

Optical Distribution Frames

2022 PRODUCT CATALOG | 4TH EDITION



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Traditional Frame Solutions

8-Inch FCM Optical Distribution Frame - Introduction

Frames

CommScope's 8-inch FCM solution utilizes a traditional frame designed to fit a variety of termination, splice and storage applications. This rear load frame is built to ensure commonality with patch cord routing, slack storage and fiber protection. It is shipped complete with enhanced front cable management, top and bottom troughs. Available accessories include interbay management panels (IMPs), rear slack storage, etc.

Termination Panel

The termination panel is available with multiple adapter types using angled retainers 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

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. CommScope's 8-inch FCM VAM chassis accommodates various splitter and WDM modules.

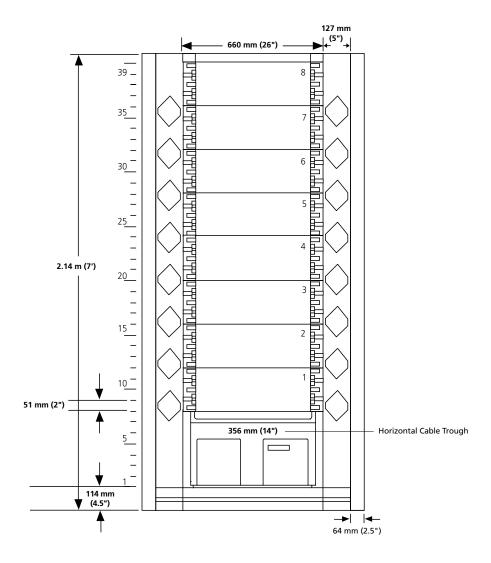
Product overview

Recommended applications:	Small to medium fiber count applications. Best cable management solution in traditional ODF.
Description:	Traditional footprint; 72-, 96- and 144-position panels
Number of fibers, future growth potential	Up to 5,000
Interconnect	Good
Cross-connect	Excellent
Accommodates on-frame splicing	Very good
Accommodates off-frame splicing	Very good
Rear access	Required. Has excellent rear cable management
Density – terminations per frame	1,152 terminations per frame
Front access to rear connector	Yes
VAM capabilities	Yes. Separate panel required
Slack storage location	IMP. Positive bend radius protection
Connector access	Angled retainer

Configuration Form

This page may be copied and used to configure this rear load frame.* The configuration drawing may then be attached to an order.

- · Rear load frames are typically used in cross-connect applications in which splicing is done in the vault or a designated off-frame splice area
- · Interbay management panels and end guards shown here are ordered and shipped separately
- · Preterminated rear load panels are shipped separately from the frame
- 14-inch lower troughs are recommended for most applications; however, other lower troughs are available.



^{*}Legacy front load panels and accessories remain available. Pleace contact CommScope Technical Assistance Center for ordering information.

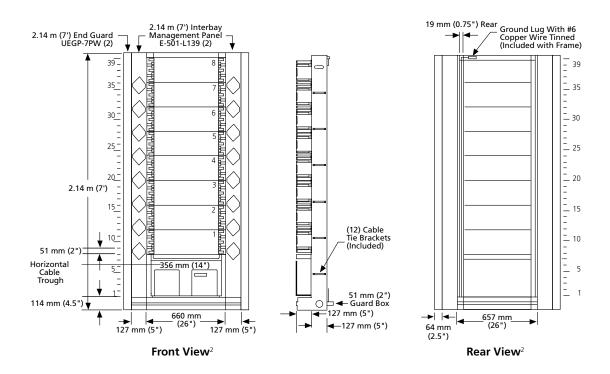
How to Order

This page may be copied and used to configure this rear load frame. The configuration drawing on the previous page may then be

