



# LSX Optical Distribution Frame



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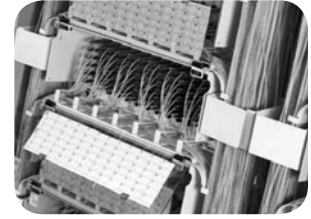


# LSX Optical Distribution Frame

## Introduction

### Frame

ADC'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 termination panel is available with multiple adapters in configurations of 72, 96, 144 and higher and can be ordered with adapters only or preterminated with either intrafacility (IFC), outside plant (OSP) cables or pigtails for ease of installation.

### Splice Panel

ADC'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

<b>Recommended applications</b>	Small to medium fiber count applications. Minimal cable management features. Lowest cost solution.
<b>Description</b>	LGX* compatible
<b>Number of fibers, future growth potential</b>	Up to 5,000
<b>Interconnect</b>	Good
<b>Cross-connect</b>	Good, no rear cable management
<b>Accommodates on-frame splicing</b>	Good
<b>Accommodates off-frame splicing</b>	Good
<b>Rear access</b>	Must have full access to front and rear
<b>Density – terminations per frame</b>	1,008 terminations per frame
<b>Front access to rear connector</b>	No
<b>VAM capabilities</b>	Yes
<b>Slack storage location</b>	Utilizes drip loop method
<b>Connector access</b>	Straight adapter

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



# LSX Optical Distribution Frame

## Things to Consider When Ordering

### How to Order

#### Main Components of the LSX Frame

Catalog Number    Quantity

1) Select desired Frame

- Traditional LSX Universal Frame - Page 81

\_\_\_\_\_

2) Select desired Fiber Termination Panels

- Preterminated Fiber Termination Panels with  
Multifiber Cable-IFC - Page 82

\_\_\_\_\_

- Adapter-Only Fiber Termination Panels - Page 83

\_\_\_\_\_

- Preterminated Fiber Termination/Splice Panels - Page 84

\_\_\_\_\_

- Splice Panels - Page 85

\_\_\_\_\_

#### Optional Equipment

3) Value-Added Module (VAM) Chassis - Page 86

\_\_\_\_\_

4) Frame Installation Kit - Pages 87–88

\_\_\_\_\_

5) Interbay Management Panel - Page 89

\_\_\_\_\_

6) Rear Door Kit - Page 89

\_\_\_\_\_

7) End Guard - Page 89

\_\_\_\_\_

8) Splice Tray - Page 90

\_\_\_\_\_

9) Cable Clamp Kit - Page 90

\_\_\_\_\_

10) Cable Ring Kit - Page 90

\_\_\_\_\_

11) Adapter Pack - Page 91

\_\_\_\_\_

12) Patch Cord - Pages 122–126\*

\_\_\_\_\_

13) In-Line Attenuator - Page 127

\_\_\_\_\_

\*See page 92 for standard cross-connect patch cord lengths.



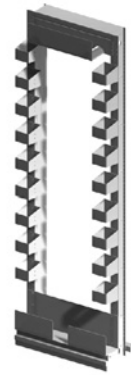
# LSX Optical Distribution Frame

## Fiber Distributing Frame

The traditional LSX universal frame provides the framework for managing a cross-connect or interconnect fiber system.

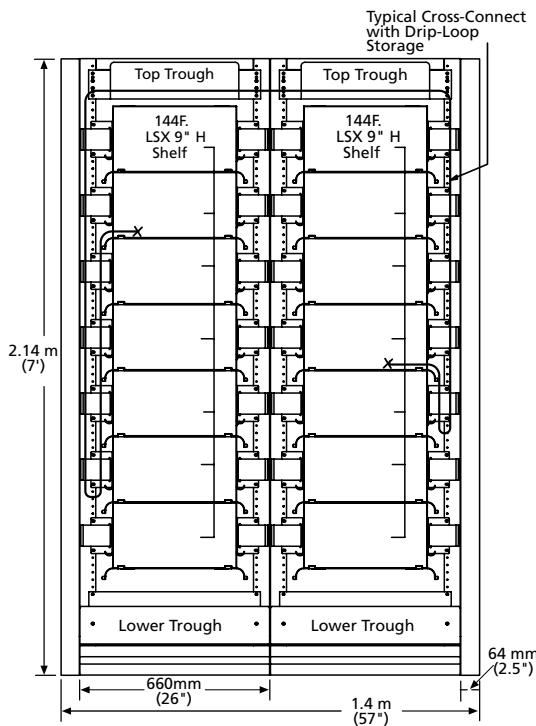
### Ordering Information

Description	Dimensions (HxWxD)	Catalog Number
<b>Traditional LSX universal frame</b> Color: Putty white	2.14 m x 584 mm x 305 mm (7' x 23" x 12")	E-501-LGX

