Base-8 Fiber Cabling System

APPLICATION GUIDE

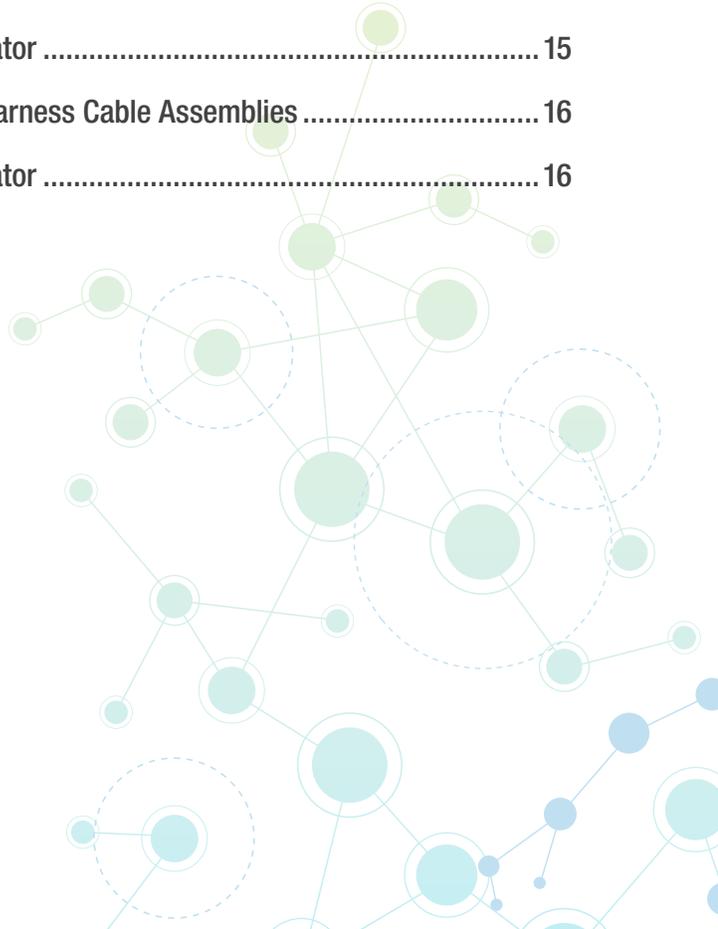Optimize rack space, reduce power requirements, and save capital expenses in your data center

PANDUIT®

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Introduction

Panduit Base-8 fiber cabling is crafted with your needs in mind, aiming to bring you savings in costs and resources. Its innovative design not only conserves capital expenses but also helps free up valuable rack space and reduces power demands. Tailored for modern applications that demand efficiency, each cable boasts eight fibers, split into four lanes dedicated to transmitting and four for receiving. Whether you're running a bustling enterprise, a dynamic colocation data center, or just managing a simple equipment closet, our versatile Base-8 fiber cabling system is here to support you every step of the way.

What is Base-8 Fiber?

Base-8 optical trunks consist of eight fibers per jacket, that are often ribbonized and can terminate with MPO or multiple duplex LC connectors. The adoption of Base-8 fiber is driven by applications that require eight fiber lanes, with four lanes dedicated to Transmit (Tx) and four lanes to Receive (Rx). An example of a Base-8 application is 100GBASE-SR4 which uses four individual 25G lanes to achieve 100G bandwidth. This 8-fiber lane count aligns with 40GbE, 100GbE, and even 400GbE and 800GbE parallel optics data transmission methods.

Our Base-8 offering encompasses 50µm OM4, OM4+ (Signature Core™), and OM5 for multimode, and 9µm OS2 for single-mode. Fiber trunk jacket colors will match those of Base-12 fiber applications however, the connector boots of a Base-8 trunk or interconnect will be gray to provide a quick visual distinction from 12-fiber cabling.

How do Base-8 and Base-12 Fiber Applications Differ?

Base-12 structured cable has been the widely deployed standard for fiber backbone installations over the past 30 years, but as applications change, so has the need for additional connectivity methods. With the release of 40GbE standards, it quickly came to light that the breakout to 4x10G was a sweet spot for Base-8 applications. The need for 8-fiber breakout applications continued with the advent of 100G x (4) 25G, 400G x (4) 100G, as well as 800G parallel connectivity.

Base-8 Fiber Cabling System

The main physical difference between Base-8 and Base-12 is the count of fibers in the trunk or application. Base-8 consists of 8 fibers, while Base-12 consists of 12 fibers in loose tube or ribbon arrangement. In some of the applications that used 12-fiber trunks, four of the Base-12 fibers were "dark," or unused to suit the application, which may have required a conversion harness/cassette to operate in breakout scenarios. While Base-12 fiber can support Base-8 applications, it is considered less than ideal due to four of the fibers (or 33 percent) are not utilized and remain "dark."