Main Components of the 8-Inch FCM Frame	Catalog Number	Quantity
1) Select the desired Frame		
- Fiber Main Distributing Frame (Rear Load)		
2) Select the desired Fiber Termination Panels		
-Preterminated Fiber Termination Panel with Multifiber Cable - IFC		
-Adapter-Only Fiber Termination Panel		
-FCM Panel Featuring NG4 CMOD's - CMOD cable		
-Splice Panel - Assembled Splice Tray and Chip - Splice Protector Sleeve		
Optional Equipment		
3) Value-Added Module (VAM) Chassis		
4) Interbay Management Panel		
5) Fiber Optic Terminal Storage Panel		
6) End Guard		
7) Guard Box (Underfloor)		
8) Frame Installation Kit		
9) Horizontal Cable Trough		
10) Rack Extenders		
11) Grounding Kit		
12) Vertical Cable Guide (VCG) Kit		
13) Blank Panel		
14) Cable Clamp Kit and Dual Cable Clamp Kit		
15) Patch Cord		

Fiber Distribution Frame (Rear Load)

Rear load frames¹ are recommended for applications when splicing is done in the vault or at an off-frame splice area. One rear load frame can accommodate up to eight 8-inch panels. A 7-foot frame supports up to 1,152 terminations. Rear load FCM frames come equipped with unequal flange network type 4.5-inch guard box frame, 14-inch lower horizontal cable trough, front vertical cable guides, ground wire kit, and cable tie brackets. Rear load panels come equipped with rear fanning triangles and 8-inch rear doors.



Ordering Information

Description	Dimensions (HxWxD)	Catalog Number
8-inch FCM fiber distribution frame Network style unequal flange rear load frame with 356 mm (14") trough		
2.14 m (7')	2.14 m x 660 mm x 305 mm (7' x 26" x 12")	E-501-L91

For existing lineups with 6", 8" or 16" lower cable troughs, contact CommScope Technical Assistance Center.

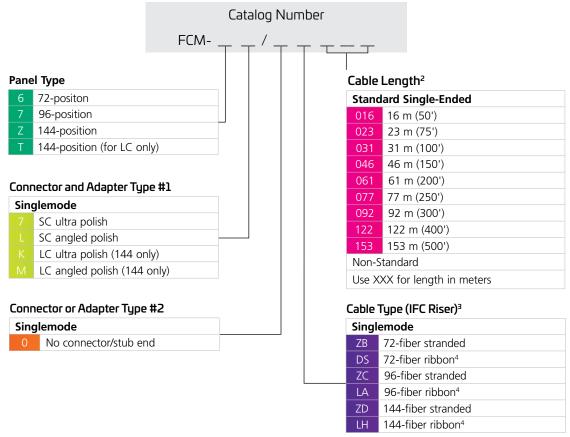
¹ Legacy front load panels and accessories remain available. Please contact CommScope Technical Assistance Center for ordering information.

² Interbay management panels and end guards shown are for reference only. They are ordered separately.

Preterminated Fiber Termination Panels with Multifiber Cable – IFC

Rear load frames¹ are recommended for applications when splicing is done in the vault or at an off-frame splice area. One rear load frame can accommodate up to eight 8-inch panels. A 7-foot frame supports up to 1,152 terminations. Rear load FCM frames come equipped with unequal flange network type 4.5-inch guard box frame, 14-inch lower horizontal cable trough, front vertical cable guides, ground wire kit, and cable tie brackets. Rear load panels come equipped with rear fanning triangles and 8-inch rear doors.





¹ Legacy front load panels and accessories remain available. Please contact CommScope Technical Assistance Center for ordering information.

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

² 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. Standard cable offerings include Alcatel, Corning, Berk-Tek, Sumitomo and Prysmian.

³ Standard cable exit direction is upward.

⁴ See pages 94-98 to configure breakout kits for configuration using stubbed IFC ribbon cable.

Adapter-Only Fiber Termination Panels

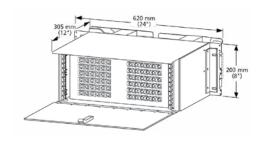
This panel is designed to be mounted in a CommScope rear load frame equipped with cable management hardware. An accessory mounting kit is required when installing a rear load panel into a 23-inch WECO drilled, unequal flange frame (industry-standard front load frame). All rear load panels come with rear doors and cable management attached. The FCM panel contains removable angled retainers; angled toward left and right side, ensuring minimum bend radius. Angled retainers are designed for easy removal without use of tool; allowing easy access to back of the adapter/receptacle from the front of the frame. Fanning strips provide organization and cable management at point of entry to the panel. The removable transparent, smoked plastic cover encloses the front of panel while protecting fibers and connectors from disturbance. The designation card identifies each cable and is visible when cover is open or closed.