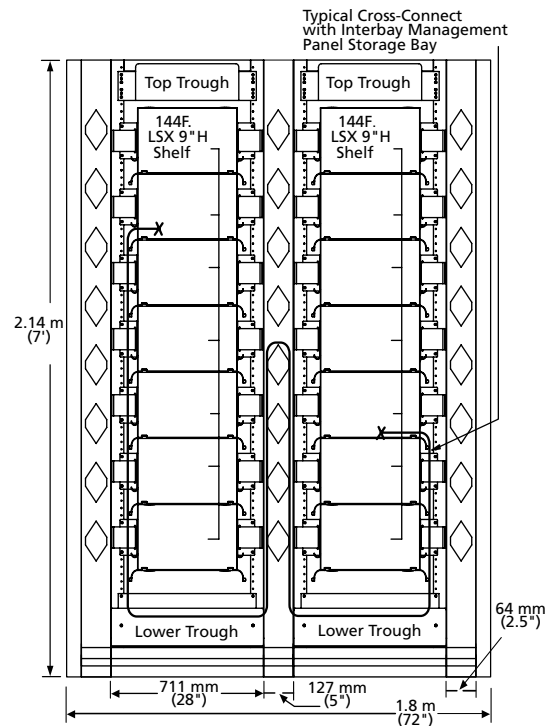


**E-501-LGX**  
(Includes Cable Rings)

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**Typical Cross-Connect with Drip Loop Storage Method**  
(Solution Shown using 144-Position LSX Panels)



