



# System Selection Guide for Cloud Data Centers

COMMSCOPE®



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[Click here for a video introduction to this guide, including best practices on how to use it.](#)

## INTRODUCTION

# Demands on hyperscale and cloud data centers are compounding.

Data center managers must manage massive amounts of new data and machine-to-machine communications while maintaining ultra-reliable, low-latency service level agreements (SLAs). As data requirements skyrocket, providers are forced to deploy and scale faster than ever.

In this fast-moving, demanding environment, having the right infrastructure and deployment partner—with the strength, speed and experience to keep you ahead of the changes—can be the difference between staying ahead or falling behind. That’s why hyperscale and cloud providers rely on CommScope for their connectivity infrastructure.

In this guide you will find the resources you need to begin designing an efficient and effective data center. Our recommended globally applicable designs supports:

- Leaf-spine architectures
- Application Migration and Growth
- High density to save white space
- Easily scalable options

## What does Ultra Low Loss mean to you?

Throughout this guide you will find a variety of options for cabling implementation. In common, across each pre-terminated design, is CommScope Ultra Low Loss (ULL) connector end-face and system performance. Regardless of your organization's data center needs, ULL assures the ability to migrate to higher data rate applications as needed. This level of performance provides longer distance support, additional connection flexibility, or both, in multimode OM5 and OM4, and singlemode. As your data center speeds grow beyond 10G to 100G, 400G and beyond, applications are more sensitive and fiber connector performance is CRITICAL. CommScope ULL delivers!

CommScope's ULL High Speed Migration portfolio uses industry standard Method B polarity, the simplest method for migration between duplex and parallel fiber cabling applications, along with CommScope Method B Enhanced polarity within the modules to simplify design, installation and testing further.

### ULL – Ultra Low Loss Features

#### Method B Enhanced modules

- 24, 12, or 8 fiber MPO rear connectors with duplex or MPO front
- No mixing or flipping of components needed to achieve polarity (Tx-Rx)
- Same module on each end of link – simplifies bill of material and designs
- Patch panel options to provide manageable high density for your environment

#### Pinned (male) MPO trunk cables

- Enable unpinned (female-female) patch cords throughout
- Simplifies installation and connections to active equipment

#### Singlemode and multimode cable options

- Support multi-wavelength and traditional applications
- Flexibility for your network architecture, TCO model, and network electronics choices

## Multi-Media Resources

- [Ultra low-loss fiber connectivity solutions: the best way to support higher speeds in your DC](#)
- [CommScope Method B Enhanced fiber polarity simplifies High Speed Migration](#)
- [High Speed Migration – Bandwidth without boundaries](#)
- [SYSTIMAX High-and ultra-high density fiber panels that scale easily, deploy quickly and manage](#)
- [SYSTIMAX Enhanced High-Density Ultra-Low Loss Fiber Solutions](#)
- [FACT High Density Optical Distribution Frame](#)

## Brochure

- [Data Center High Speed Migration: Infrastructure issues, trends, drivers and recommendations](#)

Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout		Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	FACT ODF XC	MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

# System Selection Pre-Term Using Channel Configurations



















Select a part for more information.

Fiber Basic		MPO Trunk or Array Trunk		Fiber Enhanced HD		MPO Trunk or Array Trunk	
48 ports LC-D or 32 ports MPO	G2 Module		G2 Module	72 ports LC-D or 72 ports MPO	EHD Module		EHD Module
No cable management				Front cable management			
Basic labeling				Labeling option (printer support)			
	Agile Panel		Agile Panel	Sliding tray for better cable modules access			
				Panels available in 1, 2 and 4RU	EHD Panel		EHD Panel
	Patch Cord		Patch Cord		Patch Cord		Patch Cord

Fiber HD		MPO Trunk or Array Trunk		Mixed Media Basic		MPO Trunk or Array Trunk	
48 ports LC-D or 32 ports MPO	G2 Module		G2 Module	For mixed copper and fiber installations	G2 Module		G2 Module
Front cable management				Fiber 48 ports LC-D or 32 ports MPO; Copper: 24 RJ45 ports			
Labeling option (printer support)				No cable management			
Sliding tray for easier cable/modules access				Basic labeling	Evolve Panel		Evolve Panel
Panels available in 1, 2 and 4RU	HD Panel		HD Panel	Panels available in 1RU			
	Patch Cord		Patch Cord		Patch Cord	Pre-term Cat6A Copper	Pre-term Cat6A Copper

Review System Selection Fiber Pre-terminated 19" [here](#).

Fiber Basic    Fiber HD    Fiber Enhanced HD    Mixed Media Basic

Fits to	Basic Fiber Panel	Fits to Reference Designs				RU	Description Code	Part Number
	AGILE 1U fixed panel, accepts (4) G2 modules or adapter packs providing up to 48 duplex LC or 32 MPO ports					1	AGL-1U-FX	<a href="#">760241517</a>
Fits to	Evolved Fiber Panels	Fits to Reference Designs				RU	Description Code	Part Number
	High Density 1U modular cassette sliding Panel, accepts (4) G2 modules or adapter packs, providing up to 48 duplex LC ports, or up to 32 MPO ports					1	HD-1U	<a href="#">760209940</a>
	High Density 2U modular cassette sliding Panel, accepts (8) InstaPATCH® 360 modules or MPO panels, providing up to 96 duplex LC ports or up to 64 MPO ports					2	HD-2U	<a href="#">760209957</a>
Fits to	Enhanced HD Fiber Panels	Fits to Reference Designs				RU	Description Code	Part Number
	EHD 1U sliding tray fiber panel, accepts (6) EHD ULL modules, splice cassettes or MPO panels, providing up to 72 duplex LC ports or up to 72 MPO ports					1	EHD-1U	<a href="#">EHD-1U</a>
	EHD 2U sliding tray fiber panel, accepts (12) EHD ULL modules, splice cassettes or MPO panels, providing up to 144 duplex LC ports or up to 144 MPO ports					2	EHD-2U	<a href="#">EHD-2U</a>
	EHD 4U sliding tray fiber panel, accepts (24) EHD ULL modules, splice cassettes or MPO panels, providing up to 288 duplex LC ports or up to 288 MPO ports					4	EHD-4U	<a href="#">EHD-4U</a>
Fits to	Accessories for Evolved and Enhanced HD Patch Cord/Array Trunk Fitting Kit							Part Number
	Patch cord/array trunk fitting kit with 12 cable glands							<a href="#">760242678</a>
	Trunk fitting kit with 12 cable glands							<a href="#">760242679</a>
Fits to	Mixed Media Panels	Fits to Reference Designs				Copper Tech	Description Code	Part Number
	SYSTIMAX 360™ GigaSPEED X10D® and GigaSPEED XL® Evolve 1U U/UTP Panel Kit					U/UTP	360-E-KIT-1U	<a href="#">760155739</a>
	SYSTIMAX 360™ GigaSPEED X10D® Evolve 1U F/UTP Panel Kit					F/UTP	360-IPR-MFTP-E-HD6B-1U-24	<a href="#">760150144</a>
Fits to	Mixed Media Panel Accessories						Description Code	Part Number
	SYSTIMAX 360™ 1100 EVOLVE G2 BEZEL (Cool Gray)						360-1100-E-FB-4PK	<a href="#">760175877</a>
	SYSTIMAX 360™ 1100 Evolve Fiber Cable Management						361 1100-E-FCM	<a href="#">760175919</a>
	SYSTIMAX 360™ 1100 EVOLVE G2 BEZEL (Blank)						360-1100-E-BB	<a href="#">760165191</a>
Fits to	EHD Modules		Connector	Fiber	Module		Description Code	Part Number
	EHD ULL MPO-24 distribution module, 24LC to 1x24f MPOs unpinned, OM4, dust plugs		MPO24	OM4	Distribution		EHD24-DM-24LC-LS-B-ULL	<a href="#">760237999</a>
	EHD ULL Multimode OM5 Wideband MPO-24 distribution module, 24LC to 1x24f MPOs unpinned, dust plugs		MPO24	OM5	Distribution		EHD24-DM-24LC-WB-B-ULL	<a href="#">760238000</a>
	EHD ULL MPO-12 distribution module, 24LC to 2x12f MPOs unpinned, singlemode, dust plugs		MPO12	OS2	Distribution		EHD12-DM-24LC-SM-B-ULL	<a href="#">760237992</a>
	EHD MPO Adapter Pack, 12 x MPO		Universal MPO	Universal	MPO Adapter Pack		EHD-DP-12MPO-ALL-B	<a href="#">760235622</a>
	EHD ULL MPO-12 distribution module, 24LC to 2x12f MPOs unpinned, OM4, dust plugs		MPO12	OM4	Distribution		EHD12-DM-24LC-LS-B-ULL	<a href="#">760237993</a>
	EHD ULL MPO-12 distribution module, 24LC to 2x12f MPOs unpinned, OM5 Wideband, dust plugs		MPO12	OM5	Distribution		EHD12-DM-24LC-WB-B-ULL	<a href="#">760237994</a>
	EHD 12 port LC adapter pack, single mode, UPC duplex		LC	OS2	LC Adapter Pack		EHD-DP-12LC-SM	<a href="#">760238904</a>
	EHD 12 port LC adapter pack, OM4, UPC duplex		LC	OM4	LC Adapter Pack		EHD-DP-12LC-LS	<a href="#">760238903</a>
	EHD 12 port LC adapter pack, OM5 UPC duplex		LC	OM5	LC Adapter Pack		EHD-DP-12LC-WB	<a href="#">760238902</a>

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance











Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review System Selection Fiber Pre-terminated 19" [here](#).

Fiber Basic
Fiber HD
Fiber Enhanced HD
Mixed Media Basic

Fits to	G2 Fiber Modules/Adapter Packs		Connector	Fiber	Module	Description Code	Part Number
	G2 ULL MPO-24 distribution module, 24LC to 1x24f MPO unpinned, OM5 Wideband, internal shutter		MPO24	OM5	Distribution	DM24-24LC-WB-ULL	<a href="#">760236113</a>
	G2 ULL MPO-24 distribution module, 24LC to 1x24f MPO unpinned, OM4 internal shutter		MPO24	OM4	Distribution	DM24-24LC-LS-ULL	<a href="#">760236112</a>
	G2 ULL 1x3 Multimode OM4 Conversion Module, (1) MPO-24 unpinned ports rear, (3) MPO-8 pinned front		MPO24	OM4	Conversion	CM24-1X3-LS-ULL	<a href="#">760237222</a>
	G2 ULL 1x3 Multimode OM5 WideBand Conversion Module, (1) MPO-24 unpinned ports rear, (3) MPO-8 pinned front		MPO24	OM5	Conversion	CM24-1x3-WB-ULL	<a href="#">760237223</a>
	G2 ULL MPO-12 distribution module, 24LC to 2x12f MPO unpinned, OM5 Wideband, internal shutter		MPO12	OM5	Distribution	DM12-24LC-WB-ULL	<a href="#">760236111</a>
	G2 ULL MPO-12 distribution module, 24LC to 2x12f MPO unpinned, OM4 internal shutter		MPO12	OM4	Distribution	DM12-24LC-LS-ULL	<a href="#">760236110</a>
	G2 ULL 2x3 LazrSPEED OM4 Conversion Module, (2) MPO-12 unpinned ports rear, (3) MPO-8 pinned front		MPO12	OM4	Conversion	CM12-2x3-LS-ULL	<a href="#">760237217</a>
	G2 ULL 2x3 LazrSPEED OM5 Conversion Module, (2) MPO-12 unpinned ports rear, (3) MPO-8 pinned front		MPO12	OM5	Conversion	CM12-2x3-WB-ULL	<a href="#">760237218</a>
	G2 ULL MPO-12 distribution module, 24LC to 2x12f MPOs unpinned, singlemode internal shutter		MPO12	OS2	Distribution	DM12-24LC-SM-ULL	<a href="#">760238083</a>
	G2 ULL 2x3 Singlemode Conversion Module, (2) MPO-12 unpinned ports rear, (3) MPO-8 pinned front		MPO12	OS2	Conversion	CM12-2X3-SM-ULL	<a href="#">760237216</a>
	G2 Distribution Adapter Pack, 360DP-8MPO, 8 x MPO		N/A	Universal	MPO Adapter Pack	360DP-8MPO	<a href="#">760107524</a>
	G2 Distribution Adapter Pack 24 LC with internal shutters, Multimode OM4 Aqua		N/A	OM4	LC Adapter Pack	360DPis-24LC-LS	<a href="#">760216754</a>
	G2 Distribution Adapter Pack 24 LC with internal shutters, Multimode OM5 Lime Green		N/A	OM5	LC Adapter Pack	360DPis-24LC-WB	<a href="#">760236041</a>
	G2 Distribution Adapter Pack 24 LC with internal shutters, Singlemode Blue		N/A	OS2	LC Adapter Pack	360DPis-24LC-SM	<a href="#">760216762</a>
G2 blank adapters, 4 pcs		N/A	N/A	Blank Panel	360G2-MOD-BLANK-4PK	<a href="#">760109462</a>	
Fits to	Cable Management	Fits to Reference Designs				Description Code	Part Number
	Overlength storage, 4U						<a href="#">1671711-1</a>
	Horizontal cable through, 2U, single sided					HKT-19-SS-2U	<a href="#">760072959</a>
	Horizontal cable through, 3U, single sided					HKT-19-SS-3U	<a href="#">760072967</a>
	Cable Manager 1U						<a href="#">1671495-1</a>
	Cable Manager 2U						<a href="#">1671495-2</a>
	Cable Manager 4U						<a href="#">1671495-4</a>
	Cable Manager 6U						<a href="#">1671495-6</a>
	Cable Manager 15U						<a href="#">1-1671495-5</a>
	Filler/Blank Panel, 1U x 19", Solid, Black					FPANEL-19-1U	<a href="#">760162065</a>
1U Patchcord Management					HCM-19-SS-1U-EMEA	<a href="#">760038240</a>	



Review System Selection Fiber Pre-terminated 19" [here](#).

