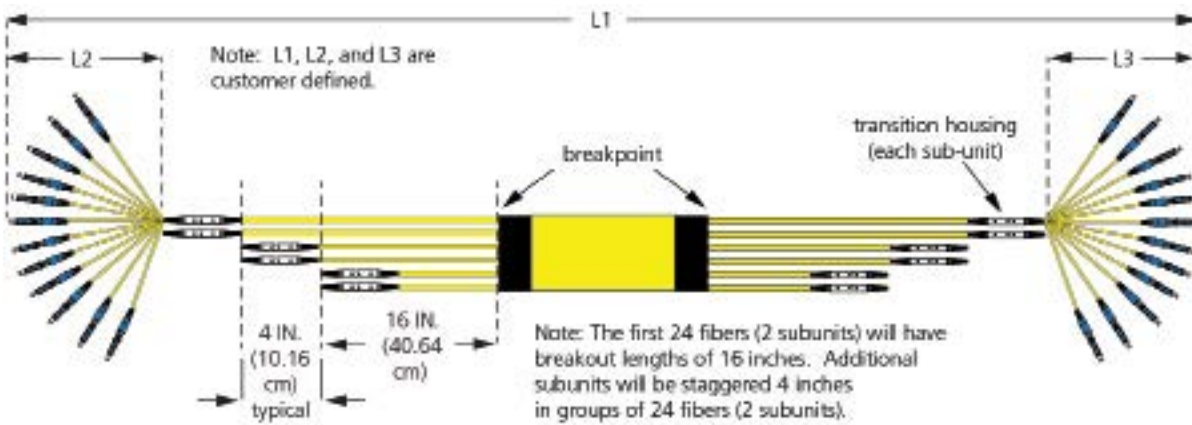


MA (Multi-Fiber Cable Assemblies)

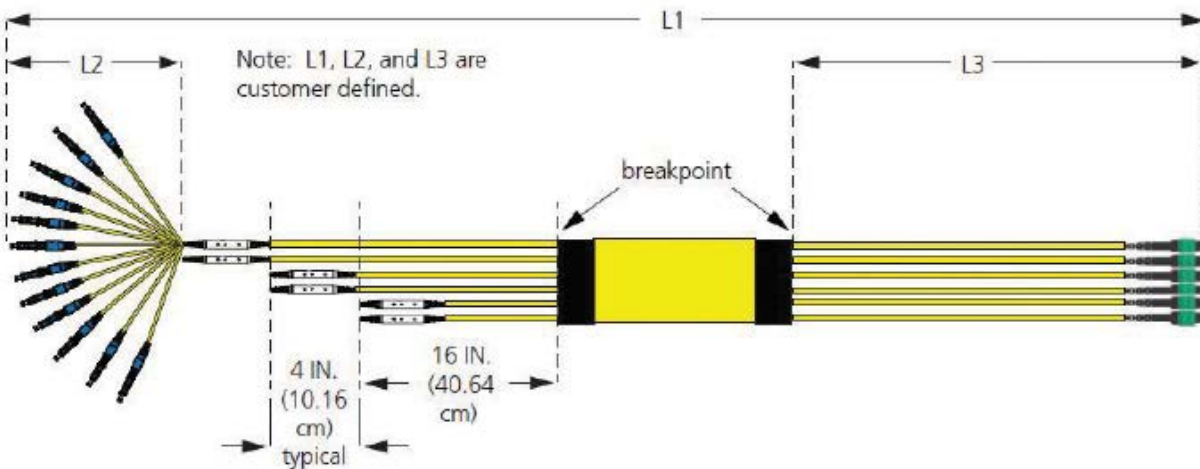
4, 8 and 12 Fiber Assembly Image



24 - 144 Fiber Assembly Image



MPO Connectors on Side B (Optional)

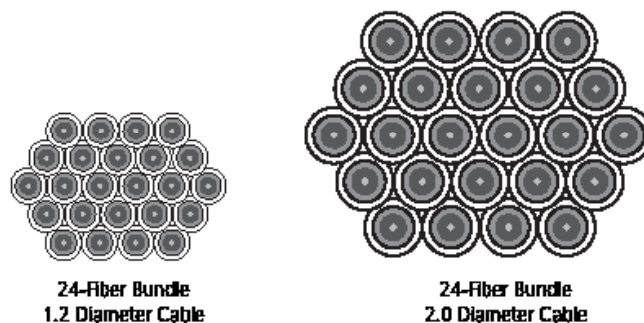


Fiber Cable Assembly Specifications

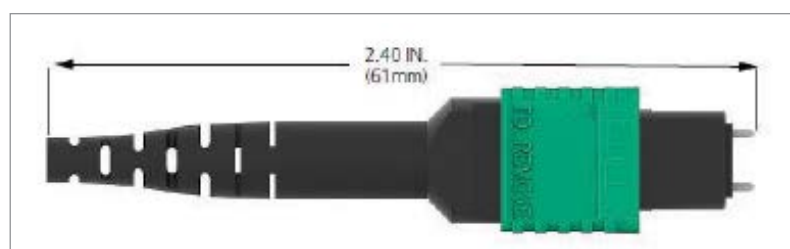
This detail shows the advantages of the 1.2 mm subunits.

PATCH CORD DIAMETER	CABLES PER SQUARE *INCH OF VERTICAL CABLE MANAGEMENT SPACE
3.0 mm	46
2.0 mm	102
1.7 mm	142
1.2 mm	285

*Based on GR-449-CORE, Issue 2 patch cord packing density guidelines.

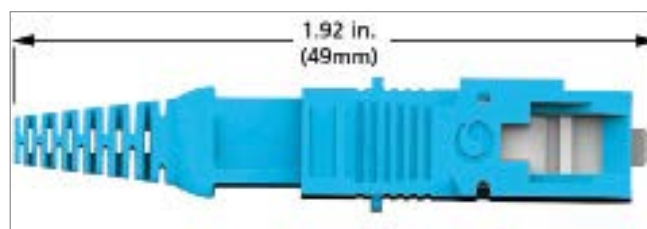


12 FIBER SINGLEMODE MPO		
Insertion loss (dB Maximum)	1310 nm	0.45
	1550 nm	0.45
Return loss (dB Minimum)	1310 nm	65
	1550 nm	65



MPO Connector

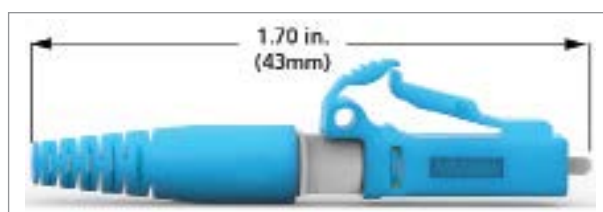
SC - SINGLEMODE UPC		
Insertion loss (dB Maximum)	1310 nm	0.2
	1550 nm	0.2
Return loss (dB Minimum)	1310 nm	55
	1550 nm	55



SC Connector

SC - SINGLEMODE APC		
Insertion loss (dB Maximum)	1310 nm	0.35
	1550 nm	0.35
Return loss (dB Minimum)	1310 nm	65
	1550 nm	65

LC - SINGLEMODE UPC		
Insertion loss (dB Maximum)	1310 nm	0.3
	1550 nm	0.3
Return loss (dB Minimum)	1310 nm	55
	1550 nm	55



LC Connector

LC - SINGLEMODE APC		
Insertion loss (dB Maximum)	1310 nm	0.35
	1550 nm	0.35
Return loss (dB Minimum)	1310 nm	65
	1550 nm	65

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow.

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