**Typical Cross-Connect with Interbay Management Panel Storage Method**  
(Solution Shown using 144-Position LSX Panels)

Traditional Frame Solutions

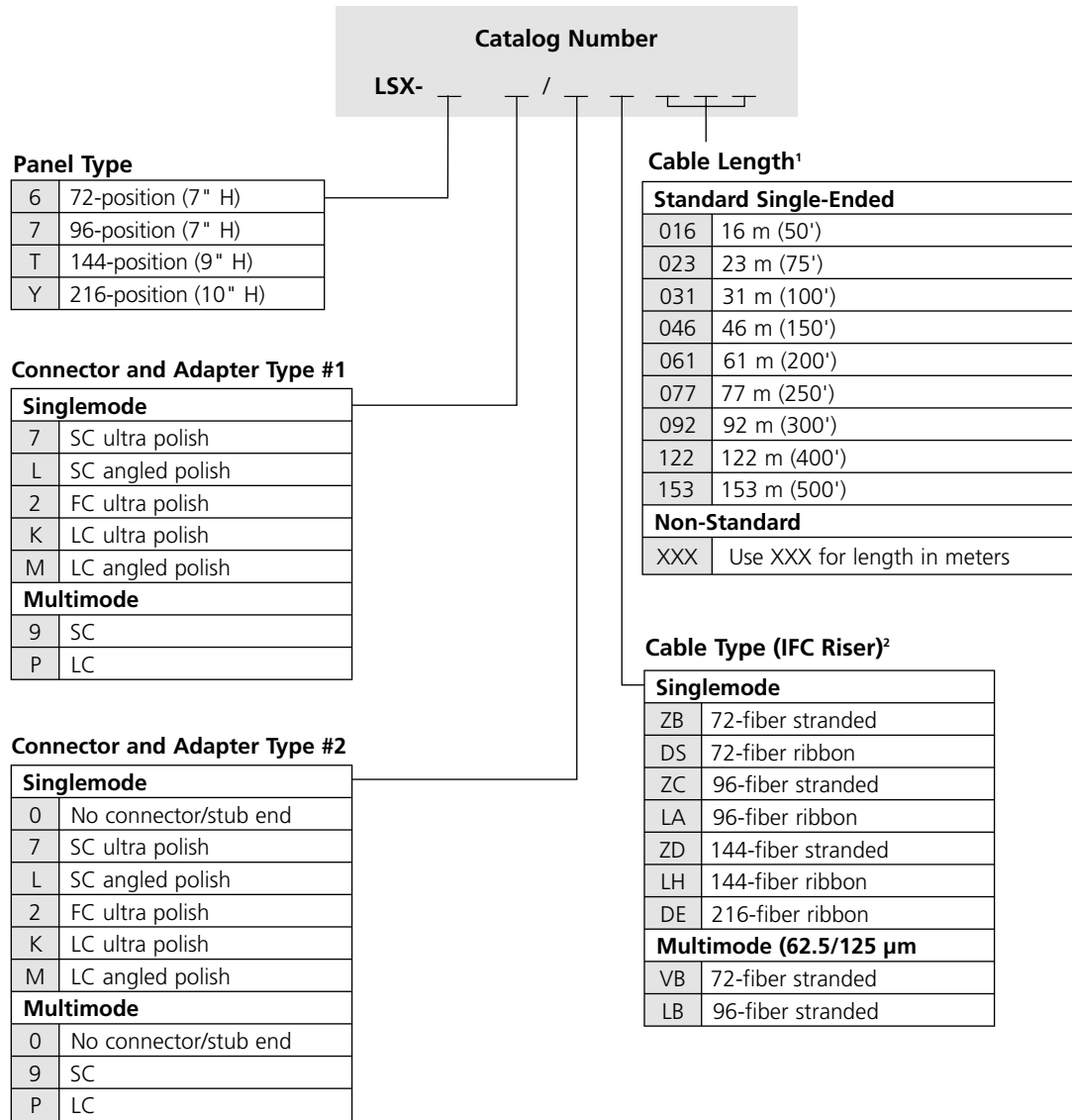


# LSX Optical Distribution Frame

## Preterminated Fiber Termination Panels with Multifiber Cable - IFC

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

The panel adapts to 19- or 23-inch rack mounting, WECCO or EIA spacing.



<sup>1</sup> Panels using ADC's standard cable offering have a shorter lead time than panels using a specific cable manufacturer. ADC only provides GR-409 compliant cable that meets or exceeds our high quality standards. House cable vendors include Alcatel, Corning and Pirelli.

<sup>2</sup> When selecting ADC's standard cable offering, the panel type must be either 6 or 7. The panel will then be packaged in ADC's protected spool where the panel is shipped inside the spool for added protection.

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



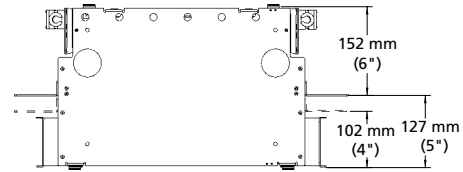
# LSX Optical Distribution Frame

## Adapter-Only Fiber Termination Panels

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



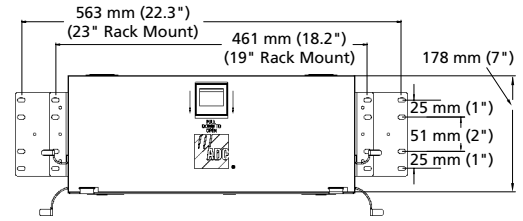
216-Position Adapter-Only Panel



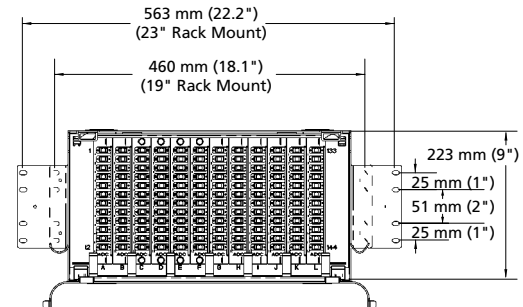
LSX Panel  
(Top View)

