LSX Optical
Distribution Frames

COMMSCOPE®

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Introduction

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. The frame is shipped complete with front cable management, top and bottom troughs.

Termination panel

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

Splice panel

CommScope's splice panel protects splices of multiple splice types.

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.
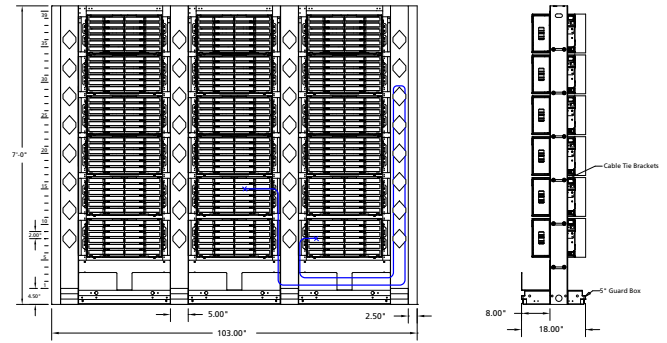
Product overview

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	1,008 terminations per frame
Front access to rear connector	No
VAM capabilities	Yes
Slack storage location	Utilizes drip loop method
Connector access	Straight adapter

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

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.
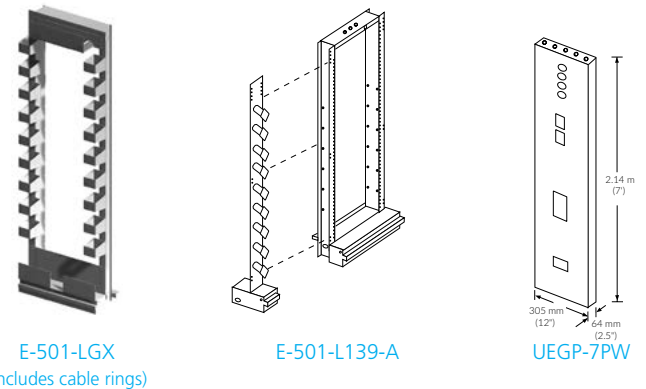

CommScope's recommended fiber frame lineup uses three frames with 1.7 mm fiber jumpers to maintain the industry standard 2-inch patch cord pile-up

ORDERING INFORMATION

DESCRIPTION	DIMENSIONS (H X W X D)	CATALOG NUMBER
Empty rack-WECO 7' network non-seismic rack, front 8"D GB, (39) 2.00" WECO mtg. spaces	2.1 m x 660 mm x 381 mm (7' x 26" x 15")	RAC-7A0160
Lower horizontal cable trough	203.2 mm x 203.2 mm (8" W x 8" D)	E-501-11115
5"D x 26'W rear guard box	660 mm x 127 mm (26" W x 5" D)	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	127 mm x 127 mm (5" W x 5" D)	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).
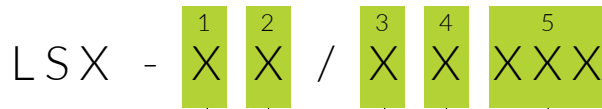

E-501-LGX
(Includes cable rings)

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)	2.14 m x 584 mm x 305 mm (7' x 23" x 12")	E-501-LGX
Interbay management panel (IMP)	2.14 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)	2.14 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 MULTIFIBER CABLE

The LSX panel can be loaded with intrafacility cable (IFC). 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.

LSX - X X / X X X X X
         1 2   3 4   5

Panel type

1	2	48-position (3.5" H)
	7	96-position (7" H)
	T	144-position (9" H)
	L	288-position (11" H)

Connector and adapter type #1

2	Singlemode	
	7	SC ultra polish
	L	SC angled polish
	K	LC ultra polish (144 and 288 only)[2]
	M	LC angled polish (144 and 288 only)[2]

Connector and adapter type #2

| 3 | Singlemode | |
| | 0 | No connector/stub end |

Cable length[1]

5	Singlemode	
	016	16 m (50')
	023	23 m (75')
	031	31 m (100')
	046	46 m (150')
	061	61 m (200')
	092	92 m (300')

Cable type[2]