Another reason for the shift to Base-8 applications is because it closely matches up with switch providers port counts, i.e., 16, 32, or 48 port switches. While Base-12 provides more fibers per jacketed trunk, it does not break out as cleanly once applications reached 40GB in speed. While both technologies (Base-8/Base-12) are suitable for Base-2 (MPO/LC breakout) scenarios, Base-8 will ultimately match up better with switch technologies to maximize density in port replication applications versus multiple of 12-jacketed fibers. Since Base-12 solutions are not all divisible by 8, Base-8 cabling will provide greater fiber utilization without the need for conversion via harnesses or cassettes, as well as providing reduced attenuation values. In addition to physical differences in Base-8 vs. Base-12, there are also data transmission differences at the transceiver level. Parallel connections will have Tx/Rx physically separated on each side of the MPO connector whereas Bidirectional Duplex applications will have Tx/Rx on continuous ports which is represented on the graphic to the right.

Note: With the use of a Panduit PanMPO™ 12-fiber trunk, Base-8 applications are also achieved utilizing eight of the 12 fibers, then changing the MPO gender from Female to Male, and changing polarity to Method B (Key-Up to Key-Up).
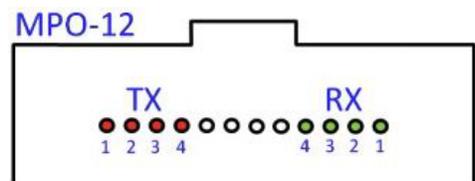
Base-8 Parallel Transceiver Tx/Rx
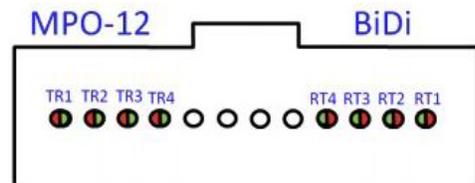
Base-12 BiDi Transceiver Tx/RX

Base-8 vs. Base-12 Assemblies Number of MPO Connectors per End		
Fiber Count	**MPO-12**	**MPO-8**
8 or 12	1	1
24	2	3
48	4	6
72	6	9
96	8	12
144	12	18

Table 1: Base-8 vs Base-12 Connector Per Assembly

Note: Base-8 assemblies increase the number of MPO connectors (24F and above) by 50% vs the same count in Base-12.

Example: Base-8 72F Trunk Assembly

What Transceiver Technologies Does Base-8 Encompass?

Most multifiber (greater than two) QSFP or OSFP optical pluggable transceivers are Base-8 compatible. There are a few Base-16 outliers, but generally most applications that are not 2-Fiber Duplex applications are Base-8.

Base-8 Parallel Optics (Either MPO/MPO or MPO/LC Breakout)				
Transceiver Model	Media Type	Transmission Speed	Reach	Connector Type
QSFP-40G-SR4	MMF	40G	150m	MPO
QSFP-4x10G-LR	MMF	40G	10km	MPO
QSFP-100G-SR4	SMF	100G	100m	MPO
QSFP-100G-PSM4	SMF	100G	500m	MPO
QSFP-100G-SL4	MMF	100G	30m	MPO
QDD-400G-SR4-BD	MMF	400G	100m	MPO
QDD-400G-DR4	SMF	400G	500m	MPO
QDD-8X100G-FR	SMF	800G	2km	MPO
QDD-400G-SR4.2	MMF	400G	100m	MPO
QDD-4x100G-FR	SMF	400G	2km	MPO
QDD-4x100G-LR	SMF	400G	10km	MPO
OSFP-400G-DR4	SMF	400G	500m	MPO
OSFP-400G-XDR4	SMF	400G	2km	MPO

Table 2: Example Parallel Optics Applications

Note: This is not an exhaustive list. These can also be connected with 8F MPO to 4xLC assemblies or 8F x 4 LC trunks or interconnects.

Why Base-8 Makes Sense, Power Saving via Port Breakout!

In addition to 100 percent fiber utilization, switch port mapping, breakout via 400/100GbE switch-to-switch applications, or 400/100GbE, 100/25GbE and 40/10GbE server breakout applications, Base-8 cabling can also greatly reduce overall cost, power, and require less conversion media in the data center.

Let's use the following scenario of 400GbE switch to 100GbE server applications with a pod of 16 cabinets with 32 servers per cabinet and one 100GbE downlink per server. The traditional top-of-rack (ToR) networking will require one 100GbE switch per cabinet for in-cabinet patching. Switching this to a MoR 400GbE switch model with 4:1 (Base-8) fiber breakout will decrease the number of switches needed (CAPEX savings) as well as decrease the amount of power draw (OPEX savings).

These savings only increase as the port count/density grows. Things such as deploying chassis-based or higher radix switches can quickly decrease your total operating cost and power draw per port.