### Ordering Information

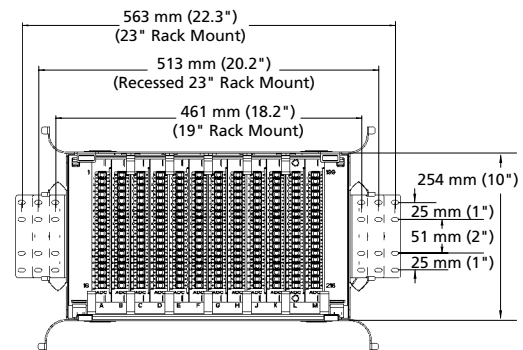
Number of Adapters	Adapter Type	Loaded with Adapters Only
72 178 mm (7") height	<b>Singlemode</b> SC ultra polish SC angled polish FC ultra polish LC ultra polish LC angled polish	LSX-670000
		LSX-6L0000
		LSX-620000
	<b>Multimode</b> SC LC	LSX-6K0000
		LSX-6M0000
		LSX-6P0000
96 178 mm (7") height	<b>Singlemode</b> SC ultra polish SC angled polish FC ultra polish LC ultra polish LC angled polish	LSX-770000
		LSX-7L0000
		LSX-720000
	<b>Multimode</b> SC LC	LSX-7K0000
		LSX-7M0000
		LSX-7P0000
144 228 mm (9") height	<b>Singlemode</b> SC ultra polish SC angled polish FC ultra polish LC ultra polish LC angled polish	LSX-T70000
		LSX-TL0000
		LSX-T20000
	<b>Multimode</b> SC LC	LSX-TK0000
		LSX-TM0000
		LSX-TP0000
216* 254 mm (10") height	<b>Singlemode</b> SC ultra polish SC angled polish LC ultra polish LC angled polish	LSX-Y70000
		LSX-YL0000
		LSX-YK0000
	<b>Multimode</b> SC LC	LSX-YM0000
		LSX-YP0000
		LSX-YP0000



72- or 96-Position Panel  
(Front View)



144-Position Panel  
(Front View)



216-Position Panel  
(Front View)

\*216-position panels are recommended for stand-alone frame installations.

5 / 0 7 • 1 0 3 7 4 2 A E Optical Distribution Frames

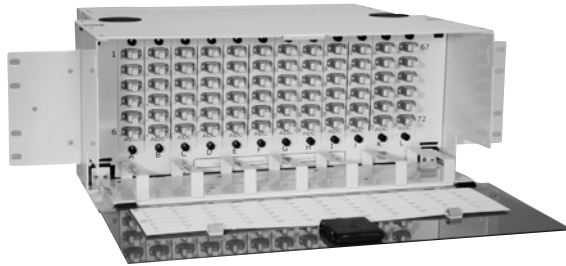
Traditional Frame Solutions



# LSX Optical Distribution Frame

Preterminated Fiber Termination/Splice Panels with Pigtailed

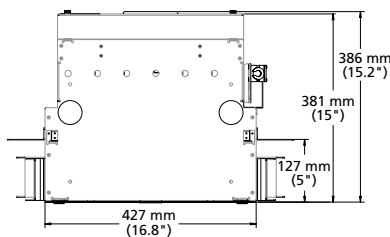
LSX panels are available with a splicing area attached to the rear of the panel. The panels can be ordered with 12-fiber ribbon or 12-fiber stranded pigtailed. Splice trays are ordered separately on page 90.