4	Singlemode IFC riser	
	2	48-fiber stranded
	ZC	96-fiber stranded
	LA	96-fiber ribbon
	ZD	144-fiber stranded
	LH	144-fiber ribbon
	WB	288-fiber stranded (2x144-fiber)
	WA	288-fiber ribbon (2x144-fiber)
	OSP[3]	
	HJ	48-fiber stranded
	T6	96-fiber stranded
	GA	96-fiber ribbon
	T7	144-fiber stranded
	GT	144-fiber ribbon
	WD	288-fiber stranded (2x144-fiber)
	WC	288-fiber ribbon (2x144-fiber)

[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.

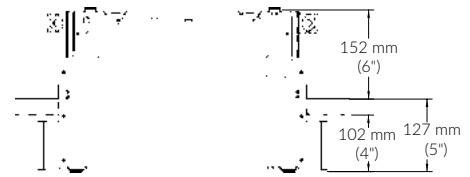Other configurations are available upon request.
Please contact CommScope technical assistance center.
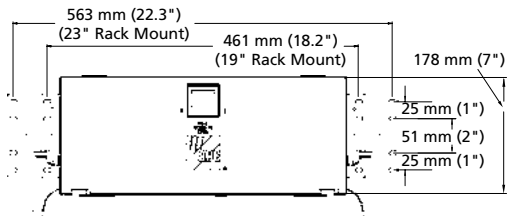
ADAPTER-ONLY FIBER TERMINATION PANELS

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

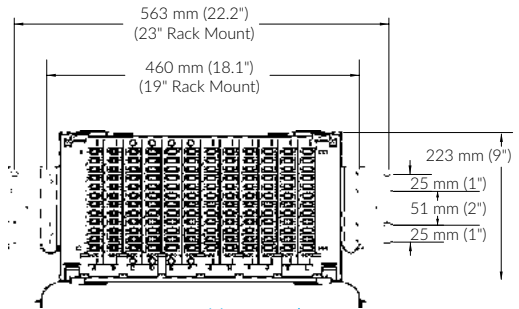| ORDERING INFORMATION		
NUMBER OF TERMINATIONS	ADAPTER TYPE	CATALOG NUMBER
24 44 mm (1.75") height	Singlemode	
	SC ultra polish	LSX-170000
	SC angled polish	LSX-1L0000
48 89 mm (3.5") height	Singlemode	
	SC ultra polish	LSX-270000
	SC angled polish	LSX-2L0000
72 178 mm (7") height	Singlemode	
	SC ultra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

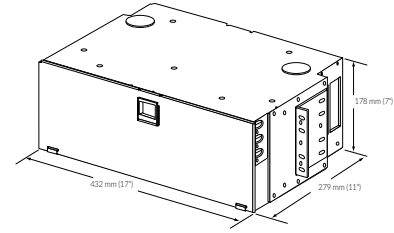| ORDERING INFORMATION			
NUMBER OF TERMINATIONS	ADAPTER TYPE	LOADED WITH 12-FIBER RIBBON PIGTAILS	LOADED WITH 12-FIBER STRANDED PIGTAILS
144 228 mm (9") height 15" deep	Singlemode		
	SC ultra polish	LSX-T75123-A-SPL	LSX-T71122-A-SPL
	SC angled polish	LSX-TL5123-A-SPL	LSX-TL1122-A-SPL
	LC ultra polish[1]	LSX-TK5123-A-SPL	LSX-TK1122-A-SPL
	LC angled polish[1]	LSX-TM5123-A-SPL	LSX-TM1122-A-SPL
288[*] 279 mm (11") height 15" deep	Singlemode		
	SC ultra polish	LSX-L75243-A-SPL	LSX-L71242-A-SPL
	SC angled polish	LSX-LL5243-A-SPL	LSX-LL1242-A-SPL
	LC ultra polish[1]	LSX-LK5243-A-SPL	LSX-LK1242-A-SPL
	LC angled polish[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.