All cable assemblies on this page fit to:

- Fiber Basic
- Fiber HD
- Fiber Enhanced HD
- Mixed Media Basic



## SYSTIMAX ULL MPO-12 Trunk Cables

1 U	2 J	3 X	4 M	5 X	6 M	7 X	8 A	9 K	10 -	11 M	12 A	13 F	14-16 010	
<b>Construction type</b> U Ultra-Low Loss	<b>Family</b> G Trunk, Plenum J Trunk, LSZH/Riser	<b>Fiber type</b> G TeraSPEED singlemode (A2) X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Termination end A</b> MX MPO (male)		<b>Termination end B</b> MX MPO (male)		<b>Construction</b> A 12 Fiber PmP	<b>Fiber count</b> D 12-fiber F 24-fiber H 48-fiber K 72-fiber L 96-fiber M 144-fiber			<b>Color</b> M Aqua N Lime green J Yellow  LazrSPEED OM4 standard is aqua  LazrSPEED OM5 standard is lime green  TeraSPEED singlemode standard is yellow	<b>Options</b> A No gland B With gland C With pulling eye  C for cabling between HD & EHD panels  A for cabling between AGL panels and between AGL panels and EHD/HD panels  Use accessory gland for patch cords in case gland is required on one side only	<b>Unit of measure</b> F Feet M Meter	<b>Length</b> 010-999 Feet 003-305 Meter

## SYSTIMAX ULL MPO-24 Trunk Cables

1 U	2 G	3 V	4 2	5 X	6 2	7 X	8 B	9 M	10 -	11 N	12 C	13 F	14-16 010	
<b>Construction type</b> U Ultra-Low Loss	<b>Family</b> G Trunk, Plenum J Trunk, LSZH/Riser	<b>Fiber type</b> X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Termination end A</b> 2X MPO (male)		<b>Termination end B</b> 2X MPO (male)		<b>Construction</b> B 24-fiber PmP	<b>Fiber count</b> F 24-fiber H 48-fiber K 72-fiber L 96-fiber M 144-fiber			<b>Color</b> M Aqua N Lime green  LazrSPEED OM4 standard is aqua  LazrSPEED OM5 standard is lime green	<b>Options</b> A No gland B With gland C With pulling eye  C for cabling between HD & EHD panels  A for cabling between AGL panels and between AGL panels and EHD/HD panels  Use accessory gland for patch cords in case gland is required on one side only	<b>Unit of measure</b> F Feet M Meter	<b>Length</b> 010-999 Feet 003-305 Meter

Note: for MPO-8 products and other trunk configurations please contact your CommScope sales representative.

### SYSTIMAX ULL Pre-terminated Trunk Cables

12- and 24-fiber MPO connector-based modules available in LazrSPEED 550 OM4 and LazrSPEED OM5 Wideband multimode fiber solutions

12-fiber MPO connector-based modules available in TeraSPEED singlemode fiber solutions

Factory-terminated and tested trunk cables provide superior quality and performance for field connections

Reliable transmit-to-receive connectivity using Method B Enhanced polarity maintenance maximizes administrative convenience

Simplified reconfiguration for moves, adds and changes (MACs)

Easy upgrade path to parallel transmission and associated applications, and increased value of existing infrastructure

SYSTIMAX ULL trunks are provisioned with pins to interface with G2 and EHD ULL modules (without pins)

Review System Selection Fiber Pre-terminated 19" [here](#).

All cable assemblies on this page fit to:

- Fiber Basic
- Fiber HD
- Fiber Enhanced HD
- Mixed Media Basic

### SYSTIMAX ULL MPO Array Trunks

12- and 24-fiber MPO connector-based modular design enables simple connections

Array trunks are constructed with 550 OM4 and OM5 Wideband and singlemode fibers

Factory-terminated and tested for instant field connections giving guaranteed quality and performance

MPO-MPO array trunks are constructed with 3.0 mm PmP array cords

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### SYSTIMAX ULL MPO/LC Array Cords

TeraSPEED singlemode 8- and 12-fiber or multimode 12- and 24-fiber MPO connectors ensure fast and simple connections

Available in LazrSPEED 550 OM4 and LazrSPEED 550 OM5 Wideband multimode fibers

Factory-terminated and tested trunk cables provide superior quality and performance for field connections

MPO-LC array fanouts are constructed with 1.6-millimeter reinforced zipcord furcation tubing for outstanding durability and dependability

Array fanouts are available with multiple breakout lengths to simplify installation



## SYSTIMAX ULL MPO Array Trunks

1	2	3	4	5	6	7	8	9	10	11	12	13	14-16
U	O	X	M	P	M	P	G	D	-	M	E	F	010
<b>Construction type</b> U Ultra-Low Loss	<b>Cable family</b> Q Plenum array R LSZH array	<b>Fiber type</b> G TeraSPEED singlemode (A2) X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Connector 1</b> MX 12f MPO (male) 2X 24f MPO (male)	<b>Connector 2</b> MX 12f MPO (male) 2X 24f MPO (male)	<b>Cordage size</b> G 12-fiber PmP Array Cord H 24-fiber PmP Array Cord	<b>Fiber count</b> D 12-fiber F 24-fiber	<b>Color</b> M Aqua N Lime green J Yellow	<b>Breakout length</b> D 12 in breakout, no gland E 24 in breakout, no gland H 48 in breakout, no gland L 72 in breakout, no gland P 96 in breakout, no gland A No gland, no breakout	<b>Unit of measure</b> F Feet M Meter	<b>Length minimal length based on breakout</b> 12 in 3-999 ft 24 in 4-999 ft 48 in 6-999 ft 72 in 8-999 ft 96 in 10-999 ft  12 in 1-305 m 24-48 in 2-305 m 72 in 3-305 m 96 in 4-305 m			
			*2P, 2X and 2C only available for multimode fiber		*24-fiber PmP cable not available for TeraSPEED singlemode		LazrSPEED OM4 standard is aqua  LazrSPEED OM5 standard is lime green  TeraSPEED singlemode standard is yellow						Total length includes the breakout



## SYSTIMAX ULL MPO/LC Array Cords

1	2	3	4	5	6	7	8	9	10	11	12	13	14-16
U	O	X	M	P	L	C	G	D	-	M	E	F	010
<b>Construction type</b> U Ultra-Low Loss	<b>Cable family</b> Q Plenum array N LSZH array	<b>Fiber type</b> G TeraSPEED singlemode (A2) X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Connector 1</b> MP 12f MPO (female) MX 12f MPO (male) 2P 24f MPO (female) 2X 24f MPO (male)	<b>Connector 2</b> LC LC connector	<b>Cordage size</b> G 12-fiber PmP Array Cord H 24-fiber PmP Array Cord	<b>Fiber count</b> D 12-fiber F 24-fiber	<b>Color</b> M Aqua N Lime green J Yellow	<b>Breakout length</b> D 12 in breakout, no gland E 24 in breakout, no gland H 48 in breakout, no gland L 72 in breakout, no gland P 96 in breakout, no gland	<b>Unit of measure</b> F Feet M Meter	<b>Length minimal length based on breakout</b> 12 in 3-999 ft 24 in 4-999 ft 48 in 6-999 ft 72 in 8-999 ft 96 in 10-999 ft  12 in 1-305 m 24-48 in 2-305 m 72 in 3-305 m 96 in 4-305 m			
							*24-fiber PmP cable not available for TeraSPEED singlemode						Other lengths available

Note: for MPO-8 products and other trunk configurations please contact your CommScope sales representative.

Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout	Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

Review System Selection Fiber Pre-terminated 19" [here](#).

All cable assemblies on this page fit to:

Fiber Basic

Fiber HD

Fiber Enhanced HD

Mixed Media Basic



## SYSTIMAX ULL LC-LC Pre-terminated Array Trunks

LC/LC trunks, 24 f	Jacket Material	Fiber Type	Description Code	Part Number
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	LSZH/riser	OM4	URXLULUHF	URXLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	LSZH/riser	OM5	URVLULUHF	URVLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	LSZH/riser	OS2	FRWLULUHF	FRWLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	Plenum	OM4	UQXLULUHF	UQXLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	Plenum	OM5	UQVLULUHF	UQVLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	Plenum	OS2	FQWLULUHF	FQWLULUHF

## SYSTIMAX ULL Patch Cords

Patch Cords	Patch Cord Type	Application	Fiber Type	Description Code	Part Number
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution/XC	OM4	UFXLULUK2	<a href="#">UFXLULUK2</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution/XC	OM5	UFVLULUK2	<a href="#">UFVLULUK2</a>
Ultra Low Loss (ULL) TeraSpeed LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution/XC	OS2	UFGLULUK2	<a href="#">UFGLULUK2</a>
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OM4	UFXLULU62	<a href="#">UFXLULU62</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OM5	UFVLULU62	<a href="#">UFVLULU62</a>
Ultra Low Loss (ULL) TeraSpeed LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OS2	UFGLULU62	<a href="#">UFGLULU62</a>
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OM4	URXQPQPJ8	<a href="#">URXQPQPJ8</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OM5	URVQPQPJ8	<a href="#">URVQPQPJ8</a>
Ultra Low Loss (ULL) TeraSpeed® MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OS2	URGQPQPJ8	<a href="#">URGQPQPJ8</a>

### Fiber Pre-term Channel Configurations

Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a
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### Splicing

19"	Fiber Entrance
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### Fiber Raceway

FiberGuide
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### DC Layout

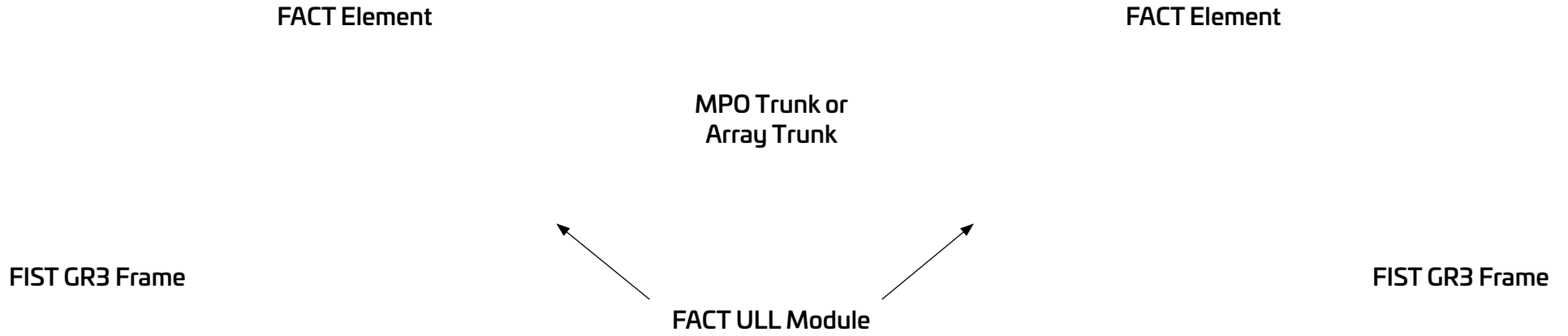
19" XC	FACT ODF XC
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### Reference Designs

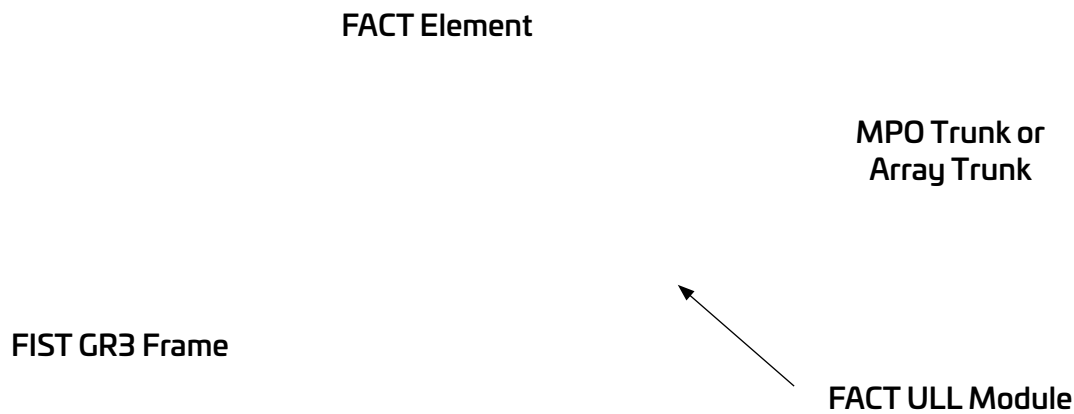
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT
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Select a part for more information.

FACT-FACT Pre-Term



FACT-Panel Pre-Term



Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout		Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	FACT ODF XC	MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