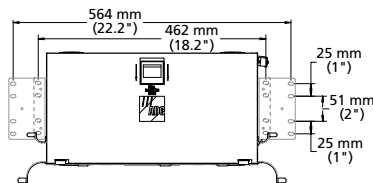
72-Position Termination/Splice Panel

## Ordering Information

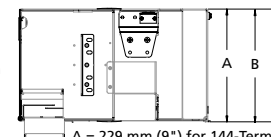
Number of Terminations	Adapter Type	Loaded with 12 Fiber Ribbon Pigtailed	Loaded with 12 Fiber Stranded Pigtailed
72 178 mm (7") height	<b>Singlemode</b>		
	SC ultra polish	LSX-675063-A-SPL	LSX-671062-A-SPL
	SC angled polish	LSX-6L5063-A-SPL	LSX-6L1062-A-SPL
	FC ultra polish	LSX-625063-A-SPL	LSX-621062-A-SPL
	<b>Multimode</b>		
	SC	N/A	LSX-691062-A-SPL
96 178 mm (7") height	<b>Singlemode</b>		
	SC ultra polish	LSX-775093-A-SPL	LSX-771092-A-SPL
	SC angled polish	LSX-7L5093-A-SPL	LSX-7L1092-A-SPL
	FC ultra polish	LSX-725093-A-SPL	LSX-721092-A-SPL
	<b>Multimode</b>		
	SC	N/A	LSX-791092-A-SPL
144 229 mm (9") height	<b>Singlemode</b>		
	SC ultra polish	LSX-T75123-A-SPL	LSX-T71122-A-SPL
	SC angled polish	LSX-TL5123-A-SPL	LSX-TL1122-A-SPL
	FC ultra polish	LSX-T25123-A-SPL	LSX-T21122-A-SPL
	LC ultra polish	LSX-TK25123-A-SPL	LSX-TK1122-A-SPL
	LC angled polish	LSX-TM25123-A-SPL	LSX-TM1122-A-SPL
	<b>Multimode</b>		
	SC	N/A	N/A
	LC	N/A	LSX-TP1122-A-SPL



Top View



Front View



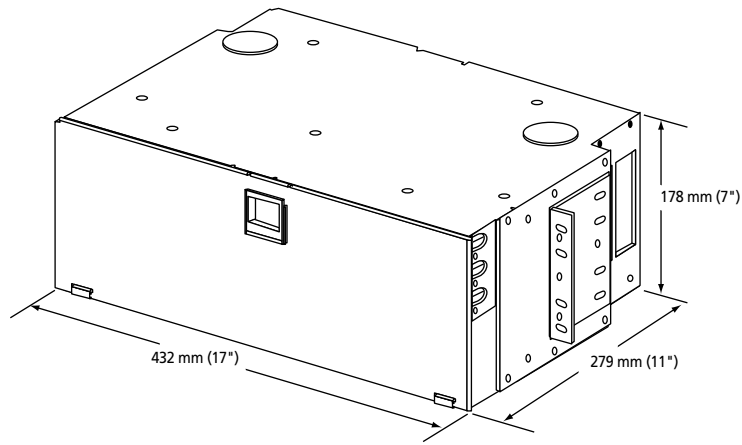
A = 229 mm (9") for 144-Terminations  
B = 178 mm (7") for 72- or 96-Terminations

Side View



# LSX Optical Distribution Frame

## Splice Panels



### Splice Panel

Shown without Vertical Cable Guides – Ordered Separately  
(Front View)

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** (see page 90). 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 (see page 90).

### Ordering Information

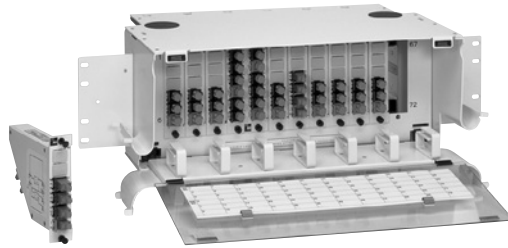
Description	Catalog Number
<b>LSX splice panel</b> 483 mm or 584 mm (19" or 23") rack mount	LSX-SPLCA06



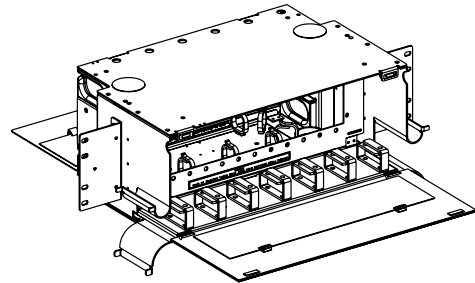
# LSX Optical Distribution Frame

## LGX® Compatible Value-Added Module (VAM) Chassis

The 7-inch LGX® compatible VAM chassis is designed to fit into any open chassis location within new or existing LGX compatible fiber frames. It can accommodate a maximum of 12 plug-in modules, 12 bulkhead plates, 12 blank plates, or any combination thereof. The mounting slots are oriented vertically.