Current Architecture

- One 100G Nexus 9364C-GX ToR Switch (2 RU) per cabinet
- One port per server
- Provides connectivity to 32 servers
- 32 downlinks, 16 uplinks 2:1 oversubscription

New Architecture

- Two ToR Nexus 9364D-GX2A Switches (2 RU) 8 cabinets
- One port can service 4 servers with 4-to-1 (SR4.2) breakouts
- Provides connectivity to 256 servers
- 32 ports downlinks, 16 uplinks 2:1 oversubscription
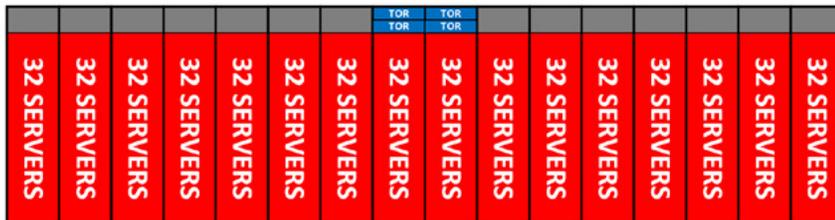
Power savings via switch reduction of (16) 100G ToR to (4) 400G ToR switches:

- Typical 2 RU 100G switch (ex. Nexus 9364C-GX) 811W x 16 = 13kW
- Typical 2 RU 400G switch (ex. Nexus 9364D-GX2A) 1324W x 4 = 5.3kW
- 7.7kW power savings (60 percent overall) via switch reductions in a 16 cabinet POD

Power savings via using Base-8 switch port breakout (switch downlink review only):

- Total power savings for POD on downlink transceivers
  - Typical 100G transceiver is ~4.3W, a 400G is ~12W
  - Using 100G ToR = 4.3W * (1024) total transceivers in the POD = 4.4kW
  - Using 400G MoR with 100G breakout: (4:1 = 512 * 100G + 128 * 400G)
    - 12W 400G * (128) transceivers = 1.54kW
    - 4.3W 100G * (512) transceivers = 2.2kW
    - Total combined power of 100G & 400G transceivers = 3.74kW
    - Total transceiver power savings of 100G ToR vs 400G 4:1 breakout model: 660W, or an additional 15 percent power savings for transceivers in this POD

Overall power savings:

- 7.7kW switch savings + 660W transceiver savings = 8.36kW POD power savings

Parallel & Duplex Link Paths

Base-8 fiber is used for parallel links, meaning for applications that use multiple fibers/channels for both Transmit and Receive using a FOCIS-5 MPO (multi-fiber push on) based connector. Base-8 also allows for quick conversion to Base-2 duplex links since its eight fibers are divisible for 2-fiber Tx/Rx transmission. With Base-8 fiber, Tx1, or fiber position one, should be received on Rx12. Conversely if traffic enters on Tx12, it should be received on Rx1. This Tx/Rx scenario is achieved by using Type B or "Method B" polarity link components. Also, to maintain that polarity or light path, the number of components in the channel should remain at an odd number.

Fiber Infrastructure Form Factor Options

A variety of Base-8 fiber connectivity components are available to suit your specific needs, offering multiple options in form factor and density. You can choose from SFQ QuickNet™, Opticom®, and HD Flex™ component form factors, each designed to meet different requirements and preferences. Take a look at the options illustrated below:

Image 5: QuickNet Base-8
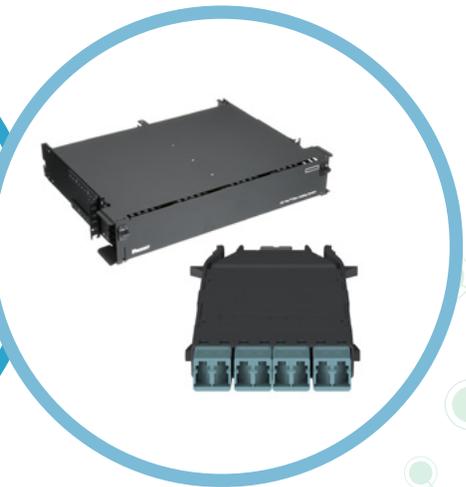

Image 6: Opticom Base-8

Image 7: HD Flex Base-8

Base-8 fiber assemblies are available in Configure To Order for Trunks, Interconnects, and Harnesses. With this option, you can customize various aspects such as fiber type, flame rating, connector type, performance, polarity, and length according to your specific requirements.

For more information, visit
www.panduit.com/base-8-cto.

Base-8 Applications

For all applications, please use these channel drawings to help with part selection. For part number specifics, please review the intended application. Application scenarios shown using HD Flex components for simplicity but SFQ QuickNet Cassettes, Opticom, and HD Flex component part numbers are available.
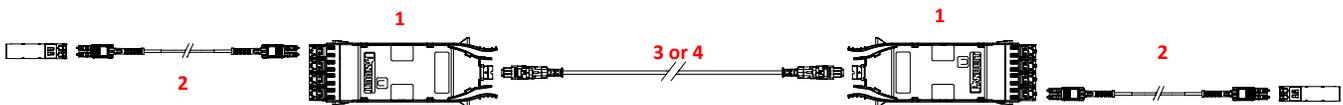
Note: Any Opticom applications using cassettes will have two 8-Fiber MPO's and eight LC adapters. There may be additional applications possible using Base-8, but these are the most common deployment options. Jacket flame rating shown in Plenum, for LSZH or Euroclass, please visit the Panduit CPQ webpage here.

Duplex Applications

1. **Duplex Interconnect**
   Use it to support easy moves, add, changes in the environment.