## Review System Selection Fiber Pre-terminated FACT [here](#).

GR3 Frame				Description Code	Part Number
GR3 ODF for 56 FACT elements, including 2 x 150 mm side ducts with 10 drums each				FIST-GR3-R-150/150-22-2	<a href="#">CS6171-000</a>
FACT Backplate 28S, to mount FACT elements in the GR3 frame, 2 pcs required for one GR3				FACT-ACCBPL28E	<a href="#">760239956</a>
FIST GR3 door for 600mm central section, Width: 600mm Height:2200mm, Lock included				FIST-GR3-D-600-22-2	<a href="#">CZ9827-000</a>
FIST GR3 Accessories				Description Code	Part Number
L-CAP, 3 pieces per 150 mm to fix pre-term fanouts				FIST-GR3-BOIC-LPL	<a href="#">EG5792-000</a>
300 mm storage bay (short side panels included)				FIST-GR3-SB-300-22-2	<a href="#">CV7092-000</a>
FIST™ GR3 Set of 2 side/back panels, 2200mm high, 300mm wide, gray				FIST-GR3-P-300-22	<a href="#">CS9084-000</a>
FIST™ GR3 Side by side attachment bracket for installation of 2 racks side by side				FIST-GR3-ST5	<a href="#">CC9465-000</a>
FIST™ GR3 Back-to-back attachment bracket for installation of 2 racks back-to-back				FIST-GR2-BTB	518372-000
Kit to lead jumpers from front to back of rack; required when extended base duct used				FIST-GR3-BD-BTB-600/215	<a href="#">EF8196-000</a>
FIST™ GR3 Extended base duct, 150mm wide, for increased patch cord capacity at bottom of rack				FIST-GR3-BD-150/215	<a href="#">EF7794-000</a>
FIST™ GR3 Extended base duct, 300mm wide, for increased patch cord capacity at bottom of rack				FIST-GR3-BD-300/215	<a href="#">EF7793-000</a>
FACT Patch-Patch Elements and FACT NG4 Elements	Element Type	Fiber Count	Fiber Type	Description Code	Part Number
FACT™ Fiber Optic Patch Panel, gray, 6E high, 288-port simplex, multimode, OM4, holding 10 hinged trays loaded with LC/UPC adapters	Patch/Patch	288	OM4	FACT-6EPATL4	<a href="#">760240442</a>
FACT™ Fiber Optic Patch Panel, gray, 6E high, 288-port simplex, singlemode, holding 10 hinged trays loaded with LC/UPC adapters	Patch/Patch	288	OS2	FACT-6EPATL1	<a href="#">760240441</a>
FACT™ Fiber Optic Patch Panel, gray, 4E high, 192-port simplex, multimode, OM4, holding 8 hinged trays loaded with LC/UPC adapters	Patch/Patch	192	OM4	FACT-4EPATL4	<a href="#">760239995</a>
FACT™ Fiber Optic Patch Panel, gray, 4E high, 192-port simplex, singlemode, holding 8 hinged trays loaded with LC/UPC adapters	Patch/Patch	192	OS2	FACT-4EPATL1	<a href="#">760239993</a>
FACT™ Fiber Optic Patch Panel, gray, 3E high, 144-port simplex, multimode, OM4, holding 6 hinged trays loaded with LC/UPC adapters	Patch/Patch	144	OM4	FACT-3EPATL4	<a href="#">760239990</a>
FACT™ Fiber Optic Patch Panel, gray, 3E high, 144-port simplex, singlemode, holding 6 hinged trays loaded with LC/UPC adapters	Patch/Patch	144	OS2	FACT-3EPATL1	<a href="#">760239988</a>
FACT™ Fiber Optic Patch Panel, gray, 2E high, 96-port simplex, multimode, OM4, holding 4 hinged trays loaded with LC/UPC adapters	Patch/Patch	96	OM4	FACT-2EPATL4	<a href="#">760239984</a>
FACT™ Fiber Optic Patch Panel, gray, 2E high, 96-port simplex, singlemode, holding 4 hinged trays loaded with LC/UPC adapters	Patch/Patch	96	OS2	FACT-2EPATL1	<a href="#">760239982</a>
FACT™ Fiber Optic Patch Panel, gray, 1E high, 48-port simplex, multimode, OM4, holding 2 hinged trays loaded with LC/UPC adapters	Patch/Patch	48	OM4	FACT-1EPATL4	<a href="#">760240416</a>
FACT™ Fiber Optic Patch Panel, gray, 1E high, 48-port simplex, singlemode, holding 2 hinged trays loaded with LC/UPC adapters	Patch/Patch	48	OS2	FACT-1EPATL1	<a href="#">760240414</a>
FACT™ NG4 Fiber Panel, with 12 unloaded trays, gray, 6E high, for holding 12 NG4 MPO modules	NG4 Module	288	Universal	FACT-6ENG4	<a href="#">760242087</a>
FACT™ NG4 Fiber Panel, with 8 unloaded trays, gray, 4E high, for holding 8 NG4 MPO modules	NG4 Module	192	Universal	FACT-4ENG4	<a href="#">760239978</a>
FACT™ NG4 Fiber Panel, with 6 unloaded trays, gray, 3E high, for holding 6 NG4 MPO modules	NG4 Module	144	Universal	FACT-3ENG4	<a href="#">760239977</a>
FACT™ NG4 Fiber Panel, with 4 unloaded trays, gray, 2E high, for holding 4 NG4 MPO modules	NG4 Module	96	Universal	FACT-2ENG4	<a href="#">760239976</a>
FACT™ NG4 Fiber Panel, with 2 unloaded trays, gray, 1E high, for holding 2 NG4 MPO modules	NG4 Module	48	Universal	FACT-1ENG4	<a href="#">760239975</a>
FACT NG4 Module	Cable Entrance		Fiber Type	Description Code	
FACT left sided ULL module, MPO24f to 12x LC-D, OM4	Left		OM4	FACT-MMDLC2-B	
FACT right sided ULL module, MPO24f to 12x LC-D, OM4	Right		OM4	FACT-MMDRC2-B	
FACT left sided ULL module, MPO24f to 12x LC-D, OM5	Left		OM5	FACT-MMDL52-B	
FACT right sided ULL module, MPO24f to 12x LC-D, OM5	Right		OM5	FACT-MMDR52-B	
FACT left sided ULL module, 2 x MPO12f to 12x LC-D, OS2	Left		OS2	FACT-MMDLKE-B	
FACT right sided ULL module, 2 x MPO12f to 12x LC-D, OS2	Right		OS2	FACT-MMDRKE-B	

Review System Selection Fiber Pre-terminated FACT [here](#).

All cable assemblies on this page fit to:

FACT-FACT Pre-Term

FACT-Panel Pre-Term

## SYSTIMAX ULL Pre-terminated Trunk Cables

12- and 24-fiber MPO connector-based modules available in LazrSPEED 550 OM4 and LazrSPEED OM5 Wideband multimode fiber solutions

12-fiber MPO connector-based modules available in TeraSPEED singlemode fiber solutions

Factory-terminated and tested trunk cables provide superior quality and performance for field connections

Reliable transmit-to-receive connectivity using Method B Enhanced polarity maintenance maximizes administrative convenience

Simplified reconfiguration for moves, adds and changes (MACs)

Easy upgrade path to parallel transmission and associated applications, and increased value of existing infrastructure

SYSTIMAX ULL trunks are provisioned with pins to interface with G2 and EHD ULL modules (without pins)



## SYSTIMAX ULL MPO-12 Trunk Cables

1 U	2 J	3 X	4 5 M X	6 7 M X	8 A	9 10 11 K - M	12 A	13 F	14-16 010	
<b>Construction type</b> U Ultra-Low Loss	<b>Family</b> G Trunk, Plenum J Trunk, LSZH/Riser	<b>Fiber type</b> G TeraSPEED singlemode (A2) X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Termination end A</b> MX MPO (male)	<b>Termination end B</b> MX MPO (male)	<b>Construction</b> A 12 Fiber PmP	<b>Fiber count</b> D 12-fiber F 24-fiber H 48-fiber K 72-fiber L 96-fiber M 144-fiber	<b>Color</b> M Aqua N Lime green J Yellow  LazrSPEED OM4 standard is aqua LazrSPEED OM5 standard is lime green  TeraSPEED singlemode standard is yellow	<b>Options</b> W No gland, 60" breakout  Use accessory gland for patch cords in case gland is required on one side only	<b>Unit of measure</b> F Feet M Meter	<b>Length</b> 010-999 Feet 003-305 Meter

## SYSTIMAX ULL MPO-24 Trunk Cables

1 U	2 G	3 V	4 5 2 X	6 7 2 X	8 B	9 10 11 M - N	12 C	13 F	14-16 010	
<b>Construction type</b> U Ultra-Low Loss	<b>Family</b> G Trunk, Plenum J Trunk, LSZH/Riser	<b>Fiber type</b> X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Termination end A</b> 2X MPO (male)	<b>Termination end B</b> 2X MPO (male)	<b>Construction</b> B 24-fiber PmP	<b>Fiber count</b> F 24-fiber H 48-fiber K 72-fiber L 96-fiber M 144-fiber	<b>Color</b> M Aqua N Lime green  LazrSPEED OM4 standard is aqua LazrSPEED OM5 standard is lime green	<b>Options</b> W No gland, 60" breakout  Use accessory gland for patch cords in case gland is required on one side only	<b>Unit of measure</b> F Feet M Meter	<b>Length</b> 010-999 Feet 003-305 Meter

Note: for MPO-8 products and other trunk configurations please contact your CommScope sales representative.

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing
19" Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout
19" XC FACT ODF XC

Reference Designs								
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT



Review System Selection Fiber Pre-terminated FACT [here](#).

All cable assemblies on this page fit to:

FACT-FACT Pre-Term

FACT-Panel Pre-Term



## SYSTIMAX ULL MPO Array Cords

**SYSTIMAX ULL MPO Array Cords**

12- and 24-fiber MPO connector-based modular design enables simple connections

Array cords are constructed with 550 OM4 and OM5 Wideband and singlemode fibers

Factory-terminated and tested for instant field connections giving guaranteed quality and performance

MPO-MPO arrays are constructed with 3.0 mm PmP array cords

1 U	2 O	3 X	4 M	5 P	6 M	7 P	8 G	9 D	10 -	11 M	12 E	13 F	14-16 O10
<b>Construction type</b> U Ultra-Low Loss	<b>Cable family</b> Q Plenum array R LSZH array	<b>Fiber type</b> G TeraSPEED singlemode (A2) X LazrSPEED 550 multimode V LazrSPEED OM5 WB multimode	<b>Connector 1</b> MX 12f MPO (male) 2X 24f MPO (male)	<b>Connector 2</b> MX 12f MPO (male) 2X 24f MPO (male)	<b>Cordage size</b> G 12-fiber PmP Array Cord H 24-fiber PmP Array Cord	<b>Fiber count</b> D 12-fiber F 24-fiber	<b>Color</b> M Aqua N Lime green J Yellow	<b>Breakout length</b> D 12 in breakout, no gland E 24 in breakout, no gland H 48 in breakout, no gland L 72 in breakout, no gland P 96 in breakout, no gland A No gland, no breakout	<b>Unit of measure</b> F Feet M Meter	<b>Length minimal length based on breakout</b> 12 in 3-999 ft 24 in 4-999 ft 48 in 6-999 ft 72 in 8-999 ft 96 in 10-999 ft  12 in 1-305 m 24-48 in 2-305 m 72 in 3-305 m 96 in 4-305 m			
			*2P, 2X and 2C only available for multimode fiber		*24-fiber PmP cable not available for TeraSPEED singlemode		LazrSPEED OM4 standard is aqua  LazrSPEED OM5 standard is lime green  TeraSPEED singlemode standard is yellow				Total length includes the breakout		

Note: for MPO-8 products and other trunk configurations please contact your CommScope sales representative.

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing
19" Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout
19" XC FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review System Selection Fiber Pre-terminated FACT [here](#).



## SYSTIMAX ULL LC-LC Pre-terminated Array Trunks

LC/LC trunks, 24 f	Jacket Material	Fiber Type	Description Code	Part Number
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	LSZH/riser	OM4	URXLULUHF	URXLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	LSZH/riser	OM5	URVLULUHF	URVLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	LSZH/riser	OS2	FRWLULUHF	FRWLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	Plenum	OM4	UQXLULUHF	UQXLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	Plenum	OM5	UQVLULUHF	UQVLULUHF
LC/LC Microdistribution-cable, 12 x LC Duplex uniboot on each side, flexible cable construction, OD 3 mm	Plenum	OS2	FQWLULUHF	FQWLULUHF

## SYSTIMAX ULL Patch Cords

Patch Cords	Patch Cord Type	Application	Fiber Type	Description Code	Part Number
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution/XC	OM4	UFXLULUK2	<a href="#">UFXLULUK2</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution/XC	OM5	UFVLULUK2	<a href="#">UFVLULUK2</a>
Ultra Low Loss (ULL) TeraSpeed LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution/XC	OS2	UFGLULUK2	<a href="#">UFGLULUK2</a>
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OM4	UFXLULU62	<a href="#">UFXLULU62</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OM5	UFVLULU62	<a href="#">UFVLULU62</a>
Ultra Low Loss (ULL) TeraSpeed LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OS2	UFGLULU62	<a href="#">UFGLULU62</a>
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OM4	URXQPQPJ8	<a href="#">URXQPQPJ8</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OM5	URVQPQPJ8	<a href="#">URVQPQPJ8</a>
Ultra Low Loss (ULL) TeraSpeed® MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OS2	URGQPQPJ8	<a href="#">URGQPQPJ8</a>

Mixed Media Panels	Copper Tech		Description Code	Part Number
SYSTIMAX 360™ GigaSPEED X10D® and GigaSPEED XL® Evolve 1U U/UTP Panel Kit	U/UTP		360-E-KIT-1U	<a href="#">760155739</a>
SYSTIMAX 360™ GigaSPEED X10D® Evolve 1U F/UTP Panel Kit	F/UTP		360-IPR-MFTP-E-HD6B-1U-24	<a href="#">760150144</a>
Mixed Media Panel Accessories				
SYSTIMAX 360™ 1100 EVOLVE G2 BEZEL (Cool Gray)			360-1100-E-FB-4PK	<a href="#">760175877</a>
SYSTIMAX 360™ 1100 Evolve Fiber Cable Management			361 1100-E-FCM	<a href="#">760175919</a>
SYSTIMAX 360™ 1100 EVOLVE G2 BEZEL (Blank)			360-1100-E-BB	<a href="#">760165191</a>
InstaPATCH® Copper Trunks	Copper Tech	Jacket Material	Description Code	Part Number
InstaPATCH® Cu GigaSPEED X10D® U/UTP LSZH Preterminated Copper Cable, 360 1100 Evolve module to 360 1100 Evolve module, 6 links	U/UTP	LSZH	CCRRB-11SA08	<a href="#">CCRRB-11SA08</a>
InstaPATCH® Cu GigaSPEED X10D® F/UTP LSZH Copper Cable, single row standard density outlet to single row standard density outlet, 6 links	F/UTP	LSZH	CFAAB-11SA08	<a href="#">CFAAB-11SA08</a>
InstaPATCH® Cu GigaSPEED X10D® U/UTP Plenum Preterminated Copper Cable, 360 1100 Evolve module to 360 1100 Evolve module, 6 links	U/UTP	Plenum	CARRB-11SA08	<a href="#">CARRB-11SA08</a>
InstaPATCH® Cu GigaSPEED X10D® F/UTP Plenum Copper Cable, single row standard density outlet to single row standard density outlet, 6 links	F/UTP	Plenum	CDAAB-11SA08	<a href="#">CDAAB-11SA08</a>
InstaPATCH® Cu GigaSPEED X10D® U/UTP Riser Preterminated Copper Cable, 360 1100 Evolve module to 360 1100 Evolve module, 6 links	U/UTP	Riser	CBRRB-11SA08	<a href="#">CBRRB-11SA08</a>
InstaPATCH® Cu GigaSPEED X10D® F/UTP Riser Copper Cable, single row standard density outlet to single row standard density outlet, 6 links	F/UTP	Riser	CEAAB-11SA08	<a href="#">CEAAB-11SA08</a>
Copper Patch Cords	Copper Tech	Jacket Material	Description Code	Part Number
GigaSPEED X10D® G10SP on S/FTP Low Smoke Zero Halogen Cordage, S/FTP Modular Patch Cord, White Jacket	S/FTP	LSZH/Riser	G10SP-L-WH	<a href="#">CA111K2-08</a>
GigaSPEED X10D® 360GS10E 23-AWG Plenum Patch Cable, white jacket	U/UTP	Plenum	360GS10E-P-H-WH	<a href="#">CPCSS02-08</a>
Mixed Media Panel Accessories			Description Code	Part Number
SYSTIMAX 360™ 1100 EVOLVE G2 BEZEL (Cool Gray)			360-1100-E-FB-4PK	<a href="#">760175877</a>
SYSTIMAX 360™ 1100 Evolve Fiber Cable Management			361 1100-E-FCM	<a href="#">760175919</a>
SYSTIMAX 360™ 1100 EVOLVE G2 BEZEL (Blank)			360-1100-E-BB	<a href="#">760165191</a>

# System Selection Splicing

Select a part for more information.