VAM Chassis

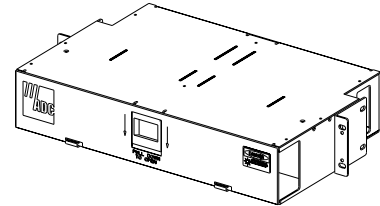


FLM-VLM19X700-W

### Ordering Information

Description	Dimensions (HxWxD)	Catalog Number
<b>7" LGX compatible VAM chassis, unloaded,</b> white; VAMs mount vertically; accommodates up to 12 single modules	178 x 483 mm/584 mm x 279 mm (7" x 19"/23" x 11")	FVM-VLM19X700-W

The 3.5-inch LGX compatible VAM chassis is designed to fit into any 19- or 23-inch environment. It can accommodate a maximum of 4 plug-in modules, 4 bulkhead plates, 4 blank plates or any combination thereof. The mounting slots are oriented horizontally to allow standard LGX compatible plug-in modules to be used while maximizing density and minimizing rack space allotment.



FVM-LGX19X350-W

### Ordering Information

Description	Dimensions (HxWxD)	Catalog Number
<b>3.5" LGX compatible VAM chassis, unloaded,</b> white; VAMs mount horizontally; accommodates up to 4 single modules	89 mm x 477 mm x 279 mm (3.5" x 18.8" x 11")	FVM-LGX19X350-W

## Value-Added Module (VAM) System

ADC offers an expansive line of monitor, splitter, WDM and CWDM plug-in modules designed to meet all application needs. Please reference the **Value-Added Module (VAM) System Catalog #101663AE** for details at [www.adc.com](http://www.adc.com) or contact ADC Customer Service.

## Outside Plant Splitter System

For outside plant splitter solutions, please reference **OmniReach™ FTX Solutions-Passive Optical Splitter Modules Catalog #102902AE** at [www.adc.com](http://www.adc.com) or contact ADC Customer Service.

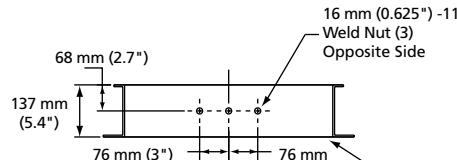


# LSX Optical Distribution Frame

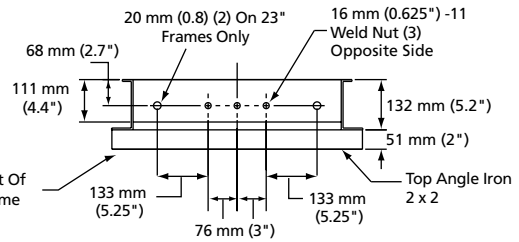
## Frame Accessories

### Frame Installation Kit

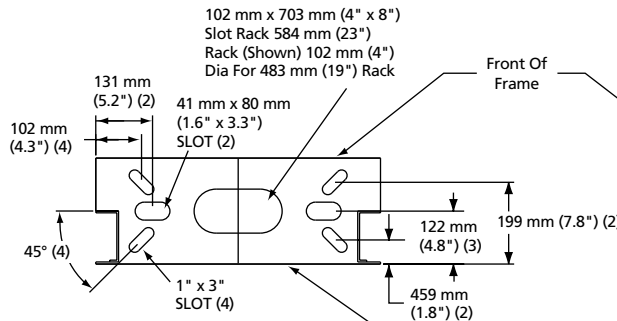
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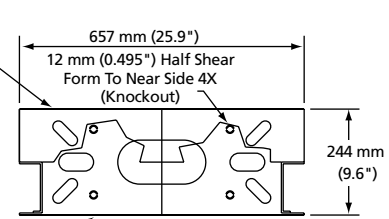
**Top Mounting Detail**  
2.14 m (7')