	Description	OS2			OM4		
#	**Duplex Interconnect**	**HD Flex**	**Opticom**	**SFQ QuickNet**	**HD Flex**	**Opticom**	**SFQ QuickNet**
1	4-Port, 8-Fiber Cassette - Universal Polarity	FHC39N-08H-10U	FC39N-16-10U	FQ39N-08-10U	FHC3ZO-08H-10U	FC3ZO-16-10U	FQ3ZO-08-10U
2	LC/LC Uniboot Patch Cord - Standard	F92RPU1U10NM***			FZ2RPU1U10NM***		
3	8F Interconnect (Female to Female)	FR98PVVB011F***			FRZ8PJJY011F***		
4	8F Trunk (Female to Female)	FY98PVVB015F***			FYZ8PJJY015F***		

2. Duplex Interconnect With Breakout

Application supports switches with high port counts. This application also enables the use of less cassettes when the interconnects are well defined.
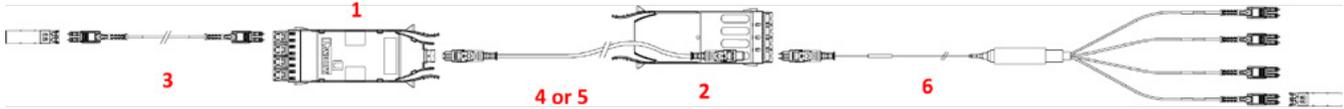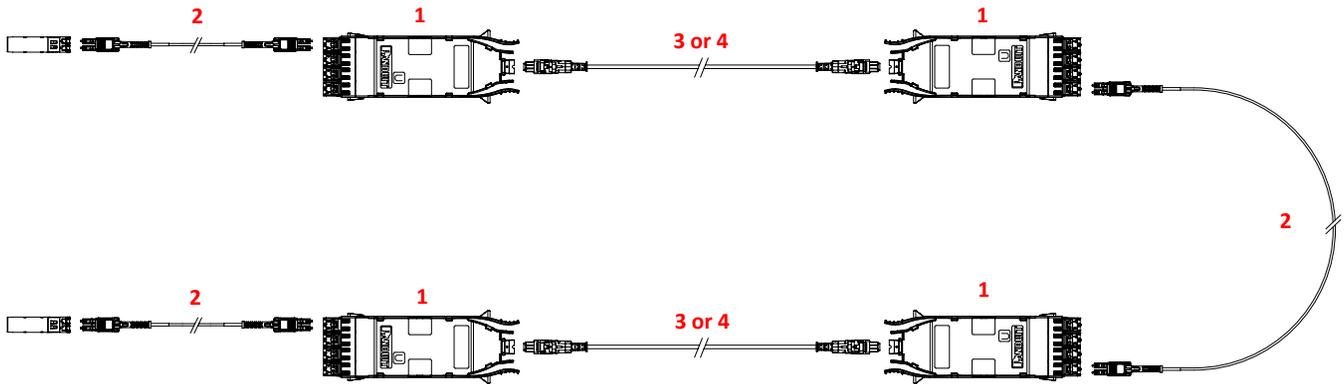

Description	OS2			OM4		
#	Duplex Interconnect with Breakout	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1	4-Port, 8-Fiber Cassette - Universal Polarity	FHC39N-08H-10U2	FC39N-16-10U2	FQ39N-08-10U2	FHC3Z0-08H-10U2	FC3Z0-16-10U2	FQ3Z0-08-10U2
2	4-Port MPO FAP	FHMP-4-ABL	FAPH0412BLMPO	FQMAP45BL	FHMP-4-ABL	FAPH0412CGMPO	FQMAP45BL
3	LC/LC Uniboot Patch Cord - Standard	F92RPU1U1ONM***			FZ2RPU1U1ONM***		
4	8F Interconnect (Female to Female)	FR98PVVB011F***			FRZ8PJJY011F***		
5	8F Trunk (Female to Female)	FY98PVVB015F***			FYZ8PJJY015F***		
6	8F Harness U2*	FH98PWPQ016F***			FHZ8PKPV016F***		

*Harnesses available in stagger as well

3. Duplex Cross-connect

Solution allows for flexible patch fields in distribution areas.

Description	OS2			OM4		
#	Duplex Cross Connect	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1	4-Port, 8-Fiber Cassette - Universal Polarity	FHC39N-08H-10U	FC39N-16-10U	FQ39N-08-10U	FHC3Z0-08H-10U	FC3Z0-16-10U	FQ3Z0-08-10U
2	LC/LC Uniboot Patch Cord - Standard	F92RPU1U1ONM***			FZ2RPU1U1ONM***		
3	8F Interconnect (Female to Female)	FR98PVVB011F***			FRZ8PJJY011F***		
4	8F Trunk (Female to Female)	FY98PVVB015F***			FYZ8PJJY015F***		

Base-8 Fiber Cabling System

Parallel Applications

4. Direct Connect
Application for short distance (in-rack/in-row) point to point equipment connections. (Direct Connect is always Method B)

1 or 2
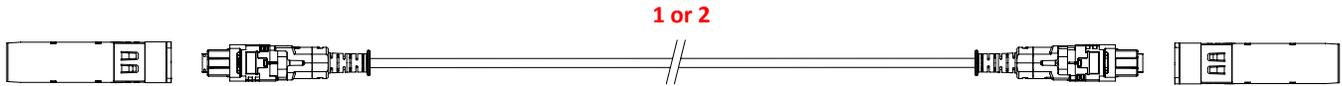
Description	OS2			OM4		
# Direct Connect	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1 8F Interconnect (Female to Female)	FR98PJJB001F***			FRZ8PJJY011F***		
2 8F Trunk (Female to Female)	FY98PJJB005F***			FYZ8PJJY015F***		

5. Parallel Interconnect
Much like the Duplex Interconnect, this allows for easy moves, add, and changes for high bandwidth applications.