Fiber Basic
48 ports LC-D or 32 ports MPO
No cable management
Basic labeling

Fiber Enhanced HD
72 ports LC-D or 72 ports MPO
Front cable management
Labeling option (printer support)
Sliding tray for better cable modules access

Fiber HD
48 ports LC-D or 32 ports MPO
Front cable management
Labeling option (printer support)
Sliding tray for easier cable/modules access

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs								
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

Review System Selection Fiber Splicing 19" [here](#).

Fiber Basic
Fiber HD
Fiber Enhanced HD
Mixed Media Basic

Fits to		Fiber	Module		Description Code	Part Number
<span style="color: orange;">■</span>	Basic Fiber Panel					
	AGILE 1U sliding panel, accepts (4) G2 modules or adapter packs providing up to 48 duplex LC or 32 MPO ports				AGL-1U-DRW-SL	<a href="#">760242455</a>
Fits to	Splice Accessories					Part Number
<span style="color: orange;">■</span>	Cable Attachment Kit for AGL fiber panel					<a href="#">1671273-1</a>
	Fiber optic splice tray, stackable, for SMOUV splice protectors, 48 splices per tray, SMOUVs and SMOUV holder included					<a href="#">760241378</a>
	Fiber optic splice tray, stackable, 24 splices per tray, for ANT splice protectors, ANT holder included, ANT splice protector to be ordered separately					760245882
	ANT splice protector (qty.: 150)					183398-000
Fits to	Splice Modules / Adapter Packs	Fiber	Module		Description Code	Part Number
<span style="color: orange;">■</span>	G2 Distribution Adapter Pack 12 LC with internal shutters, Multimode OM4 Aqua	OM4	Adapter Pack		360DPis-24LC-LS	<a href="#">760216754</a>
	G2 Distribution Adapter Pack 24 LC with internal shutters, Multimode OM5 Lime Green	OM5	Adapter Pack		360DPis-24LC-WB	<a href="#">760236041</a>
	G2 Distribution Adapter Pack 12 LC with internal shutters, Singlemode Blue	OS2	Adapter Pack		360DPis-24LC-SM	<a href="#">760216762</a>
Fits to	Pigtails	Fiber		Jacket	Description Code	Spalte3
<span style="color: orange;">■</span>	OM4 LC to Unconnectorized, Fiber Pigtail, 0.9 mm Tight Buffer, 12-pigtail Kit, Blue - Aqua (1-12)	OM4		Tight Buffer	FAXLCUCOC-XXF006	<a href="#">FAXLCUCOC</a>
	Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC to Unconnectorized, Fiber Pigtail, 0.9 mm Tight Buffer, 12-pigtail Kit, Blue - Aqua (1-12)	OM5		Tight Buffer	UAVLCUCOC-XXF006	<a href="#">UAVLCUCOC</a>
	OS2 LC to Unconnectorized, Fiber Pigtail, 0.9 mm Tight Buffer	OS2		Tight Buffer	FAWLCUC01-JXF006	<a href="#">FAWLCUC01</a>
	Fiber Optic Pigtail, Simplex, easy strip, Multimode OM4, LC/UPC to Stub, aqua, 2 m	OM4		Easy Strip	N/A	<a href="#">2160044-2</a>
	Fiber Optic Pigtail, Simplex, easy strip, singlemode OS2, LC/PC to pigtail, 900 µm tuned, 2 m, white	OS2		Easy Strip	N/A	<a href="#">2160054-2</a>
Fits to	Evolved Fiber Panels			RU	Description Code	Part Number
<span style="color: red;">■</span>	High Density 1U modular cassette sliding Panel, accepts (4) InstaPATCH® 360 modules or MPO panels, providing up to 48 duplex LC ports, or up to 32 MPO ports			1	HD-1U	<a href="#">760209940</a>
	High Density 2U modular cassette sliding Panel, accepts (8) InstaPATCH® 360 modules or MPO panels, providing up to 96 duplex LC ports or up to 64 MPO ports			2	HD-2U	<a href="#">760209957</a>
Fits to	Splice Modules / Accessories	Fiber	Module		Description Code	Part Number
<span style="color: red;">■</span>	G2 Splice Cassette 24 LC, OM4, including pigtails	OM4	G2		G2-SP-24LCX-PT	<a href="#">760244927</a>
	G2 Splice Cassette 24 LC, OS2, including pigtails	OS2	G2		G2-SP-24LCG-PT	<a href="#">760244929</a>
	G2 blank adapters, 4 pcs	N/A	N/A		360G2-MOD-BLANK-4PK	<a href="#">760109462</a>
Fits to	Enhanced HD Fiber Panels			RU	Description Code	Part Number
<span style="color: purple;">■</span>	EHD 1U sliding tray fiber panel, accepts (6) EHD ULL modules, splice cassettes or MPO panels, providing up to 72 duplex LC ports or up to 72 MPO ports			1	EHD-1U	<a href="#">EHD-1U</a>
	EHD 2U sliding tray fiber panel, accepts (12) EHD ULL modules, splice cassettes or MPO panels, providing up to 144 duplex LC ports or up to 144 MPO ports			2	EHD-2U	<a href="#">EHD-2U</a>
	EHD 4U sliding tray fiber panel, accepts (24) EHD ULL modules, splice cassettes or MPO panels, providing up to 288 duplex LC ports or up to 288 MPO ports			4	EHD-4U	<a href="#">EHD-4U</a>
Fits to	Splice Modules / Accessories	Fiber	Module		Description Code	Part Number
<span style="color: purple;">■</span>	EHD ULL 24 LC stranded fiber splice cassette, LazrSPEED OM4, UPC, Enhanced Method B, includes 24, FST-ACC005 single fiber splice sleeves	OM4	EHD		EHD-SP-24LC-LS-B-ULL	<a href="#">760238935</a>
	EHD ULL 24 LC stranded fiber splice cassette, TeraSPEED single mode, UPC, Enhanced Method B, includes 24, FST-ACC005 single fiber splice sleeves	OS2	EHD		EHD-SP-24LC-SM-B-ULL	<a href="#">760238936</a>

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	



Review System Selection Fiber Splicing 19" [here](#).

Loose Tube and Distribution Cable Indoor	Fiber Type	Fiber Count	Jacket Material	Description Code	Part Number
CommScope OM4 loose tube cable, Low Smoke Zero Halogen, 48 fiber multi-unit with 12 fiber subunits	OM4	48	LSZH	POC-FO-MCRO-LSZH-48X2-2KM	2-1716297-2
CommScope OM4 loose tube cable, Low Smoke Zero Halogen 96 fiber multi-unit with 12 fiber subunits	OM4	96	LSZH	POC-FO-MCRO-LSZH-96X2-2KM	2-1716300-2
CommScope OM4 loose tube cable, Low Smoke Zero Halogen, 144 fiber multi-unit with 12 fiber subunits	OM4	144	LSZH	POC-FOMCRO-LSZH-144X2-2KM	2-1716301-2
LazrSPEED® 550 OM4 Plenum Distribution Cable, 48 fiber multi-unit with 12 fiber subunits	OM4	48	Plenum	P-048-DS-5K-FMUAQ	<a href="#">760024554</a>
LazrSPEED® 550 OM4 Plenum Distribution Cable, 96 fiber multi-unit with 12 fiber subunits	OM4	96	Plenum	P-096-DS-5K-FMUAQ	<a href="#">760021691</a>
LazrSPEED® 550 OM4 Plenum Distribution Cable, 144 fiber multi-unit with 12 fiber subunits	OM4	144	Plenum	P-144-DS-5K-FMUAQ	<a href="#">760024869</a>
LazrSPEED® 550 OM4 Riser Distribution Cable, 48 fiber multi-unit with 12 fiber subunits	OM4	48	Riser	R-048-DS-5K-FMUAQ	<a href="#">760026849</a>
LazrSPEED® 550 OM4 Riser Distribution Cable, 96 fiber multi-unit with 12 fiber subunits	OM4	96	Riser	R-096-DS-5K-FMUAQ	<a href="#">760026864</a>
LazrSPEED® 550 OM4 Riser Distribution Cable, 144 fiber multi-unit with 12 fiber subunits	OM4	144	Riser	R-144-DS-5K-FMUAQ	<a href="#">760026872</a>
CommScope OS2 loose tube cable, Low Smoke Zero Halogen, 48 fiber multi-unit with 12 fiber subunits	OS2	48	LSZH	C-048-LN-8F-M12YL/14D/D	2-1716297-4
CommScope OS2 loose tube cable, Low Smoke Zero Halogen, 96 fiber multi-unit with 12 fiber subunits	OS2	96	LSZH	POC-FO-MCRO-LSZH-96X4-2KM	2-1716300-4
CommScope OS2 loose tube cable, Low Smoke Zero Halogen, 144 fiber multi-unit with 12 fiber subunits	OS2	144	LSZH	POC-FOMCRO-LSZH-144X4-2KM	2-1716301-4
TeraSPEED® OS2 Plenum Distribution Cable, 48 fiber multi-unit with 12 fiber subunits	OS2	48	Plenum	P-048-DS-8W-FMUYL	<a href="#">760004382</a>
TeraSPEED® OS2 Plenum Distribution Cable, 96 fiber multi-unit with 12 fiber subunits	OS2	96	Plenum	P-096-DS-8W-FMUYL	<a href="#">760018051</a>
TeraSPEED® OS2 Plenum Distribution Cable, 144 fiber multi-unit with 12 fiber subunits	OS2	144	Plenum	P-144-DS-8W-FMUYL	<a href="#">760018895</a>
TeraSPEED® OS2 Riser Distribution Cable, 48 fiber multi-unit with 12 fiber subunits	OS2	48	Riser	R-048-DS-8W-FMUYL	<a href="#">760004473</a>
TeraSPEED® OS2 Riser Distribution Cable, 96 fiber multi-unit with 12 fiber subunits	OS2	96	Riser	R-096-DS-8W-FMUYL	<a href="#">760026823</a>
TeraSPEED® OS2 Riser Distribution Cable, 144 fiber multi-unit with 12 fiber subunits	OS2	144	Riser	R-144-DS-8W-FMUYL	<a href="#">760018887</a>
Loose Tube Cable Outdoor, Armored	Fiber Type	Fiber Count		Description Code	Part Number
OM4 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 48 fibers	OM4	48		D-048-LA-5K-F12NS	<a href="#">760053769</a>
OM4 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 96 fibers	OM4	96		D-096-LA-5K-F12NS	<a href="#">760053793</a>
OM4 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 144 fibers	OM4	144		D-144-LA-5K-F12NS	<a href="#">760053801</a>
OM4 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 288 fibers	OM4	288		D-288-LA-5K-F12NS	<a href="#">760053819</a>
Singlemode OS2 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 48 fibers	OS2	48		D-048-LA-8W-F12NS	<a href="#">760053314</a>
Singlemode OS2 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 96 fibers	OS2	96		D-096-LA-8W-F12NS	<a href="#">760053348</a>
Singlemode OS2 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 144 fibers	OS2	144		D-144-LA-8W-F12NS	<a href="#">760053355</a>
Singlemode OS2 Single Jacket/Single Armor, Gel-Free, Outdoor Stranded Loose Tube Cable, 288 fibers	OS2	288		D-288-LA-8W-F12NS	<a href="#">760053363</a>

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review System Selection Fiber Splicing 19" [here](#).

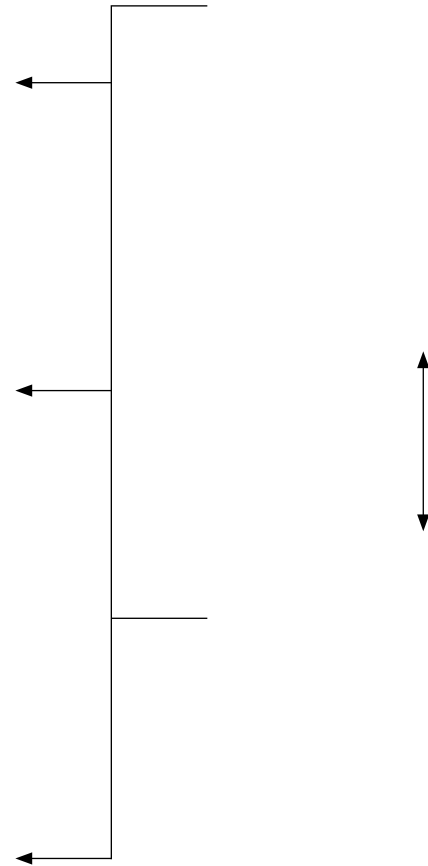
Patch Cords	Patch Cord Type	Application	Fiber Type		Description Code	Part Number
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution	OM4		UFXLULUK2	<a href="#">UFXLULUK2</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution	OM5		UFVLULUK2	<a href="#">UFVLULUK2</a>
Ultra Low Loss (ULL) TeraSpeed LC Uniboot to LC Uniboot, Fiber Patch Cord, 1.5 mm Duplex, LSZH/Riser	LC-D to LC-D, 1.5 mm diameter, LSZH/Riser	Distribution	OS2		UFGLLULUK2	<a href="#">UFGLLULUK2</a>
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OM4		UFXLULU62	<a href="#">UFXLULU62</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OM5		UFVLULU62	<a href="#">UFVLULU62</a>
Ultra Low Loss (ULL) TeraSpeed LC Uniboot to LC Uniboot, Fiber Patch Cord, 2.0 mm Duplex, LSZH/Riser	LC-D to LC-D, 2 mm diameter, LSZH/Riser	Equipment Area	OS2		UFGLLULU62	<a href="#">UFGLLULU62</a>
Ultra Low Loss (ULL) LazrSPEED® 550 OM4 MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OM4		URXQPQPJ8	<a href="#">URXQPQPJ8</a>
Ultra Low Loss (ULL) LazrSPEED® 550 WideBand OM5 MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OM5		URVQPQPJ8	<a href="#">URVQPQPJ8</a>
Ultra Low Loss (ULL) TeraSpeed® MPO/8 (Female) to MPO/8 (Female), 8-Fiber, LSZH/Riser	MPO-MPO, female, 8 fibers, LSZH/Riser	Distribution or Equipm. Area	OS2		URGQPQPJ8	<a href="#">URGQPQPJ8</a>
Cable Management					Description Code	Part Number
Overlength storage, 4U						<a href="#">1671711-1</a>
Horizontal cable through, 2U, single sided					HKT-19-SS-2U	<a href="#">760072959</a>
Horizontal cable through, 3U, single sided					HKT-19-SS-3U	<a href="#">760072967</a>
Cable Manager 1U						<a href="#">1671495-1</a>
Cable Manager 2U						<a href="#">1671495-2</a>
Cable Manager 4U						<a href="#">1671495-4</a>
Cable Manager 6U						<a href="#">1671495-6</a>
Cable Manager 15U						<a href="#">1-1671495-5</a>
Filler/Blank Panel, 1U x 19", Solid, Black					FPANEL-19-1U	<a href="#">760162065</a>
1U Patchcord Management					HCM-19-SS-1U-EMEA	<a href="#">760038240</a>

Select a part for more information.