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

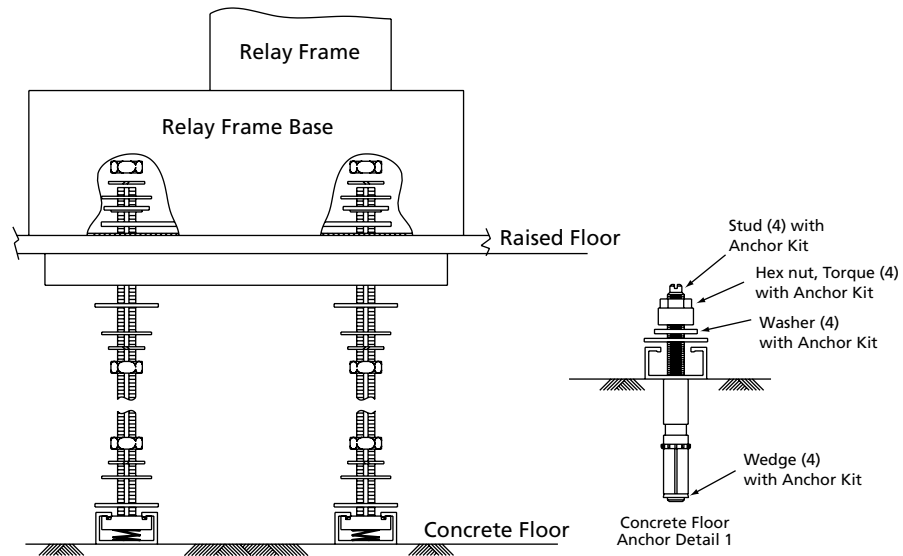


**Base Mounting Detail**  
2.14 m, 2.44 m, 2.74 m, 3.51 m  
(7', 8', 9', 11.5')  
(Bottom View)



**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**

Ordering information follows on the next page.

Traditional Frame Solutions



# LSX Optical Distribution Frame

## Frame Accessories

### Frame Installation Kit

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

#### Ordering Information

Description	Catalog Number
<b>Frame installation kit for 2.14 m (7') frames, includes:</b> <ul style="list-style-type: none"> <li>- (1) floor mounting kit</li> <li>- (1) top attachment kit for 2.14 m (7') frames</li> <li>- (12) frame tie brackets kits</li> <li>- (1) frame ground kit for 2.14 m (7') frames</li> </ul>	RINST-DSX7-XX*
<b>Frame installation kit for 2.74 m (9') and 3.51 m (11.5') frames, includes:</b> <ul style="list-style-type: none"> <li>- (1) floor mounting kit</li> <li>- (1) top attachment kit for 2.74 m (9') and 3.51 m (11.5') frames</li> <li>- (22) frame tie brackets kits</li> <li>- (1) frame ground kit for 2.74 m (9') and 3.51 m (11.5') frames</li> </ul>	RINST-DSX9-XX*
<b>Universal anchor kit for all UEF frames, includes:</b> <ul style="list-style-type: none"> <li>- (4) anchor assemblies</li> <li>- (2) universal hold down bars</li> <li>- (8) anchor plate washers</li> <li>- (8) shim plates 2 mm (0.063")</li> <li>- (4) shim plates 3 mm (0.125")</li> </ul>	RINST-FLR
<b>Isolation pad</b> accommodates; <ul style="list-style-type: none"> <li>- (1) UEF 23" network frame</li> <li>- (2) end guards</li> <li>- (2) interbay management panels</li> </ul>	FDI-ISOTEMPLATE

\*Substitute XX with NB for network blue, PW for putty white.



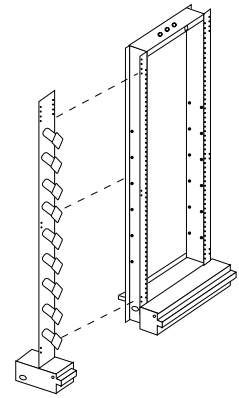
# LSX Optical Distribution Frame

## Frame Accessories

### Interbay Management Panel

#### Ordering Information

Description	Dimensions (HxWxD)	Catalog Number
<b>Interbay Management Panel (IMP)</b>	2.14 m x 127 mm x 305 mm (7' x 5" x 12")	E-501-L139-A



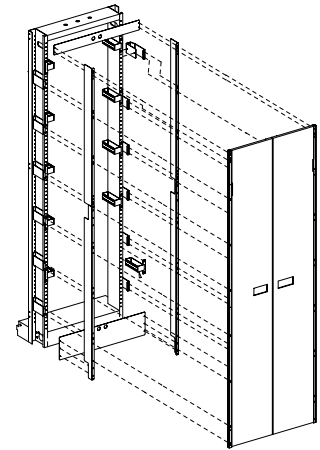
Interbay Management Panel

### Rear Door Kit

Provides protection and a finished appearance to the rear of a frame.