2 or 3   **1**   **4 or 5**   **2 or 3**   **1**

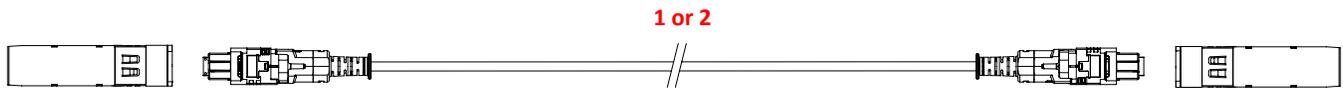| Description	OS2			OM4		
# Parallel Interconnect	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1 4-Port MPO FAP	FHMP-4-ABL	FAPH0412BLMPO	FQMAP45BL	FHMP-4-ABL	FAPH0412CGMPO	FQMAP45BL
2 8F Interconnect (Female to Female)	FR98PVVB011F***			FRZ8PJJY011F***		
3 8F Trunk (Female to Female)	FY98PVVB015F***			FYZ8PJJY015F***		
4 8F Interconnect (Male to Male)	FY98PWWB015F***			FYZ8PKKY015F***		
5 8F Trunk (Male to Male)	FY98PWWB015F***			FYZ8PKKY015F***		

6. Parallel Cross Connect

Application allows for moves, add, or changes at one end of the patch field and allows for 1:1 port replication at the switch.
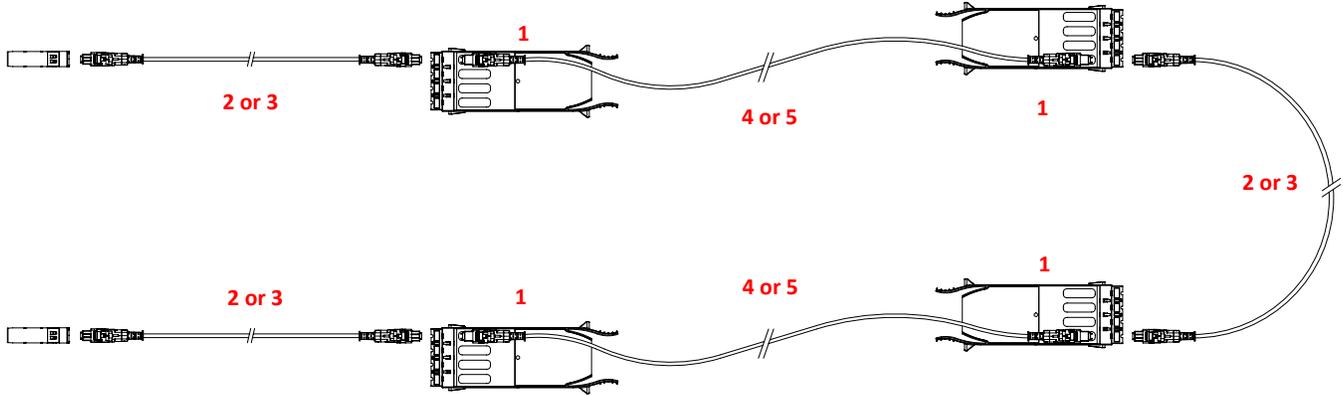
Description	OS2			OM4		
# Parallel Cross Connect	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1 4-Port MPO FAP	FHMP-4-ABL	FAPH0412BLMPO	FQMAP45BL	FHMP-4-ABL	FAPH0412BLMPO	FQMAP45BL
2 8F Interconnect (Female to Female)		FR98PVVB011F***			FRZ8PJJY011F***	
3 8F Trunk (Female to Female)		FY98PVVB015F***			FYZ8PJJY015F***	
4 8F Interconnect (Male to Male)		FY98PWWB015F***			FYZ8PKKY015F***	
5 8F Trunk (Male to Male)		FY98PWWB015F***			FYZ8PKKY015F***	

7. Direct Connect With Harness Breakout

Application for breaking out high bandwidth switch ports to servers in close proximity, such as in-cabinet/in-row switch to server connections.