Number of Adapters	Adapter Type	Numbered	Catalog Number
	Singlemode		
	SCultra polish	Vertically	FCM-670000
72	SC angled polish	Vertically	FCM-6L0000
72	FC ultra polish	Vertically	FCM-620000
	LC ultra polish	Vertically	FCM-6K0000
	LC angled polish	Vertically	FCM-6M0000
	Singlemode		
	SCultra polish	Vertically	FCM-770000
96	SC angled polish	Vertically	FCM-7L0000
90	FC ultra polish	Vertically	FCM-720000
	LC ultra polish	Vertically	FCM-7K0000
	LC angled polish	Vertically	FCM-7M0000
	Singlemode		
	SCultra polish	Vertically	FCM-Z70000
144	SC angled polish	Vertically	FCM-ZL0000
	LC ultra polish	Vertically	FCM-TK0000-144
	LC angled polish	Vertically	FCM-TM0000-144

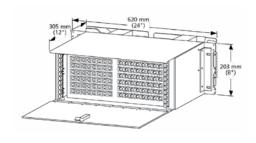


144-Position Panel (Front View)





72-Position Termination Panel



96-Position Adapter Only Termination Panel

8-Inch FCM Optical Distribution Frame Fiber Termination Panel Featuring NG4 CMOD's

The addition of the 8-inch FCM ODF Fiber Termination Panel updates the FDF style chassis with a higher density NG4 quick termination cable using CMODs for plug-and-play installation.

- · Designed to be mounted in an FDF rear load frame equipped with cable management hardware.
- · Holds up to 288 LC or 144 SC terminations (12 CMODs).
- Each panel opening cabled module, MPO module, or VAM module will fit in each opening with tray adapter insert.
- · Modules may be mixed and matched in the same chassis.
- · Rear cable management addressed cable management.



FCM-10000-CMOD (Front)

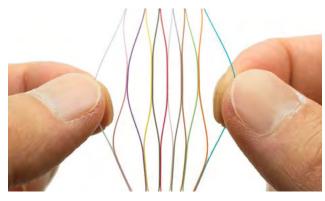
Description	Dimensions (H x W x D)	Part Number
FCM-100000-CMOD: FCM 288 C-MOD EMPTY PANEL	584 x 305 x 203 mm (23" X 12" X 8")	760245372



FCM-10000-CMOD (Rear)

Cabled modules with rollable ribbon indoor/outdoor jacketing

Cabled modules with Rollable Ribbon Indoor/Outdoor Jacketing



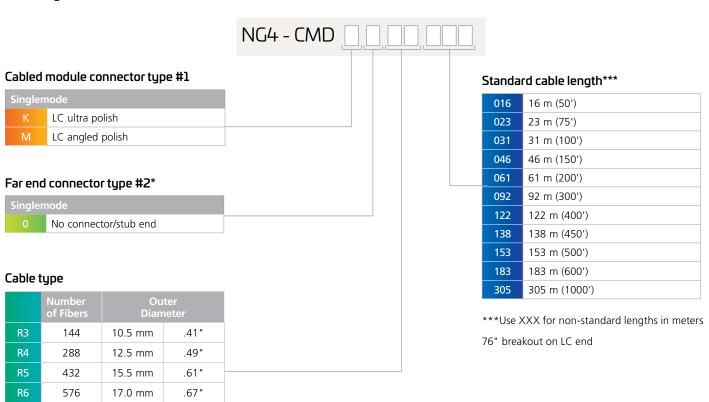
Rollable Ribbon Cable

Ordering information

864

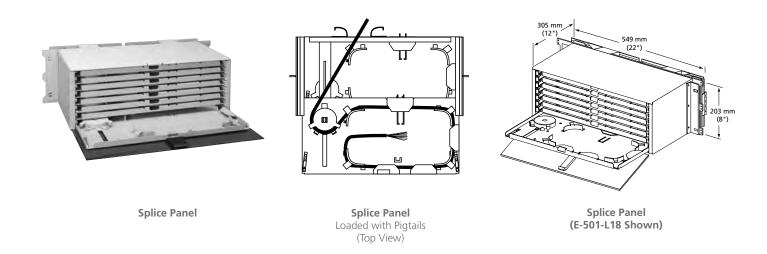
19.5 mm

.77"