Fiber Basic
48 ports LC-D or 32 ports MPO
No cable management
Basic labeling
Panels available in 1, 2 and 4RU

Fiber HD
48 ports LC-D or 32 ports MPO
Front cable management
Labeling option (printer support)
Sliding tray for easier cable/modules access
Panels available in 1, 2 and 4RU

Fiber Enhanced HD
72 ports LC-D or 72 ports MPO
Front cable management
Labeling option (printer support)
Sliding tray for better cable modules access
Panels available in 1, 2 and 4RU



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review System Selection Entrance Splicing 19" [here](#).

## Entrance Splicing, Wall-Mounted

Enclosure Type	Max Stranded Fibers 48/Tray	Weight	Dimensions (H x W x D)	Part Number
FEC-6	576	40 lbs (18.18 kg)	19.5" x 32" x 13" (49.53 x 81.28 x 33.02 cm)	<a href="#">FEC-6</a>
FEC-12	1152	80 lbs (36.3 kg)	28" x 32" x 13" (71.12 x 81.28 x 33.02 cm)	<a href="#">FEC-12</a>
Splice Trays Standard-style FEC cabinets will accept two single trays or one dual tray per drawer	Splice Sleeve Protector	Splice Trays Type	Dimensions (H x W x D)	Part Number
Single tray (12-fiber)	FST-ACC001	Heat shrink (single fiber fusion)	0.3" x 11.75" x 5" (9 mm x 299 mm x 127 mm)	<a href="#">FST-HS</a>
Dual tray (24-fiber)	FST-ACC001	Heat shrink (single fiber fusion)	0.5" x 11.75" x 5" (14 mm x 299 mm x 127 mm)	<a href="#">FST-D-HS</a>
Single tray (48-fiber)	FST-ACC001	Heat shrink (single fiber fusion)	0.3" x 11.75" x 5" (9 mm x 299 mm x 127 mm)	<a href="#">FST-HS-48</a>

## Cable Clamp Kits for FEC

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.	Quantity			Part Number
Cables with a maximum diameter of 10 mm (0.4") to 30 mm (1.2")	3			<a href="#">OSP-CLPFEC-LG</a>
Cables with a maximum diameter of 5 mm (0.2") to 18 mm (0.7")	3			<a href="#">OSP-CLPFEC</a>
Individual IFC/OSP cable clamp for wall mount configurations. Secure one cable to a single cable entry point on the cabinet.	Quantity			Part Number
Cables with a maximum diameter of 5 mm (0.2") to 18 mm (0.7")	1			<a href="#">OSP-CLPSST</a>
Individual IFC/OSP cable clamp for rack or wall mount configurations. Secure one cable to a single cable entry point on the cabinet.	Quantity			Part Number
Cables with a maximum diameter of 10 mm (0.4") to 30 mm (1.2")	1			<a href="#">FEC-ACCCLMP01</a>
Grounding Kits (used to ground armored cables)				Part Number
Grounding kit for armored OSP cable includes: 1 cable assembly lug type ground kit and 1 #6 ground cable 229 mm (9") long				<a href="#">GAK-FEC001</a>
Any armored loose tube or buffer tubed fiber OSP cable includes: 1 bullet ground connector and 1 #6 ground cable 127 mm (5") long				<a href="#">GND-STPKIT</a>
Frame mount configuration, any armored loose tube or buffer tubed OSP cable includes: 1 bullet ground connector and 1 #6 ground cable 305 mm (12") long				<a href="#">FEC-ACC GND02</a>

Review System Selection Entrance Splicing 19" [here](#).

## Entrance Splicing ODF

GR3 Frame	Description Code	Part Number
GR3, 2200 mm, 150/150, incl. ducts with 10 drums each	FIST-GR3-R-150/150-22-2	<a href="#">CS6171-000</a>
FACT Backplate 28S, to mount FACT elements in the GR3 frame, 2 pcs required for one GR3	FACT-ACCBPL28E	<a href="#">760239956</a>
FIST GR3 door for 600mm central section, Width: 600mm Height:2200mm, Lock included	FIST-GR3-D-600-22-2	<a href="#">CZ9827-000</a>
GR3 Accessories	Description Code	Part Number
L-CAP, 3 pieces per 150 mm to fix pre-term fanouts	FIST-GR3-BOIC-LPL	<a href="#">EG5792-000</a>
300 mm storage bay (short side panels included)	FIST-GR3-SB-300-22-2	<a href="#">CV7092-000</a>
FIST™ GR3 Set of 2 side/back panels, 2200mm high, 300mm wide, gray	FIST-GR3-P-300-22	<a href="#">CS9084-000</a>
FIST™ GR3 Side by side attachment bracket for installation of 2 racks side by side	FIST-GR3-STS	<a href="#">CC9465-000</a>
FIST™ GR3 Back-to-back attachment bracket for installation of 2 racks back-to-back	FIST-GR2-BTB	518372-000
Kit to lead jumpers from front to back of rack; required when extended base duct used	FIST-GR3-BD-BTB-600/215	<a href="#">EF8196-000</a>
FIST™ GR3 Extended base duct, 150mm wide, for increased patch cord capacity at bottom of rack	FIST-GR3-BD-150/215	<a href="#">EF7794-000</a>
FIST™ GR3 Extended base duct, 300mm wide, for increased patch cord capacity at bottom of rack	FIST-GR3-BD-300/215	<a href="#">EF7793-000</a>
FACT Fiber Cable Termination Unit (CTU) For (1) fiber cable 15 mm maximum diameter or (1) flex-tube 12-16 mm"	FACT-ACCCTUMLT	<a href="#">760239898</a>
FACT Fiber Cable Termination Unit (CTU) For (1) fiber cable 15 mm maximum diameter or (1) flex-tube 12-16 mm (for splicing)	FACT-ACCCTUMLT	<a href="#">760239898</a>
C-Cable Clamp, 1 cable, 8-12 mm OD	FIST-GR2-CAA-1-8/12	<a href="#">CK8121-000</a>
C-Cable Clamp, 2 cables, 12-16 mm OD	FIST-GR2-CAA-2-12/16	<a href="#">F55585-000</a>
C-Cable Clamp, 2 cables, 16-22 mm OD	FIST-GR2-CAA-2-16/22	<a href="#">C29771-000</a>
C-Cable Clamp, 3 cables, 12-16 mm OD	FIST-GR2-CAA-3-12/16	<a href="#">D88793-000</a>
C-Cable Clamp, 3 cables, 16-22 mm OD	FIST-GR2-CAA-3-16/22	<a href="#">F56920-000</a>
Flex Tubing (length of 50 meters) Inner diameter 12 mm, outer diameter 16 mm protects loose tubes up to a bundle of 12 mm	FIST-GS-FLEX-12-50	<a href="#">E43826-000</a>

### Fiber Pre-term Channel Configurations

<a href="#">Pre-term Fiber 19"</a>	<a href="#">Pre-term Fiber FACT</a>	<a href="#">Pre-term Fiber FACT-19"</a>	<a href="#">Pre-term Cat6a</a>
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### Splicing

<a href="#">19"</a>	<a href="#">Fiber Entrance</a>
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### Fiber Raceway

<a href="#">FiberGuide</a>
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### DC Layout

<a href="#">19" XC</a>	<a href="#">FACT ODF XC</a>
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### Reference Designs

<a href="#">MDA to XC</a>	<a href="#">MDA Cabinet</a>	<a href="#">FACT ODF XC</a>	<a href="#">19" XC</a>	<a href="#">Fiber Guide</a>	<a href="#">ToR</a>	<a href="#">EoR Copper</a>	<a href="#">Entrance to 19"</a>	<a href="#">Entrance to FACT</a>
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Review System Selection Entrance Splicing 19" [here](#).

## FACT Splice-Patch Chassis

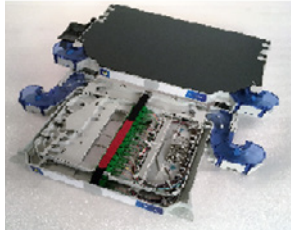
Preterminated with pigtails

Enables splicing of OSP or ISP cables directly on the frame with no loss of density

Available with SC or LC preterminated connections

High-density chassis accommodates 24 SC or 48 single LC connections per FACT element

Uses the EIA/TIA 598 color-coding standard



FACT — <sup>1</sup>XX <sup>2</sup>X HP <sup>3</sup>XX <sup>4</sup>X

Element count	
1E	One element
2E	Two elements
3E	Three elements
4E	Four elements
5E	Five elements
6E	Six elements

Patch cord side	
L	Left-hand patch
R	Right-hand patch

Splice holder/protector (included)	
5	SMOUV
A	ANT

Adaptor/connector types, part count	
L1	LC UPC, C-grade, 48 single LC ports per element
L4	LC OM4, 48 single LC ports per element

## FACT Splice Chassis

Multipurpose splice shelf

Features up to 96 ANT splices or 72 SMOUV splices per FACT element



FACT — <sup>1</sup>XX SPL <sup>2</sup>XXX

Element count	
1E	One element
2E	Two elements
3E	Three elements
4E	Four elements

Tray types	
A12	12 ANT splices
S12	12 SMOUV splices

Number of trays per FACT chassis		
	A12	S12
1E	8 = 96 splices	6 = 72 splices
2E	16 = 192 splices	12 = 144 splices
3E	24 = 288 splices	18 = 216 splices
4E	32 = 384 splices	24 = 288 splices






# FiberGuide<sup>®</sup> System





## 4"x6" FiberGuide System

Description	Part Number	
4x6 Horizontal Straight Section, 6' long, yellow	<a href="#">FGS-MSHS-B</a>	
4x6 Horizontal Stack Storage Section, yellow	<a href="#">FGS-MSHS-STOR-B</a>	
4x6 Horizontal T, yellow	<a href="#">FGS-MHRT-B</a>	
4x6 Horizontal Cross, yellow	<a href="#">FGS-MHXP-B</a>	
4x6 Horizontal Elbow 90°, yellow	<a href="#">FGS-MH9E-B</a>	
4x6 Down Spout, yellow	<a href="#">FGS-MDSP-B</a>	
4x6 Trumpet Flare, yellow	<a href="#">FGS-MTRM-B</a>	
4x6 Down Elbow 45°, yellow	<a href="#">FGS-MD4E-B</a>	
4x6 Up Elbow 45°, yellow	<a href="#">FGS-MU4E-B</a>	
4x6 Junction	<a href="#">FGS-MFAW-B</a>	
4x6 End Cap, black	<a href="#">FGS-HMEC-B</a>	

## 4"x6" Supports

Description	Part Number	
L Bay Support Bracket	<a href="#">FGS-HLBK</a>	
Center Support Bracket Kit (xx = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	<a href="#">FGS-HTUB-XX</a>	
Top Support C-Bracket Kit (xx = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	<a href="#">FGS-HNTS-XX</a>	
Unistrut Kit; 10 Quick Knob T-Bolt	<a href="#">FGS-ACC532</a>	





## Express Exits

Description	Part Number	
4" Express Exit with 4x4 exit opening, yellow	<a href="#">FGS-MEXP-E-A/B/F</a>	
2" Low Profile Express Exit with 2x2 exit opening, yellow	<a href="#">FGS-MEXP-LP-A/B/F</a>	
2x2 Trumpet Flare for 2" Express Exits, yellow	<a href="#">FGS-MTRM-C</a>	
Single 2" Flex Tube Attachment 2" flex tube and 2x2 junction to attach to Express Exit		
5' length	<a href="#">FGS-MEXI-C-5F</a>	
10' length	<a href="#">FGS-MEXI-C-10F</a>	
15' length	<a href="#">FGS-MEXI-C-15F</a>	

Note: For additional FiberGuide products, see online catalog available [here](#).

Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout		Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	FACT ODF XC	MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

## 4"x12" FiberGuide System

Description	Part Number	
4x12 Horizontal Straight Section, 6' long, yellow	<a href="#">FGS-MSHS-F</a>	
4x12 Horizontal Slack Storage Section, yellow	<a href="#">FGS-MSHS-STOR-F</a>	
4x12 Horizontal T, yellow	<a href="#">FGS-MHRT-F</a>	
4x12 Horizontal Cross, yellow	<a href="#">FGS-MHXP-F</a>	
4x12 Horizontal Elbow 90°, yellow	<a href="#">FGS-MH9E-F</a>	
4x12 Down Spout, yellow	<a href="#">FGS-MDSP-F</a>	
4x12 Trumpet Flare, yellow	<a href="#">FGS-MTRM-F</a>	
4x12 Horizontal Cross with two 6" exit, yellow	<a href="#">FGS-MHXP-B/F</a>	
4x12 Down Elbow 45°, yellow	<a href="#">FGS-MD4E-F</a>	
4x12 Up Elbow 45°, yellow	<a href="#">FGS-MU4E-F</a>	
4x12 Junction	<a href="#">FGS-MFAW-F</a>	
4x12 End Cap	<a href="#">FGS-HMEC-F</a>	
Trapeze Bracket Kit (xx = size: 1/2", 5/8", 12 mm, 14 mm, 16 mm)	<a href="#">FGS-HNTP-F-XX</a>	

## 4"x24" FiberGuide System

Description	Part Number	
4x24 Horizontal Straight Section, 6" long, yellow	<a href="#">FGS-MSHS-H</a>	
4x24 Horizontal T, with single 12" exit, yellow	<a href="#">FGS-MHRT-H/F</a>	
4x24 Horizontal T with three 24" exits, yellow	<a href="#">FGS-MHRT-H</a>	
4x24 Horizontal Cross, yellow	<a href="#">FGS-MHXP-H</a>	
4x24 Horizontal Cross with dual 12" exits	<a href="#">FGS-MHXP-F/H</a>	
4x24 Horizontal Elbow 45°, yellow	<a href="#">FGS-MH4E-H</a>	
4x24 Down Elbow 45°, yellow	<a href="#">FGS-MD4E-H</a>	
4x24 Up Elbow 45°, yellow	<a href="#">FGS-MU4E-H</a>	
4x24 Junction	<a href="#">FGS-MFAW-H</a>	
4x24 End Cap	<a href="#">FGS-HMEC-H</a>	
Threaded Rod Trapeze Bracket Kit for New, 5/8"	<a href="#">FGS-HNTP-H-5/8"</a>	

Note: For additional FiberGuide products, see online catalog available [here](#).