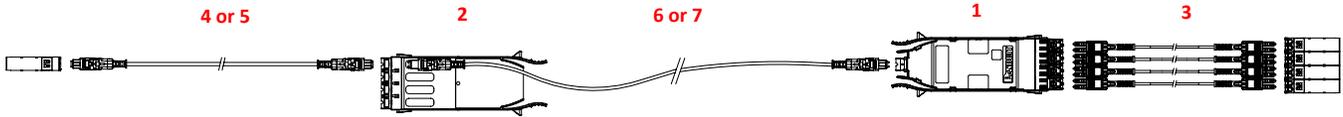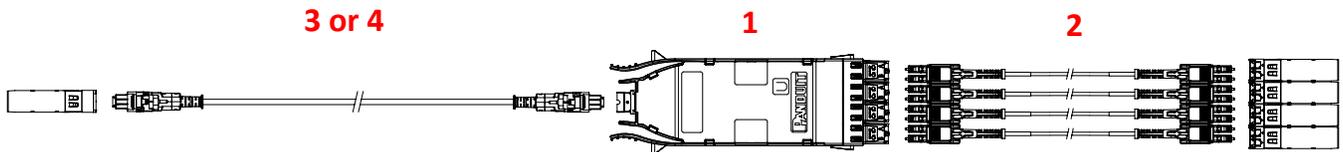| Description	OS2			OM4		
# Direct Connet with Harness Breakout	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1 8F LC Harness U2*		FH98PVPQ016F***			FHZ8PJPV016F***	

*Harnesses available in stagger as well

8. Interconnect to Duplex Breakout

This application supports breakout of a high bandwidth switch ports to (4) lower bandwidth links using less cassettes.

4 or 5 **2** **6 or 7** **1** **3**

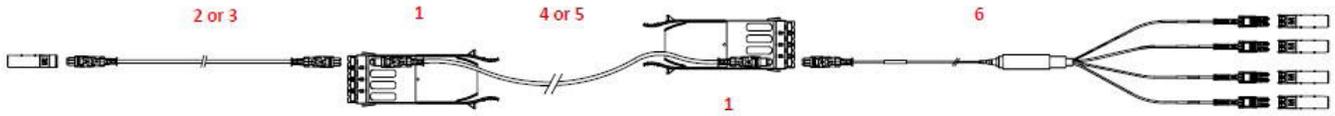| Description	OS2			OM4		
#	Interconnect to Duplex Breakout	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1	4-Port, 8-Fiber Cassette - Universal Polarity	FHC39N-08H-10U2	FC39N-16-10U2	FQ39N-08-10U2	FHC3ZO-08H-10U2	FC3ZO-16-10U2	FQ3ZO-08-10U2
2	4-Port MPO FAP	FHMP-4-ABL	FAPH0412BLMPO	FQMAP45BL	FHMP-4-ABL	FAPH0412CGMPO	FQMAP45BL
3	LC/LC Uniboot Patch Cord - Standard	F92RPU1U10NM***			FZ2RPU1U10NM***		
4	8F Interconnect (Female to Female)	FR98PVVB011F***			FRZ8PJJY011F***		
5	8F Trunk (Female to Female)	FY98PVVB015F***			FYZ8PJJY015F***		
6	8F Interconnect (Female to Male)	FY98PVWB015F***			FYZ8PJKY015F***		
7	8F Trunk (Female to Male)	FY98PVWB015F***			FYZ8PJKY015F***		

9. Interconnect With Port Breakout

Allows for 1:4 port replication. Solution is best used as an in-cabinet patching application to use shorter length patch cords for clean cable management.

3 or 4 **1** **2**

Description	OS2			OM4		
#	Interconnect with Port Breakout	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1	4-Port, 8-Fiber Cassette - Universal Polarity	FHC39N-08H-10U	FC39N-16-10U	FQ39N-08-10U	FHC3ZO-08H-10U	FC3ZO-16-10U	FQ3ZO-08-10U
2	LC/LC Uniboot Patch Cord - Standard	F92RPU1U10NM***			FZ2RPU1U10NM***		
3	8F Interconnect (Female to Female)	FR98PVVB011F***			FRZ8PJJY011F***		
4	8F Trunk (Female to Female)	FY98PVVB015F***			FYZ8PJJY015F***		

10. Interconnect With Harness Breakout

Application allows for ease of Day 2 upgrades from 2-fiber to 8-fiber network applications where the harness can be removed/replace with Interconnects without changes to the horizontal infrastructure.

Description		OS2			OM4		
#	Interconnect with Harness Breakout	HD Flex	Opticom	SFQ QuickNet	HD Flex	Opticom	SFQ QuickNet
1	4-Port MPO FAP	FHMP-4-ABL	FAPH0412BLMPO	FQMAP45BL	FHMP-4-ABL	FAPH0412CGMPO	FQMAP45BL
2	8F Interconnect (Female to Female)		FR98PVVB011F***			FRZ8PJJY011F***	
3	8F Trunk (Female to Female)		FY98PVVB015F***			FYZ8PJJY015F***	
4	8F Interconnect (Male to Male)		FY98PWWB015F***			FYZ8PKKY015F***	
5	8F Trunk (Male to Male)		FY98PWWB015F***			FYZ8PKKY015F***	
6	8F LC Harness U2*		FH98PVPQ016F***			FHZ8PJPV016F***	

*Harnesses available in stagger as well

Note: For additional Base-8 part numbers, please visit **www.panduit.com**.