Splice Panels

Splice panels for rear load* frames include 8-inch rear doors and rear cable management. The eight splice drawers provide protective enclosure for mounting splice trays and coiling of the service loop, which is required for off-shelf splicing. Both outside plant (OSP) cable and fiber optic patch cords are terminated at the rear of the FCM, keeping them secure while routine maintenance is performed on the front of the FCM. Each splice drawer holds two 12-fiber single splice trays or one 24-fiber dual splice tray. Splice trays are available with all industry-standard splice chips. Each drawer is designed to handle twenty-four 900 micron pigtails or twelve 3.0 mm pigtails. Designation labels are attached to the front of each drawer to identify its contents. The cover encloses the splice panel for protection from normal frame activity. Pigtails and OSP buffer tubes enter and exit through openings on the back of the panel. The splice tray with slack take-up wheel keeps constant tension on the fiber cable, preventing binding when the drawer is closed.



Description	Dimensions (HxWxD)	Catalog Number
Splice panel for rear load frames	203 mm x 620 mm x 305 mm (8" x 24.4" x 12")	E-501-L18
Cable clamp	10 mm – 31 mm (0.4" – 1.2" outer diameter)	E-501-L40

^{*} Legacy front load panels and accessories remain available. Please contact CommScope Technical Assistance Center for ordering information.

^{*} Cable clamps must be ordered separately

Panel Accessories

Assembled Splice Tray and Chip

Each 8-inch FCM splice panel has eight splice drawers capable of holding up to two single 12-position splice trays or one dual 24-position splice tray for a total of 192 fibers when splicing individual fibers or 384 fibers when performing mass fusion splicing with ribbon fibers.



Single and Dual Splice Trays

Heat Shrink Sleeve

Stainless Steel

Strength Member

Hot Melt -

(0.06")

(0.07")

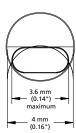
3.8 mm (0.15")

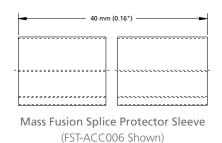
Ordering Information

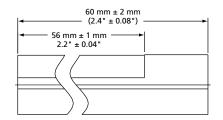
Description	Number of Splices per Tray	Number of Splice Trays per Drawer	Splice Panel Capacity	Catalog Number
12-position splice tray, single height				
Bare fusion				FST-FT
Heat shrink (single fiber fusion)	12	2	192	FST-HS
Mechanical				FST-MT
24-position splice tray, dual height				
Bare fusion				FST-D-FT
Heat shrink (single fiber fusion)	24	1	192	FST-D-HS
Mechanical (Mass fusion)				FST-D-MT

Splice Protector Sleeve

The splice protector sleeve is constructed to protect a splice after fusion. It is made from heat shrinkable material and contains a built-in strength member for physical protection of the fusion splice. The splice protector sleeve is placed on the fiber before making a splice, moved over the splice when the splice fusion is complete and shrunk into place. They are available in either single fusion or mass fusion sleeves.







Single Fusion Splice Protector Sleeve (FST-ACC001 Shown)

Description	Catalog Number
Splice protector sleeve for	
Single fiber – single fusion; 60 mm (2.4") length, 1 each	FST-ACC001
Single fiber – single fusion; 40 mm (1.6") length, 1 each	FST-ACC005
12-fiber ribbon – mass fusion – heat shrink; 40 mm (1.6") length, 1 each	FST-ACC006

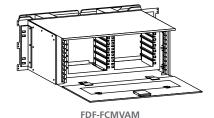
Value-Added Module (VAM) Chassis

8-Inch FCM Standard VAM Chassis – 12 Single Plug-In Modules

The 8-inch FCM standard VAM chassis fits into any open chassis location and ships with appropriate rear cable management. It accommodates a maximum of either 12 plug-in modules, 12 bulkhead plates, 12 blank panels or any combination thereof. The 8-inch rear load chassis* mounts in EIA or WECO racks. **Compatible with CommScope's rear load frame system only.***