#### Ordering Information

Description	Door Offset	Catalog Number
<b>Rear door kit</b>	51 mm (2")	E-501-LGX12-PW



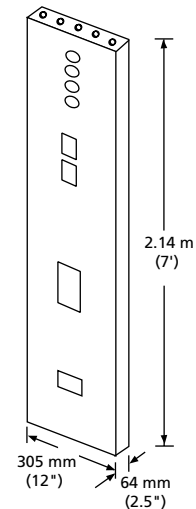
Rear Door Kit

### 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
<b>End guard</b> Mounts on IMP or network frame 2.14 m x 305 mm x 64 mm (7' H x 12" W x 2.5" D)	UEGP-7PW



End Guard



# LSX Optical Distribution Frame

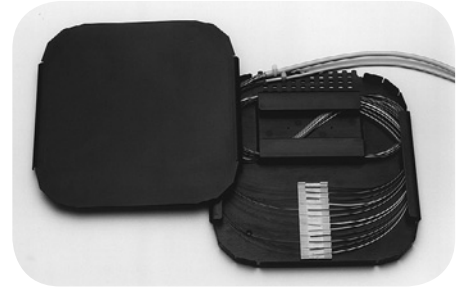
## Panel Accessories

### Splice Tray

Each splice tray is purchased separately.

#### Ordering Information

Description	Catalog Number
<b>Splice tray;</b> 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



Splice Tray

\* Use only one FST-F3DF-MT-D per splice drawer (24 splices per tray).

### Cable Clamp Kit

The cable clamp kit provides a means of securing the end of an OSP or IFC cable to the cable plate.

#### Ordering Information

Description	Catalog Number
<b>Cable clamp kit</b>	LSX-CBLCMPKIT

### Cable Ring Kit

The cable ring protects and manages jumpers on the frame.

#### Ordering Information

Description	Catalog Number
<b>Cable ring kit</b> includes 2 cable rings and appropriate hardware	LSX-ACCVCCKIT



# LSX Optical Distribution Frame

## Panel Accessories

### Adapter Pack

For loading into an LSX adapter-only panel.

**Catalog Number**  
LSX- \_\_\_\_\_

#### Adapter Pack Capacity

6P	6 pack for 72-position panel (7" H)
8P	8 pack for 96-position panel (7" H)
12P	12 pack for 144-position panel (9" H)
18P	18 pack for 216-position panel (10" H)*

\*FC connector style not available

#### Adapter Type

Singlemode	
7	SC ultra polish
L	SC angled polish
2	FC ultra polish
K	LC ultra polish
M	LC angled polish
Multimode	
9	SC
P	LC



**18 Pack**  
(SC ultra polish adapters)

### Adapter Pack with 5 Meter Pigtailed

For loading into an LSX termination/splice panel.

**Catalog Number**  
LSX- \_\_\_\_\_ PT05M

#### Adapter Pack Capacity

6P	6 pack for 72-position panel (7" H)
8P	8 pack for 96-position panel (7" H)
12P	12 pack for 144-position panel (9" H)
18P	18 pack for 216-position panel (10" H)*

\*FC connector style not available

#### Adapter Type

Singlemode	
7	SC ultra polish
L	SC angled polish
2	FC ultra polish
K	LC ultra polish
M	LC angled polish
Multimode	
9	SC
P	LC

#### Cable Type

1	Stranded
5	Ribbon



**12 Pack**  
(SC angled polish adapters and pigtailed)

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

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Traditional Frame Solutions



# LSX Optical Distribution Frame

Frame Accessories

## Standard Cross-Connect Patch Cord Lengths

Number of Frames	Approximate Patch Cord Length Meters (Feet)
1	4 m & 6 m (13.1' & 19.7')
2	6 m (19.7')
3	6 m & 7 m (19.7' & 23')
4	7 m & 8 m (23' & 26.2')
5	8 m & 9 m (26.2' & 29.5')
6	9 m (29.5')

For recommended cross-connect methods and installation instructions, refer to LSX User Manual ADCP-93-089.

## Ordering Information for Patch Cords and Attenuators

ADC offers a comprehensive line of cable assembly and accessory products including patch cords, IFC assemblies, attenuators, FasTerm® connectors and adapters to meet the demanding needs of today's network. Please refer to the **Fiber Cable Assemblies Catalog #102880AE** at [www.adc.com](http://www.adc.com) for more detailed information. For your convenience, ordering information for patch cords and attenuators can also be found on pages 122–127.