Plenum Base-8 MPO Trunk Cable Assemblies

Part Number Configurator

FYZ8PJJY011F030 = OM4 8-Fiber HD Flex, Indoor Small Diameter Trunk, Plenum, 1× PanMPO-8 Female with 1m breakout to 1× PanMPO-8 Female with 1m breakout, Polarity B, Optimized IL, Pulling Eye End A, 30 feet.
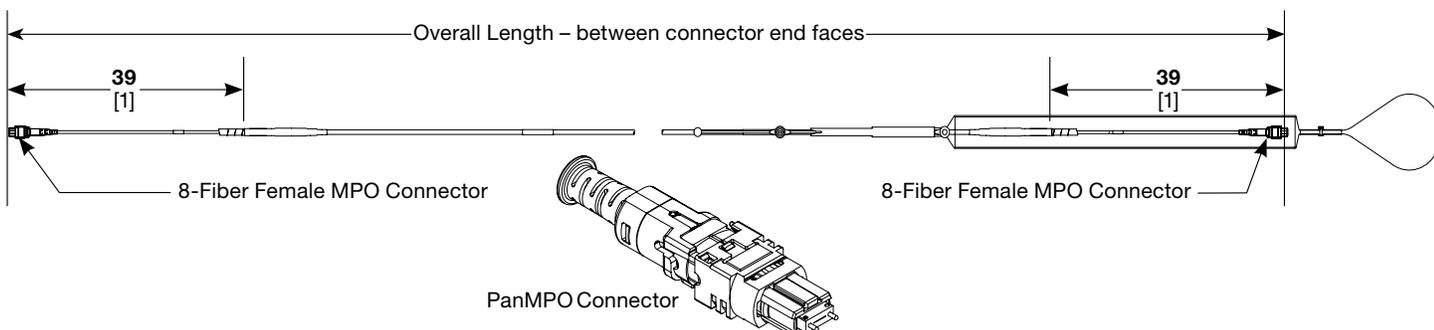
Character	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Example	F	Y	Z	8	P	J	J	Y	0	1	1	F	0	3	0

1 – Fiber F = Fiber

2 – Cable Type Y = Indoor small diameter trunk cable

3 – Fiber Type
9 = OS2 Singlemode 9/125µm
Z = OM4 50/125µm
S = OM4+ 50/125µm
W = OM5 50/125µm

4 – Fiber Count
8 = 8-Fibers
C = 16-Fibers
U = 24-Fibers
W = 48-Fibers
X = 72-Fibers
Y = 96-Fibers
A = 144-Fibers

5 – Jacket Type P = Plenum

6 – Connector
7   Types
G = MPO-8 Female (MM)
H = MPO-8 Male (MM)
J = PanMPO-8 Female (MM)
K = PanMPO-8 Male (MM)
X = MPO-8 Female APC (SM)
Y = MPO-8 Male APC (SM)
V = PanMPO-8 Female APC (SM)
W = PanMPO-8 Male APC (SM)
U = Pigtail (End B only)

8 – Construction/
**   Perfomance**
A = Method A, Standard IL (SM)
B = Method B, Standard IL (SM)
X = Method A, Optimized IL
Y = Method B, Optimized IL
K = Method A, Ultra IL (MM)
      (8 – 48-Fibers)
L = Method B, Ultra IL (MM)
      (8 – 48-Fibers)

9 – Serial See Table Below
10
11

12 – Unit of Measure F = Feet
M = Meters

13 – Cable Asembly 015 – 999 Feet
14   Length 005 – 999 Meters
15

Serial	Transition	Pulling Eye
011	HD Flex	Yes
012	HD Flex	No
013	HD Flex to pigtail	Yes
014	HD Flex to pigtail	No

Serial	Transition	Pulling Eye
015	Standard	Yes
016	Standard	No
017	Standard to pigtail	Yes
018	Standard to pigtail	No

Small Diameter Trunk Cable Assembly Detail

Overall Length – between connector end faces

39 [1]

39 [1]

8-Fiber Female MPO Connector

8-Fiber Female MPO Connector

PanMPO Connector

Dimensions are in inches. [Dimensions in brackets are metric].

# Base-8 MPO Interconnect Cable Assemblies

Part Number Configurator

Example: FRZ8PJJY011F030 - OM4 8-Fiber Interconnect, Plenum, PanMPO-8 Female to PanMPO-8 Female, Polarity B, Optimized IL, 30 feet.

Character	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Example	F	R	Z	8	P	J	J	Y	0	1	1	F	0	3	0

1 – Fiber F = Fiber

2 – Cable Type R = Indoor, round

3 – Fiber Type
9 = OS2 Singlemode 9/125µm
Z = OM4 50/125µm
W = OM5 50/125µm
S = OM4+ 50/125µm

4 – Fiber Count
8 = 8-Fibers
C = 16-Fibers
U = 24-Fibers

5 – Jacket Type
P = Plenum (OFNP)
L = LSZH
B = LSZH Euroclass B2ca

6 – Connector
7   Types
G = MPO-8 Female (MM)
H = MPO-8 Male (MM)
J = PanMPO-8 Female (MM)
K = PanMPO-8 Male (MM)
X = MPO-8 Female APC (SM)
Y = MPO-8 Male APC (SM)
V = PanMPO-8 Female APC (SM)
W = PanMPO-8 Male APC (SM)
U = Unterminated (End B only)

8 – Construction/
Perfomance
A = Method A, Standard IL (SM)
B = Method B, Standard IL (SM)
X = Method A, Optimized IL
Y = Method B, Optimized IL
K = Method A, Ultra IL (MM)
L = Method B, Ultra IL (MM)