SPLICE PANELS

The LSX splice panel has the same mounting dimensions as LGX compatible panels and consists of six drawers, designation labels and a cover. Maximum splice capacity is 144 when splicing individual stranded fibers or 432 fibers when using ribbon fiber and mass fusion splicing. The LSX splice panel requires F3DF splice trays. Each drawer holds twenty-four 900 micron pigtails or twelve 3.0 mm pigtails. Pigtails and cable enter and exit through access ports in the rear of the panel.

Vertical cable guides must be ordered along with the LSX splice panel unless it is mounted into a frame that includes vertical cable guides. If needed, cable clamp kit must be ordered separately (below).

Splice panel shown without vertical cable guides
Ordered separately (front view)

ORDERING INFORMATION	
DESCRIPTION	ADAPTER TYPE
LSX splice panel; 483 mm or 584 mm (19" or 23") rack mount	LSX-SPLCA06

SPLICE TRAY

Each splice tray is purchased separately.

Splice tray

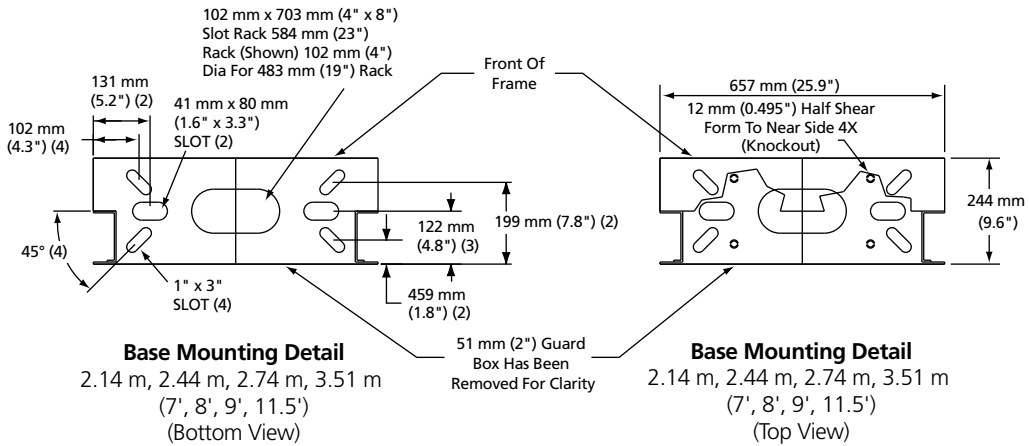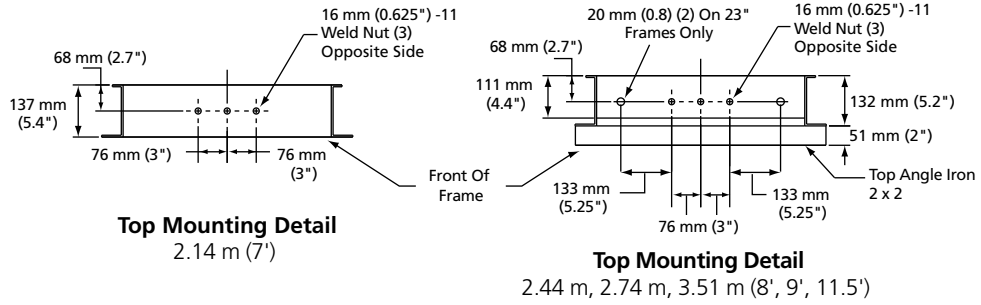| ORDERING INFORMATION	
DESCRIPTION	ADAPTER TYPE
Splice tray; 12 splices per tray mass fusion ribbon	FST-F3DF-MT-D*
Heat shrink (single fiber fusion)	FST-F3DF-HS
Bare fusion	FST-F3DF-FT
Mechanical (mass fusion)	FST-F3DF-MT
Nortel QPAK	FST-F3DF-NT