Standard VAM Chassis



Ordering Information

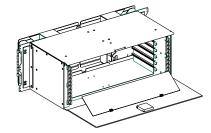
Description	Dimensions (HxWxD)	Catalog Number
8" FCM standard VAM chassis, unloaded; rear cable management and doors attached to module	203 mm x 620 mm x 307 mm (8.0" x 24.4" x 12.1")	FDF-FCMVAM

8-Inch FCM WideVAM® Chassis

CommScope's 8-inch WideVAM chassis allows efficient integration of optical components into the frame and provides the utmost protection, modularity and flexibility for all optical component needs. Incorporating 18 front and 10 rear ports, this chassis provides 50 percent more density than the standard FCM VAM chassis.



WideVAM Chassis and Single Module (7' H WideVAM Chassis shown)



FDF-FCMWVAM

Ordering Information

Description	Dimensions (HxWxD)	Catalog Number
8" FCM WideVAM chassis, unloaded; accommodates 6 single WideVAM modules	203 mm x 620 mm x 308 mm (8" x 24.4" x 12.1")	FDF-FCMWVAM

Value-Added Module (VAM) System

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

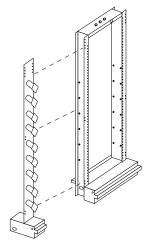
^{*}Legacy front load panels and accessories remain available. Please contact CommScope Technical Assistance Center for ordering information.

Frame Accessories

Interbay Management Panel

The 8-inch FCM standard VAM chassis fits into any open chassis location and ships with appropriate rear cable management. It accommodates a maximum of either 12 plug-in modules, 12 bulkhead plates, 12 blank panels or any combination thereof. The 8-inch rear load chassis* mounts in EIA or WECO racks. Compatible with CommScope's rear load frame system only.*





Interbay Management Panel

Ordering Information

Description	Catalog Number
Interbay management panel; includes trough filler insert and lower 5" guard box Use with 356 mm (14") trough only	
2.14 m x 127 mm x 305 mm (7' H x 5" W x 12" D)	E-501-L139

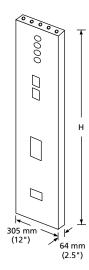
Optional cover kits are available for 14" lower troughs. For existing lineups with 6", 8" or 16" lower cable troughs, call CommScope Technical Assistance Center.

Frame Accessories

Fiber Optic Terminal Jumper Storage Panel (Rear Facing)

The fiber optic terminal jumper storage panel provides cable management and service loop storage of fiber optic patch cords typically routed between an FCM and fiber optic terminal equipment. The kit contains one storage panel with spools and mounting hardware to secure the panel to the frame. The panel can be installed in existing lineups and mounts on either side of the FCM frame. It attaches easily to 7-, 9- or 11.5-foot frames. CommScope recommends storing excess patch cord slack at the FOT to distribute the slack to multiple locations throughout the central office/headend. The fiber optic terminal storage panel cannot be mounted onto the frame if any cable clamps are present on that side of the frame. Contact CommScope Technical Assistance Center to determine the optimal storage for your application.





End Guard

Ordering Information

Description	Catalog Number
Fiber optic terminal jumper storage panel (rear facing); Includes one storage panel, with spools and mounting hardware	FDF-RFSP

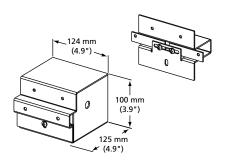
End Guard

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.

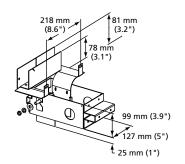
Description	Catalog Number
End guard; mounts on IMP or network style frame	
2.14 m x 64 mm x 305 mm (7' H x 2.5" W x 12" D)	UEGP-7PW

Frame Accessories

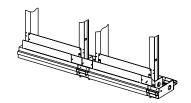
Guard Box (Underfloor)