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

# System Selection DC Layout Using Reference Designs

## MDA

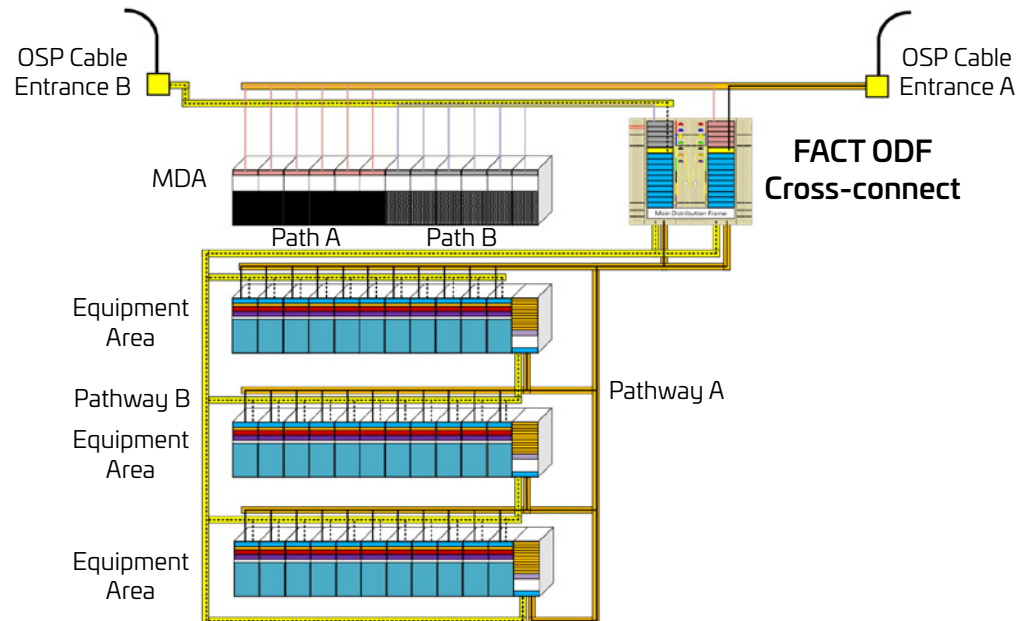
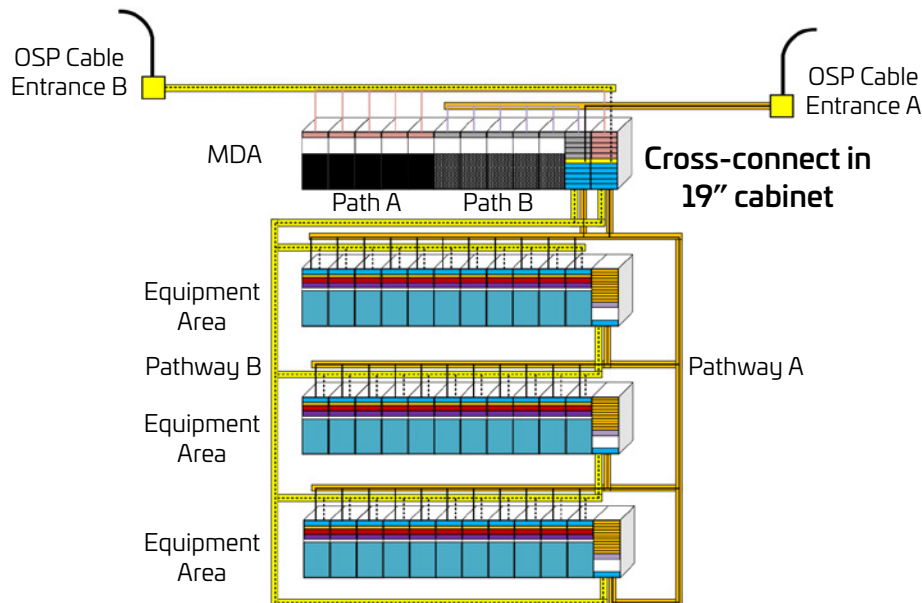
- Spine Switch, Router, etc.
- Enhanced High-Density Fiber Panels

## EDA

- Out of band switch (located End of Row (EoR))
- Leaf Switch (ToR) Top of Rack
- Servers within cabinets
- High-density fiber panels
- A & B patching to server

## FiberGuide

- Redundant separate overhead pathways for A-B back-up



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

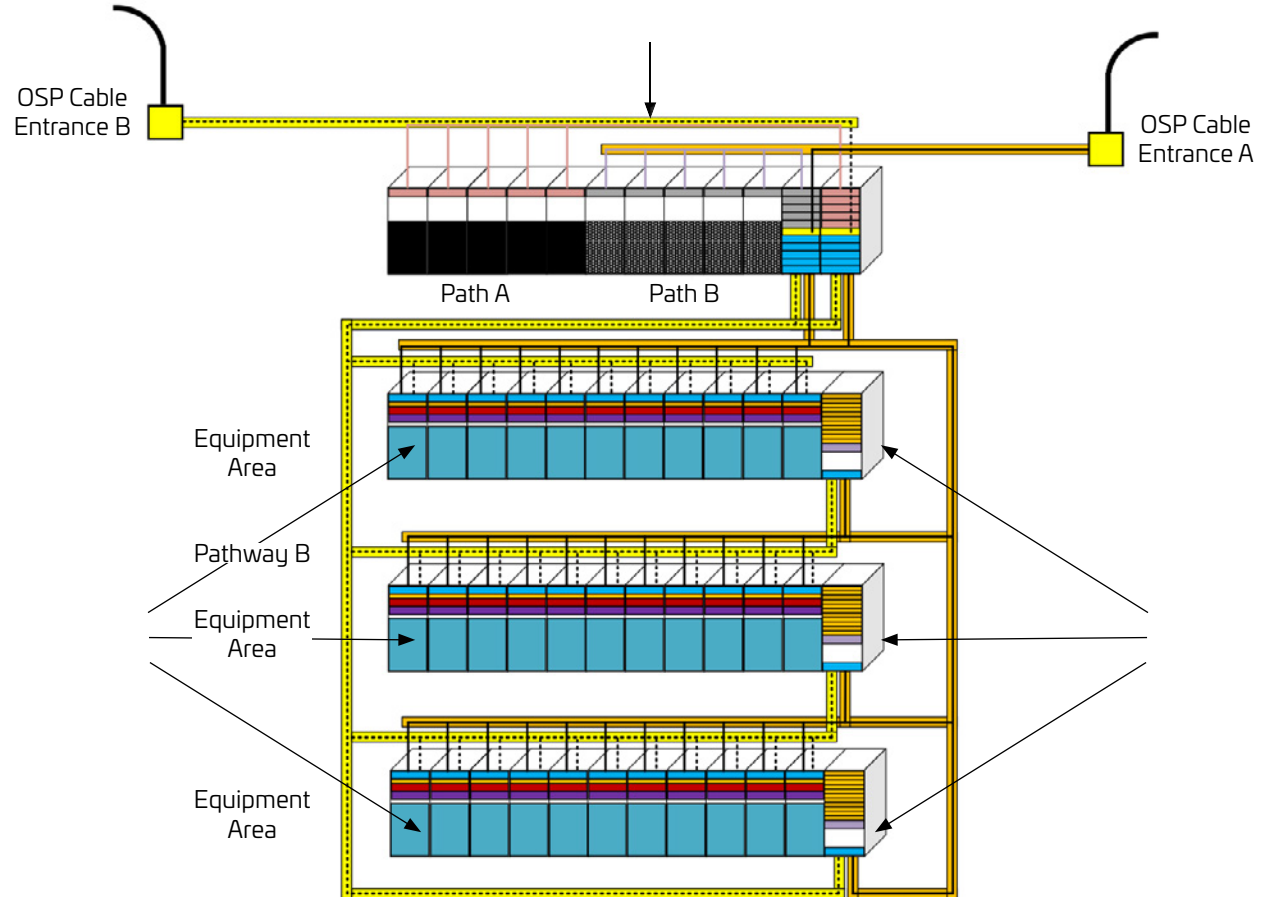
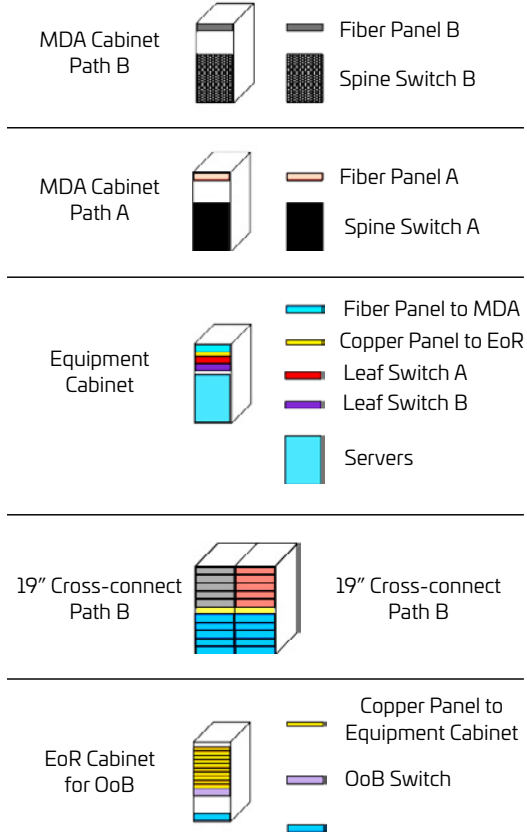
Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

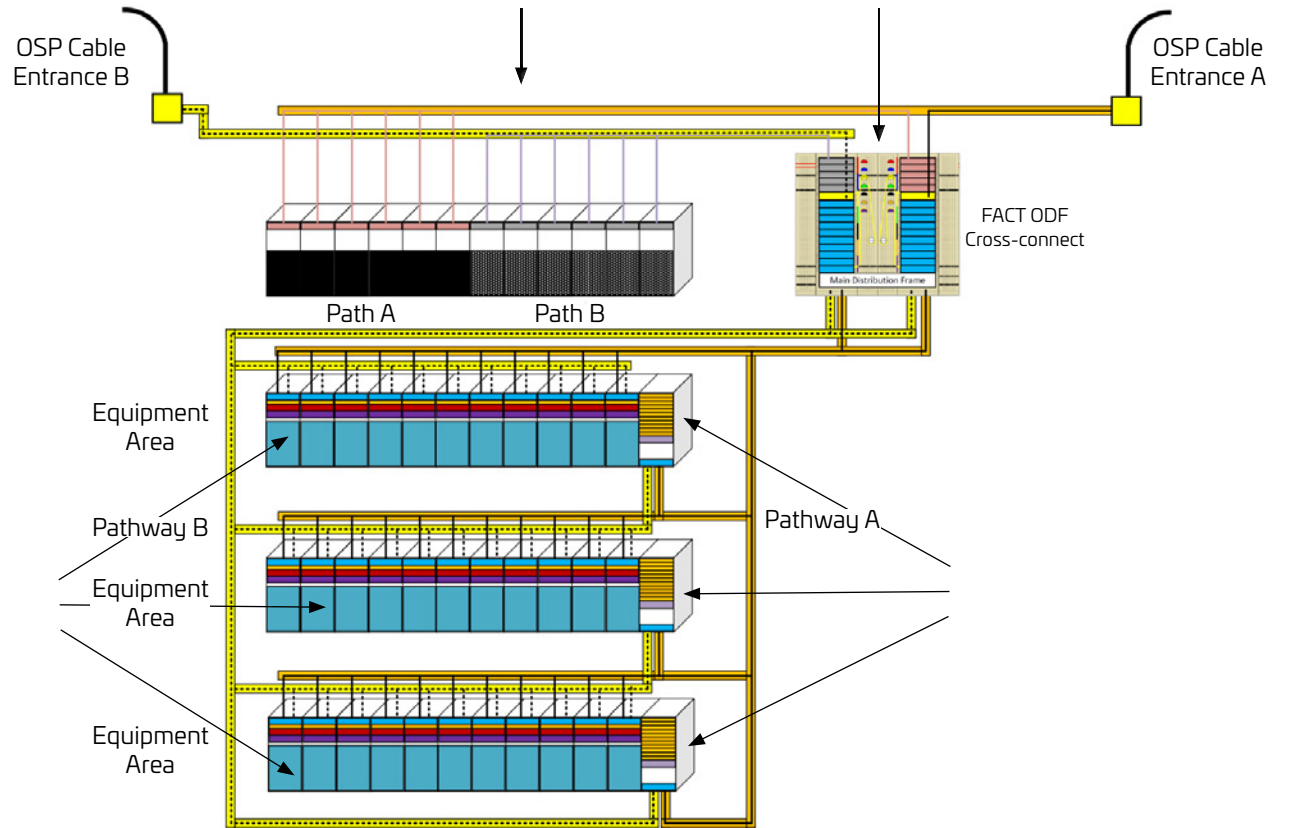
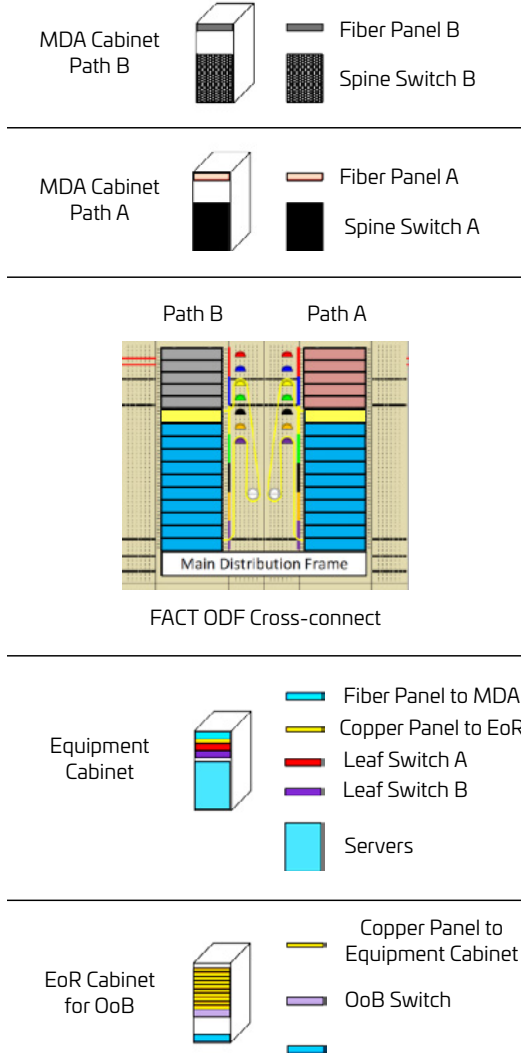
Reference Designs											
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT			

Select a section for more information.



Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout		Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	FACT ODFXC	MDA to XC	MDA Cabinet	FACT ODFXC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

Select a section for more information.



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	



Select a part for more information.



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

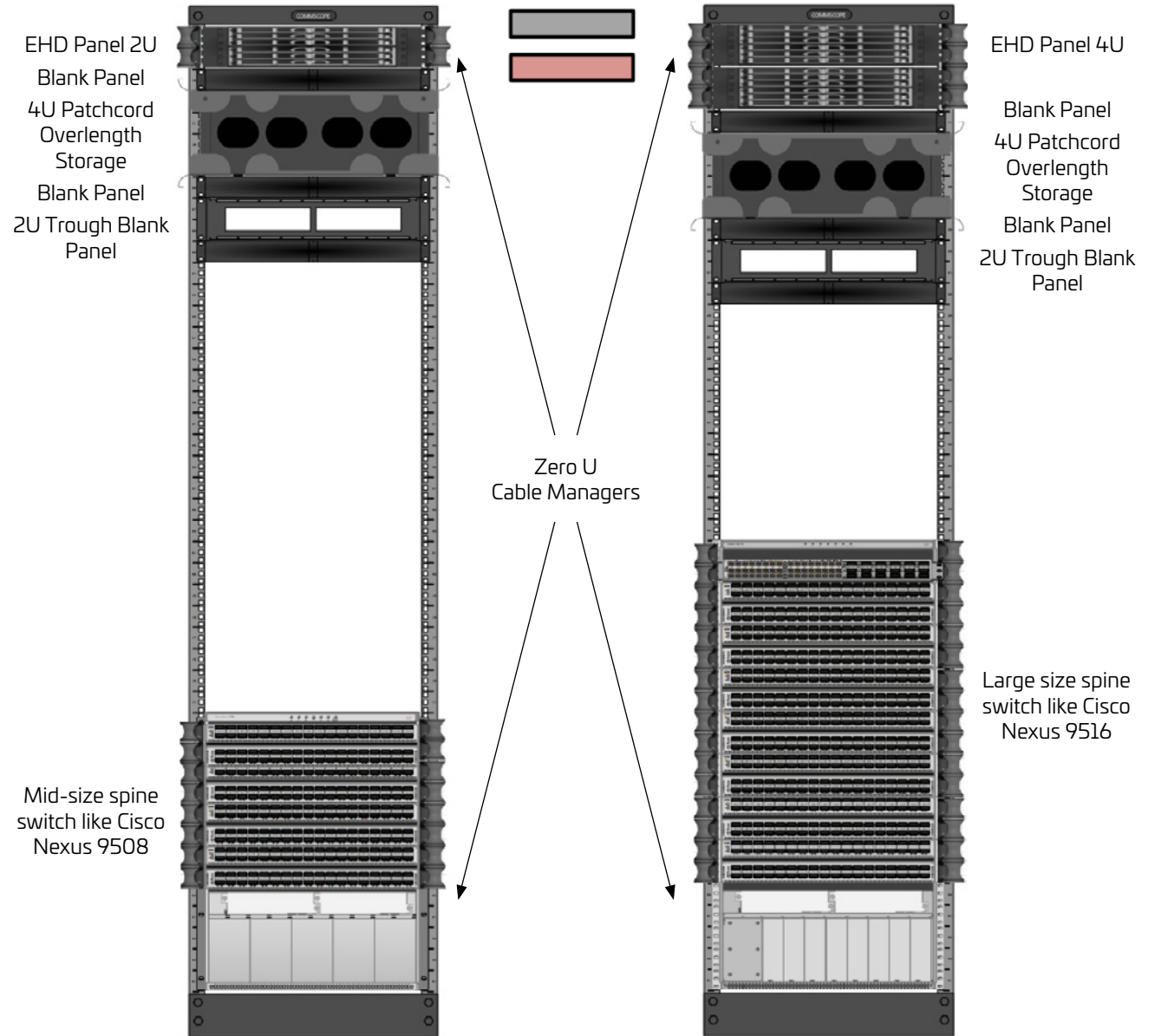
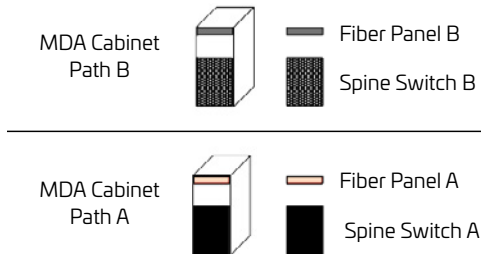
Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs								
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

Review System Selection Fiber Pre-terminated 19" [here](#).



Reference Design for Mid-size Spine Switch

Reference Design for Large Size Spine Switch

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

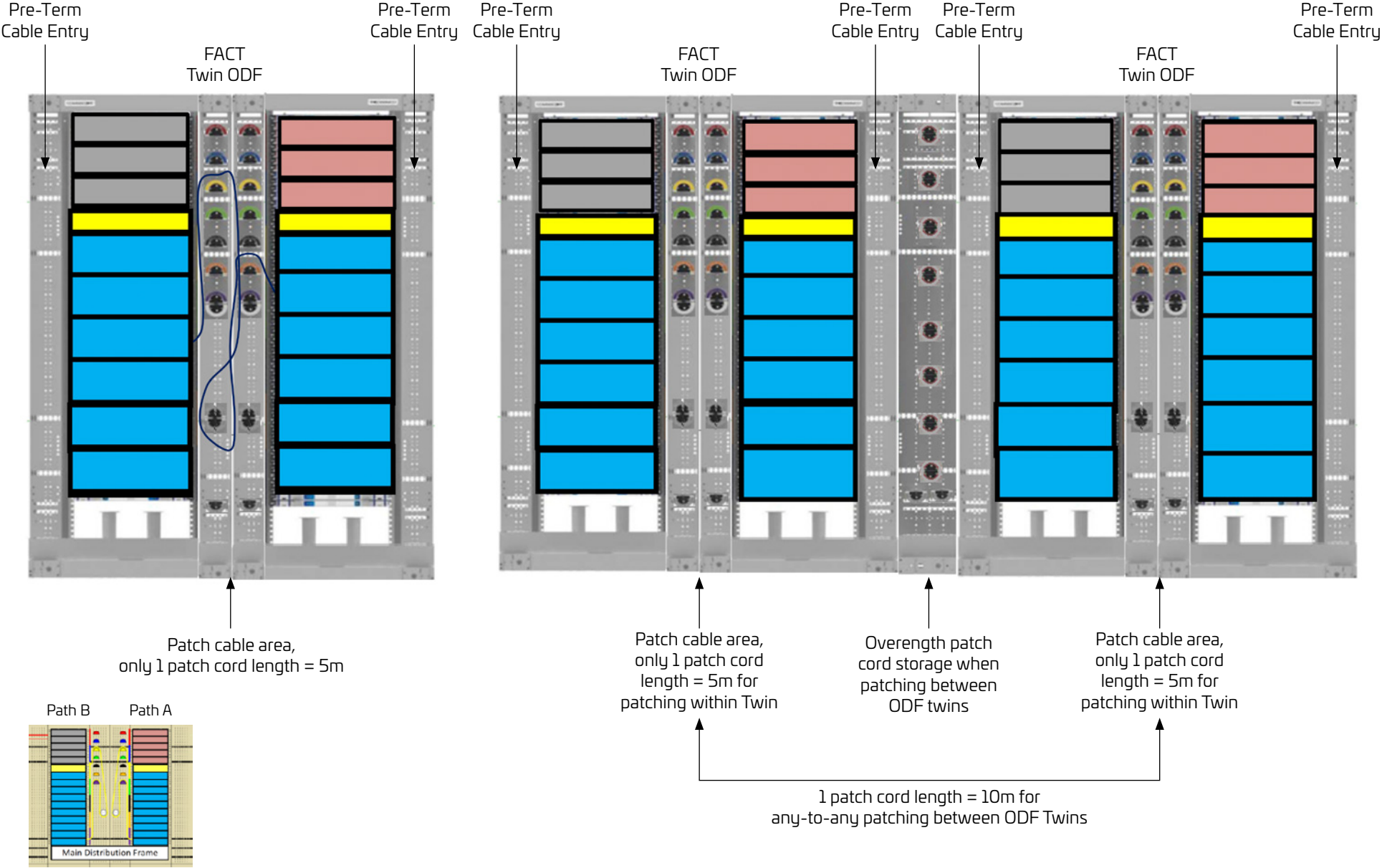
Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review System Selection Fiber Pre-terminated FACT [here](#).



FACT ODF Cross-connect

Note: The XC can consist of more than 4 cabinets depending on the DC size.

Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout		Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	FACT ODF XC	MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT

Review System Selection Fiber Pre-terminated 19" [here](#).



3 x EHD Panels 4U  
Patch section 1

Blank Panel  
Overlength Storage 4U  
Blank Panel

3 x EHD Panels 4U  
Patch Section 2

Blank Panel  
Overlength Storage 4U  
Blank Panel

Cable Trough  
2U to guide patch cords to adjacent cabinets



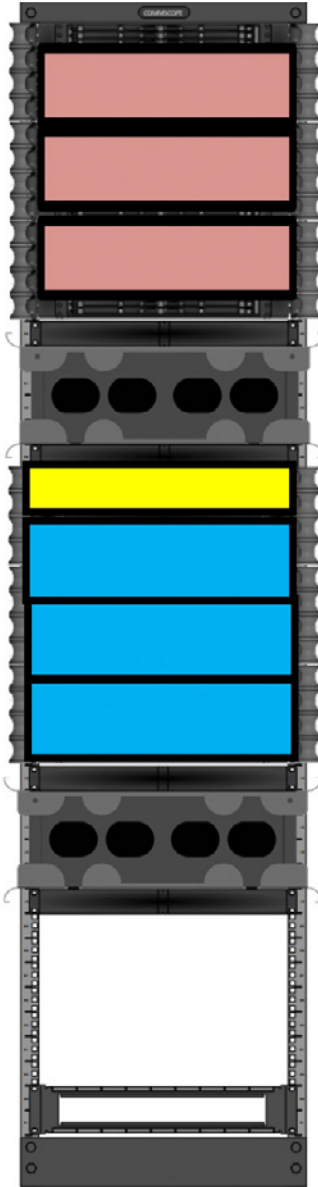
3 x EHD Panels 4U  
Patch section 1

Blank Panel  
Overlength Storage 4U  
Blank Panel

3 x EHD Panels 4U  
Patch Section 2

Blank Panel  
Overlength Storage 4U  
Blank Panel

Cable Trough  
2U to guide patch cords to adjacent cabinets



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

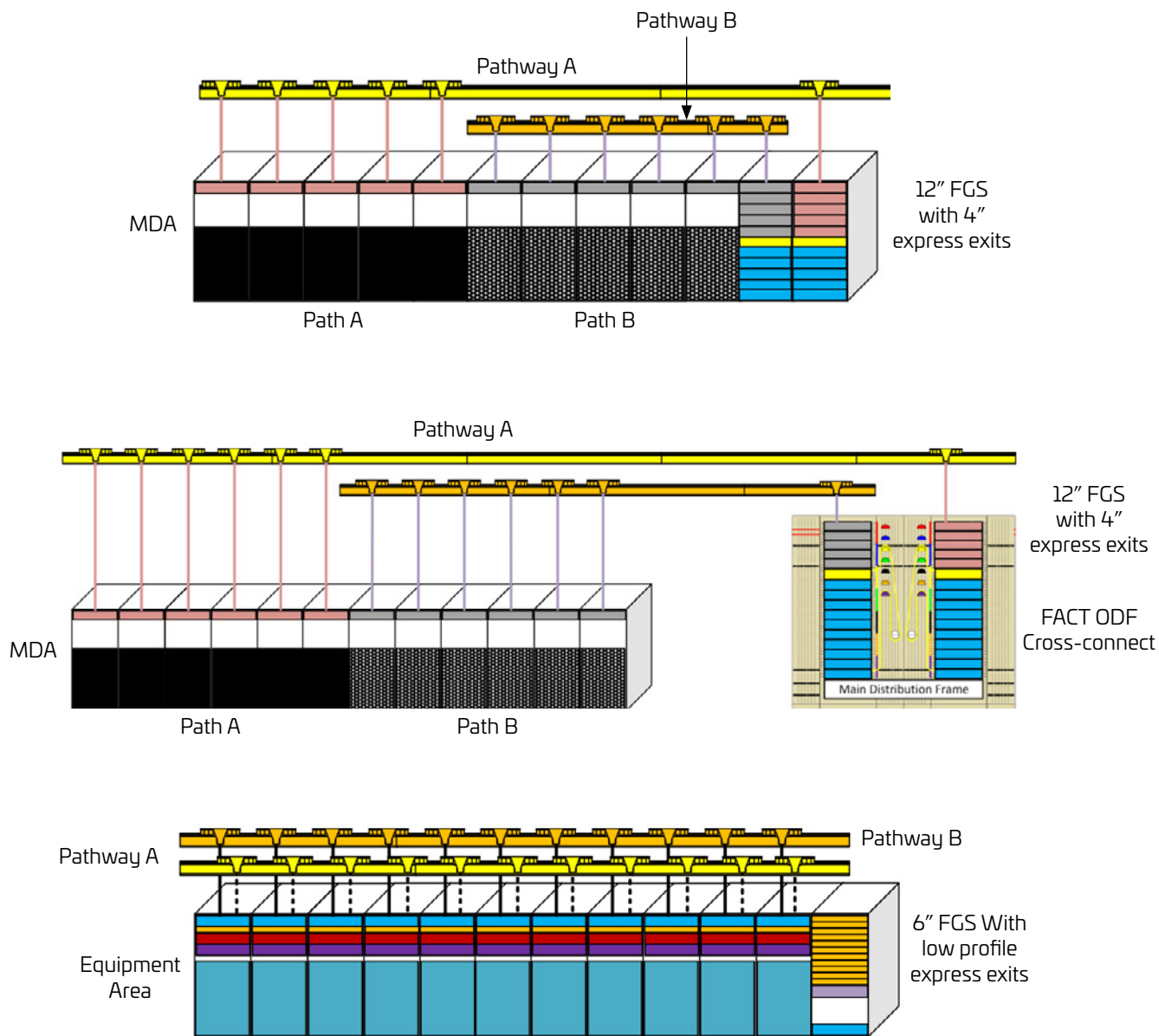
Splicing
19" Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout
19" XC
FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review the FiberGuide [here](#).