9 – Serial
10
11
See Table Below

12 – Unit of Measure
F = Feet
M = Meters

13 – Cable Asembly
14   Length
15
1 – 300 Feet
0.5 – 100 Meters

Serial	Breakout – End A	Breakout – End B
011	None	None
012	24 in. (60 cm)	24 in. (60cm)
013	None	

QuickNet MPO Interconnect Round Cable Assembly Detail

Length

Length
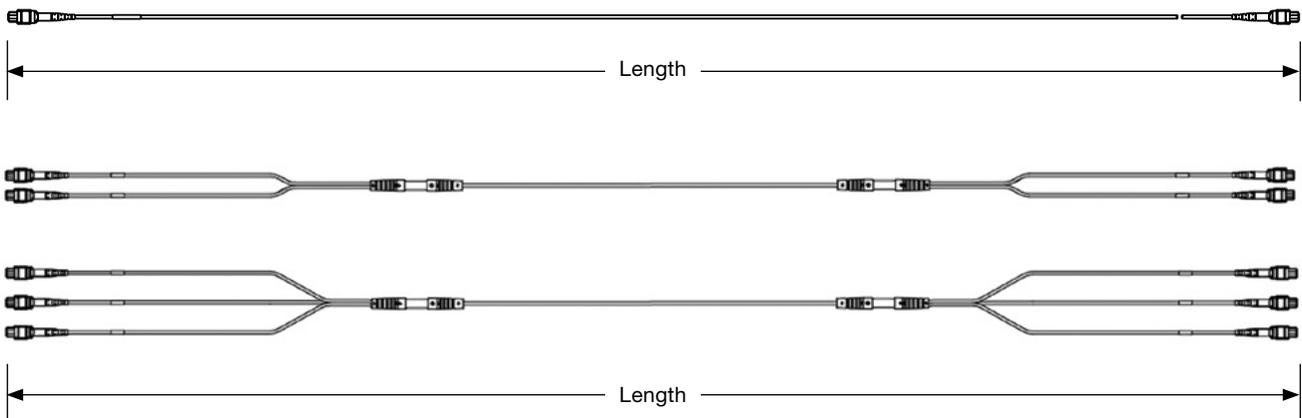
Base-8 MPO Breakout Harness Cable Assemblies

Part Number Configurator

Example: FHZ8PJPV016F015 = OM4 Harness, 8-Fiber, round, plenum, Pan-MPO-8 female to LC Uniboot Push Pull with 24in (60cm) equal breakout, 4 to 1 Polarity (U2), Optimized IL - 15 Feet.

Character	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Example	F	H	Z	8	P	J	P	V	0	1	1	F	0	3	5

1 – Fiber F = Fiber

2 – Cable Type H = Indoor, Round Harness

3 – Fiber Type
9 = OS2 Singlemode 9/125µm
Z = OM4 50/125µm
W = OM5 50/125µm
S = OM4+ 50/125µm

4 – Fiber Count 8 = 8-Fibers

5 – Jacket Type
P = Plenum (OFNP)
L = LSZH
B = LSZH Euroclass B2ca

6 – Connector Types
G = MPO-8 Female (MM)
H = MPO-8 Male (MM)
J = PanMPO-8 Female (MM)
K = PanMPO-8 Male (MM)
X = MPO-8 Female APC (SM)
Y = MPO-8 Male APC (SM)
V = PanMPO-8 Female APC (SM)
W = PanMPO-8 Male APC (SM)

7 – Connector Type (End B)
L = LC Duplex
P = LC Uniboot Push Pull
B = LC/APC Duplex (SM)
9 = LC/APC Uniboot Push Pull (SM)

8 – Construction/ Performance
Q = 4 to 1 / U2 - Std. IL (SM)
V = 4 to 1 / U2 - Opt. IL
U = 4 to 1 / U2 - Ultra IL (MM)
1 = 4 to 1 / U - Std. IL (SM)
2 = 4 to 1 / U - Opt. IL
3 = 4 to 1 / U - Ultra IL (MM)

9 – Serial
10 See Table Below
11

12 – Unit of Measure
F = Feet
M = Meters

13 – Cable Asembly
14   Length 1 – 300 Feet
15   0.5 – 100 Meters

Serial	Breakout Length	Stagger
011		Equal Breakout
012		LC Pair 1 Longest
013	18 in. (45cm)	LC Pair 1 Shortest
014		LC Pair 1 and 2 Longest
015		Pair 1 and 2 Shortest
016		Equal Breakout
017		LC Pair 1 Longest
018	24 in. (60cm)	LC Pair 1 Shortest
019		LC Pair 1 and 2 Longest
01A		Pair 1 and 2 Shortest

Serial	Breakout Length	Stagger
01B		Equal Breakout
01C		LC Pair 1 Longest
01D	30 in. (76cm)	LC Pair 1 Shortest
01E		LC Pair 1 and 2 Longest
01F		Pair 1 and 2 Shortest
01M		Equal Breakout
01N		LC Pair 1 Longest
01P	39 in. (1m)	LC Pair 1 Shortest
01Q		LC Pair 1 and 2 Longest
01AR		Pair 1 and 2 Shortest

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