Rear Access Underfloor Guard Box (Front View) FDF-ACC139



Front/Rear Access Underfloor Guard Box (Rear View) FDF-ACC152

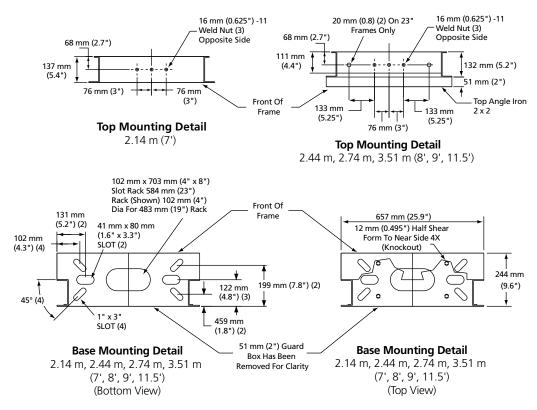


Shown Installed Between Network Frames and at End of a Lineup (Front View) FDF-ACC152

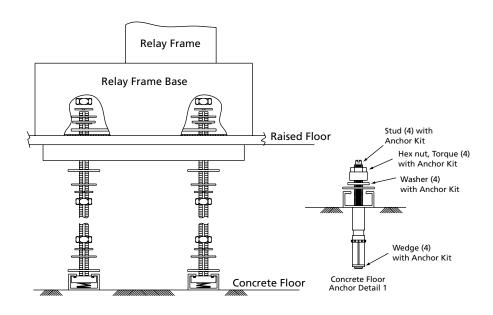
Description	Dimensions (HxWxD)	Catalog Number
Rear access only. Used for routing OSP, IFC cable or patch cords from underfloor to the rear of the frame.	100 mm x 125 mm x 125 mm (3.9" x 4.9" x 4.9")	FDF-ACC139
Front and rear access. Used for routing OSP, IFC or patch cords from under floor to the rear of the frame and patch cords from underfloor to the front of the frame.	179 mm x 218 mm x 127 mm (7.1" x 8.6" x 5")	FDF-ACC152

Frame Accessories

Frame Installation Kit



Network Type Unequal Flange Frame Mounting Details



Underfloor Mounting Kit

Frame Accessories

Frame Installation Kit

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

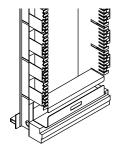
Description	Catalog Number
Frame installation kit for 2.14 m (7') frames, includes; 1 floor mounting kit 1 top attachment kit for 2.14 m (7') frames 12 frame tie brackets kits 1 frame ground kit for 2.14 m (7') frames	RINST-DSX7-PW
Frame installation kit for 2.74 m (9') and 3.51 m (11.5') frames, includes; 1 floor mounting kit 1 top attachment kit for 2.74 m (9') and 3.51 m (11.5') frames 22 frame tie brackets kits 1 frame ground kit for 2.74 m (9') and 3.51 m (11.5') frames	RINST-DSX9-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
Underfloor mounting kit	
1/2" threaded rod	RINST-DSXRFL-PW
5/8" threaded rod	FDF-ACC146

Frame Accessories

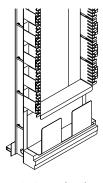
Horizontal Cable Trough

Lower horizontal cable troughs are always included with fiber frames. They can be purchased separately for special applications.

The upper cable trough is not a standard part of the frame. It should be used in applications in which patch cords need to be brought from the front of the frame to the rear. The upper cable trough is putty white and mounts at the top of the frame. Bend radius limiters are provided on the edges of the trough to maintain minimum bend radius requirements.



152 mm (6") Lower Cable Trough (E-501-L73 Shown)



356 mm (14") Lower Cable Trough (E-501-L136 Shown)

Rack Extenders

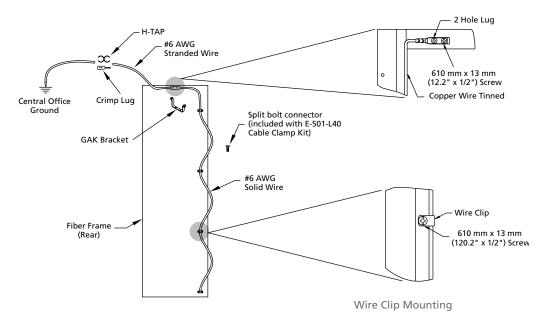
This accessory is designed to extend the top of a 7-foot non-seismic UEF rack to the appropriate height overhead.