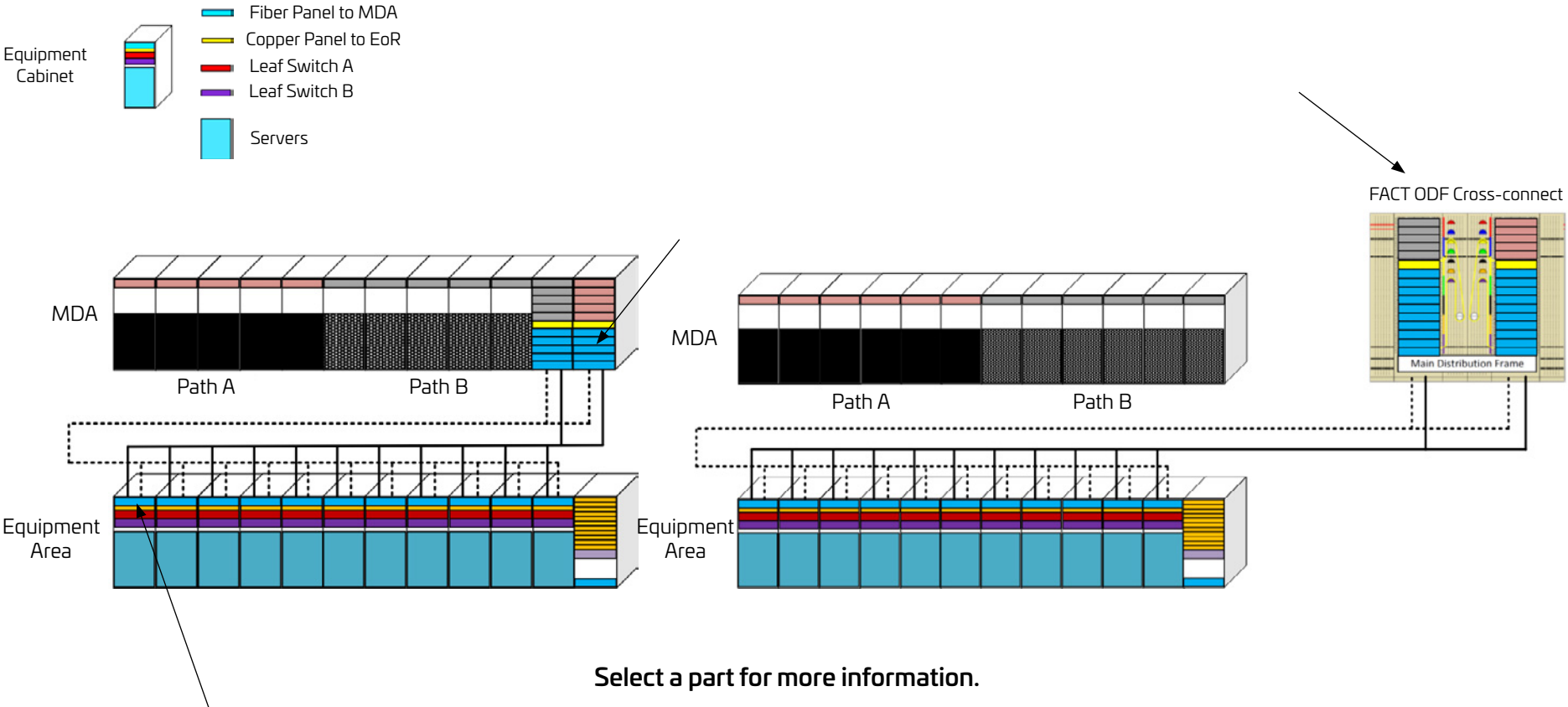
Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs								
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

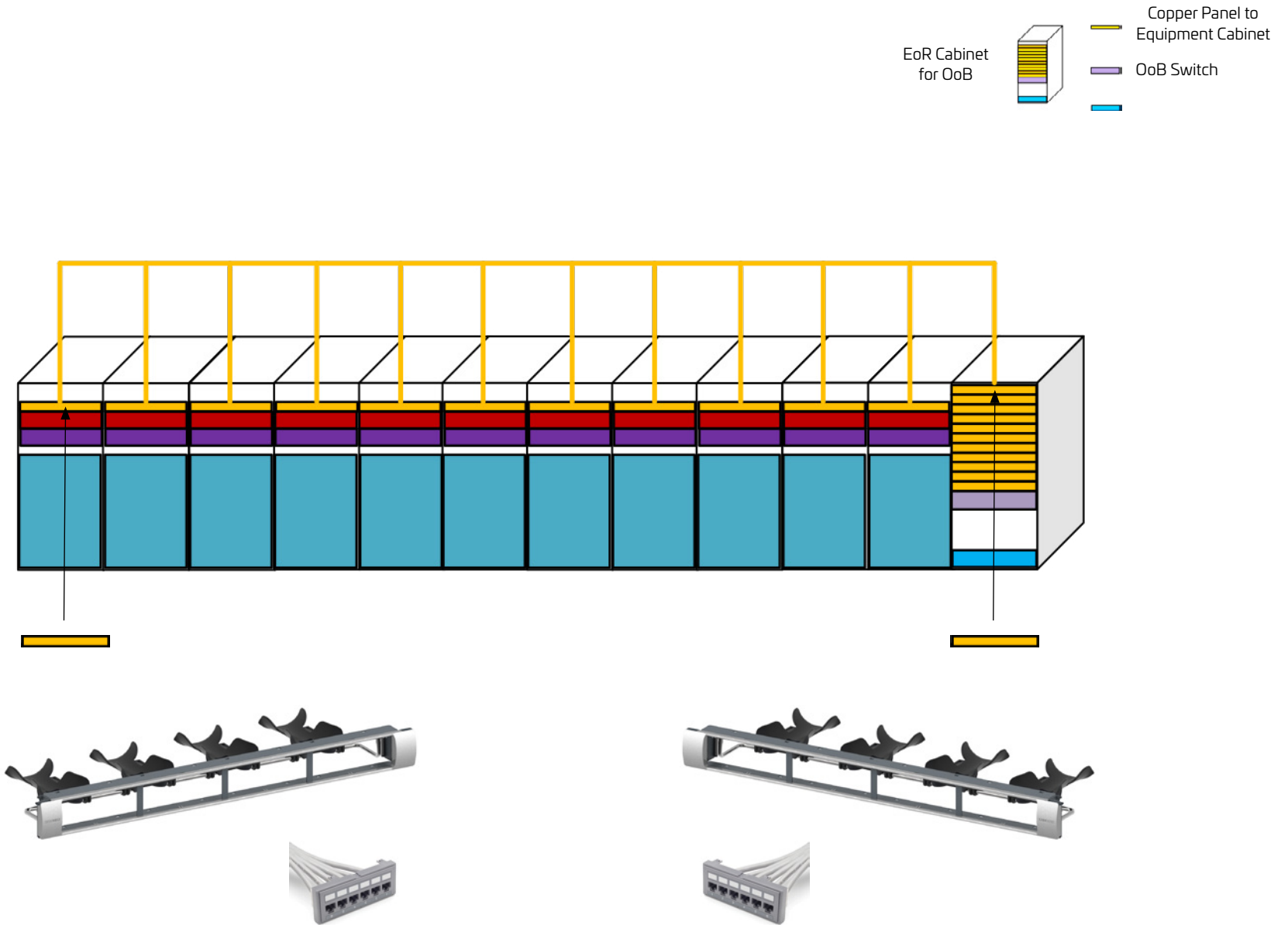
Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

Review System Selection Copper Pre-terminated Cat6A [here](#).



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

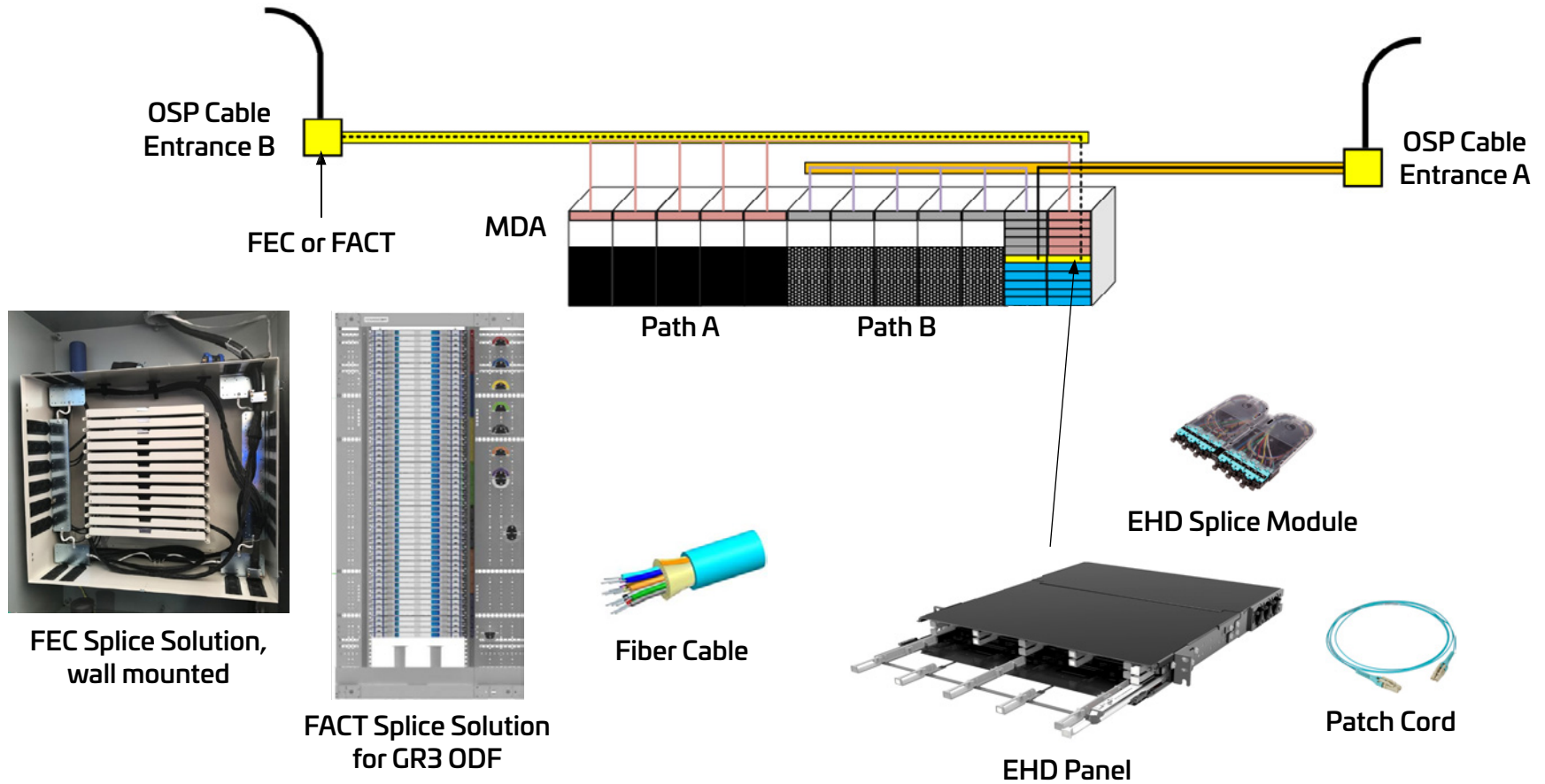
Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs								
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT



Review Entrance Splicing Systems [here](#).



Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

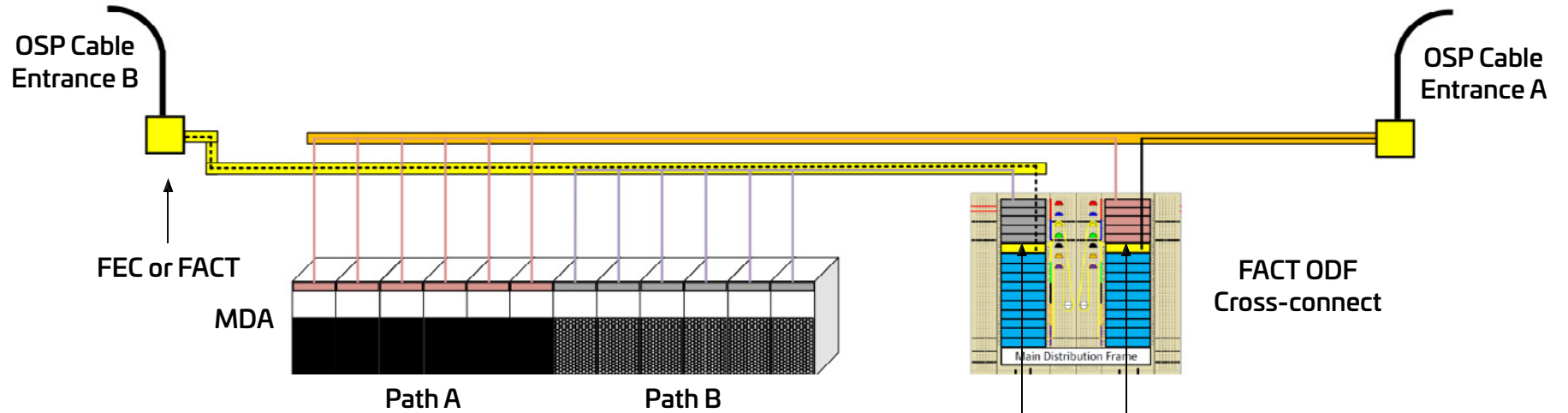
Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	



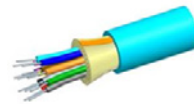
Review Entrance Splicing Systems [here](#).



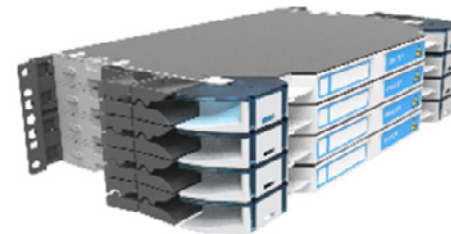
FEC Splice Solution, wall mounted



FACT Splice Solution for GR3 ODF



Fiber Cable



Patch Cord

Fiber Pre-term Channel Configurations			
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a

Splicing	
19"	Fiber Entrance

Fiber Raceway
FiberGuide

DC Layout	
19" XC	FACT ODF XC

Reference Designs									
MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT	

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EB-1141631-EN (07/20)

Fiber Pre-term Channel Configurations				Splicing		Fiber Raceway	DC Layout		Reference Designs								
Pre-term Fiber 19"	Pre-term Fiber FACT	Pre-term Fiber FACT-19"	Pre-term Cat6a	19"	Fiber Entrance	FiberGuide	19" XC	FACT ODF XC	MDA to XC	MDA Cabinet	FACT ODF XC	19" XC	Fiber Guide	ToR	EoR Copper	Entrance to 19"	Entrance to FACT