* Use only one FST-F3DF-MT-D per splice drawer (24 splices per tray).
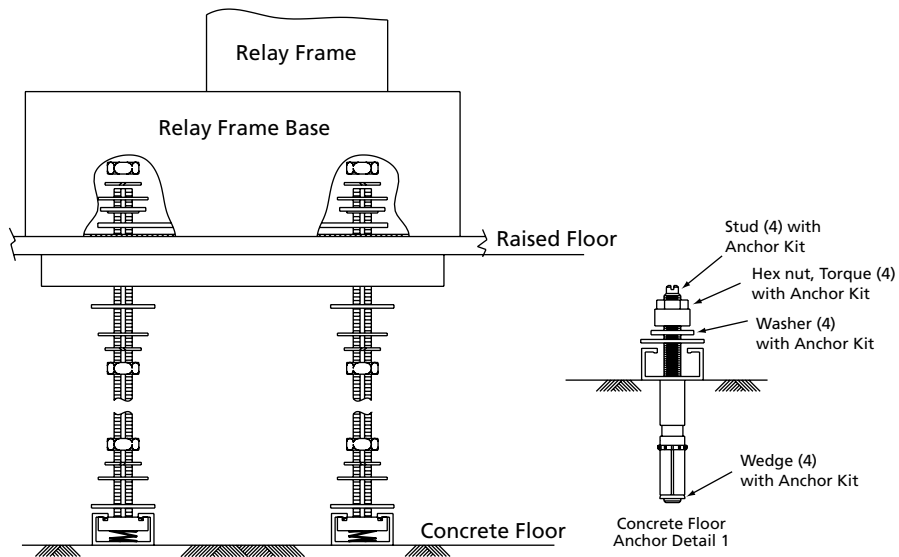
Use trays with the LSX splice panel only (above).
Note: Trays can not be used in preterminated LSX splice panels. Preterminated LSX splice panels already include splice trays.

Frame Accessories
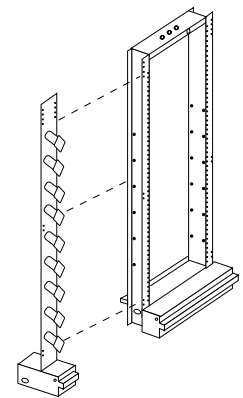
FRAME INSTALLATION KIT

Top Mounting Detail
2.14 m (7')

Top Mounting Detail
2.44 m, 2.74 m, 3.51 m (8', 9', 11.5')

Base Mounting Detail
2.14 m, 2.44 m, 2.74 m, 3.51 m
(7', 8', 9', 11.5')
(Bottom View)

Base Mounting Detail
2.14 m, 2.44 m, 2.74 m, 3.51 m
(7', 8', 9', 11.5')
(Top View)

Network Type Unequal Flange Frame Mounting Details

Underfloor Mounting Kit

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

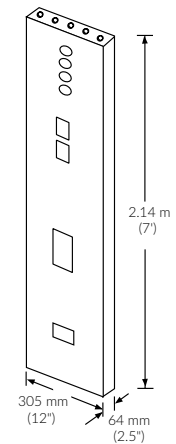| ORDERING INFORMATION		
DESCRIPTION	DIMENSIONS (H X W X D)	CATALOG NUMBER
Interbay Management panel (IMP)	2.14 m x 127 mm x 305 mm (7' x 5" x 12")	E-501-L139-A

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 IMP or network frame 2.14 m x 64 mm x 305 mm (7' H x 2.5" W x 12" D)	UEGP-7PW

2.14 m
(7')

305 mm
(12")

64 mm
(2.5")

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

STANDARD CROSS-CONNECT PATCH CORD LENGTHS

NUMBER OF FRAMES	APPROXIMATE PATCH CORD LENGTH METERS (FEET)
1	4 m and 6 m (13.1' and 19.7')
2	6 m (19.7')
3	6 m and 7 m (19.7' and 23')
4	7 m and 8 m (23' and 26.2')
5	8 m and 9 m (26.2' and 29.5')
6	9 m (29.5')

For recommended cross-connect methods and installation instructions, refer to LSX user manual.

ORDERING INFORMATION FOR PATCH CORDS AND ATTENUATORS

CommScope offers a comprehensive line of cable assembly and accessory products including patch cords, IFC assemblies, attenuators.

Please visit www.commscope.com or contact customer service.

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