Description	Catalog Number
12"H Network-style rack extender, WECO, PW	RAC-0X0337
24"H Network-style rack extender, WECO, PW	RAC-0X0229
54"H Network-style rack extender, WECO, PW	RAC-0X0230
56"H Network-style rack extender, WECO, PW	RAC-0X0338

Frame Accessories

Grounding Kit

The fiber distribution frame is equipped with a grounding kit designed with mechanical (clamps, straps, connectors) fittings. Order this kit only if you are building a frame using your own frame. When connecting frame ground to office ground conductor, an H-TAP bonding kit should also be ordered.



Grounding Kit Accessories

Grounding kit includes:		H-TAP bonding kit includes:		GAK grounding kit includes:	
2-hole terminal lug	1 each	Н-ТАР	1 each	Bracket	1 each
#6 AWG copper tinned wire	13 feet	H-TAP insulated cover	1 each	Clamping bolt	2 each
Wire clips	8 each	2-hole terminal crimp	3 each	Nut	2 each
#12-24 x 1/2" screws	10 each	Terminal lug, screw	4 each	Screw	10 each
		#6 AWG stranded insulated wire	2 feet	Wire clip	8 each
		Star washer	6 each	Н-ТАР	1 each
		No-ox grease	1 tube	#6 AWG solid copper tinned wire	13 feet

Description	Catalog Number
Grounding kit	E-501-L37*
H-TAP bonding kit	E-501-L166
GAK grounding kit	GAK

^{*} Included with CommScope's 8-inch FCM fiber frame

Panel Accessories

Vertical Cable Guide (VCG) Kit

There are times when a single panel must be mounted in a frame without a cable management system. An individual 8-inch VCG kit is available to manage patch cords when mounting a panel in a 23-inch frame.

Ordering Information

Description	Catalog Number
VCG kit; Contains two 203 mm (8") front vertical cable guides and screws	FDF-ACC145

Blank Panel

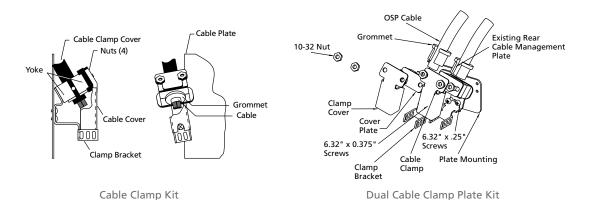
The blank panel occupies one panel space in either a front load or rear load frame.

Ordering Information

Description	Catalog Number
Blank panel, 203 mm (8") H	E-501-L39

Cable Clamp Kit and Dual Cable Clamp Plate Kit

The cable clamp kits provide a means of securing the end of an outside plant (OSP) or intrafacility cable (IFC) to the cable plate. Cable diameters must be between 10 mm to 31 mm (0.4 to 1.2-inch). Additional components are included with the OSP clamp kit for grounding metallic parts of the cable such as metallic strength members or metallic sheaths.



Description	Cable Outer Diameter Supported	Catalog Number
8" FCM cable clamp kit for IFC and OSP cable	10 mm – 31 mm (0.4" – 1.2")	E-501-L40
8" FCM dual cable clamp plate kit doubles the number of clamping positions on the frame from 32 to 64; kit includes plate only	-	E-501-L41

Frame Accessories

Standard Cross-Connect Patch Cord Lengths

Number of Frames	Approximate Patch Cord Length Meters (Feet)
1	5 m (16.4')
2	6 m (19.7')
3	6 m (19.7')
4	7 m (23')
5	8 m (26.2')
6	9 m (29.5')

For recommended cross-connect methods, refer to FCM user manual ADCP-90-140. For installation instructions for the 8-inch FCM, refer to user manual ADCP-90-113.

Ordering Information for Patch Cords and Attenuators

CommScope offers a comprehensive line of cable assembly and accessory products including patch cords, IFC assemblies, and adapters to meet the demanding needs of today's network. Please refer to the Fiber Cable Assemblies Catalog #102880AE at www.commscope.com for more detailed information.

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. Discover more at commscope.com



commscope.com

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