Pretium EDGE® HD Solutions

A LANscape® Pretium® Solutions Product

Pretium EDGE® HD Solutions for Enterprise Data Centers and Storage Area Networks

Corning Pretium EDGE® HD solutions create a fiber optic tip-to-tip solution for data centers and storage area networks (SANs) consisting of housings, modules, panels, trunks, harnesses and jumpers.

Pretium EDGE HD Solutions
| Photo MM191

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Features and Benefits

Removable covers on the 1U and 2U housings
Provide easier access to modules and panels

Pretium EDGE reverse polarity uniboot duplex jumpers
Enables quick and easy polarity management

Improved mounting brackets
Allow for depth adjustment in the rack

New bracket option for 23-in racks
Offers the ultimate design flexibility

New mounting system
Allows for one-person installation

New snap-in routing guides
Provides easier cable management

Pretium EDGE® HD Solutions

Pretium EDGE® HD solutions are high-density preterminated optical cabling solutions offering industry-leading connector density. With unprecedented finger access, there is no need for additional tools enabling faster moves, adds and changes (MACs).

Pretium EDGE Solutions
| Photo LAN2279

Specifications

Connected Mated Pair		
	Insertion Loss, Max.	
	OM3/OM4	OS2
LC Reverse Polarity Uniboot	0.10 dB	0.25 dB
MTP® Compatible Connector	0.25 dB	0.75 dB

Modules/Harnesses - Low Loss		
	Insertion Loss, Max.	
	OM3/OM4	OS2
Component Value	0.5 dB	1.0 dB

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Modules/Harnesses - Ultra Low Loss		
	Insertion Loss, Max.	
	OM3/OM4	OS2
Component Value	0.35 dB	0.6 dB

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Pretium EDGE® Housing

Pretium EDGE® HD housings are mountable in 19-in racks or cabinets and provide industry-leading high-density connectivity when combined with Pretium EDGE modules, panels, harnesses, trunks and jumpers.

EDGE-01U
| Photo LAN1693

EDGE-01U-SP
| Photo LAN 7370

EDGE-02U
| Photo LAN6656

EDGE-04U
| Photo LAN6680

Part Number	Height Unit	Dimensions (W x D x H)	Packaging Dimensions (W x D x H)	Shipping Weight	Number of Panels per Housing
EDGE-01U	1U	432 mm x 561 mm x 44 mm (17 in x 22.1 in x 1.75 in)	565 mm x 657 mm x 171 mm (20.3 in x 27 in x 7.8 in)	7.7 kg (17 lb)	8
EDGE-01U-SP	1U	432 mm x 561 mm x 44 mm (17 in x 22.1 in x 1.75 in)	565 mm x 646 mm x 171 mm (19 in x 22.125 in x 7.75 in)	8.2 kg (18 lb)	12
EDGE-02U	2U	432 mm x 561 mm x 88 mm (17 in x 22.1 in x 3.5 in)	565 mm x 660 mm x 216 mm (22.3 in x 27.4 in x 8.4 in)	10.9 kg (24 lb)	24
EDGE-04U	4U	432 mm x 561 mm x 177 mm (17 in x 22.1 in x 7 in)	565 mm x 660 mm x 305 mm (23.3 in x 28.6 in x 13 in)	16.8 kg (37 lb)	48

Note: When rear strain-relief plate is removed from part number EDGE-01U-SP, product depth reduces to 14.9 in.

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Low Loss/Ultra Low Loss Modules

The Pretium EDGE® modules provide the interface between the MTP® connector on the trunk and the LC duplex jumpers that will then connect directly into the electronics. The LC duplex adapters feature hinged VFL-compatible shutters that move up and out of the way when the connector is inserted. Specially designed indents in the shutters ensure that the end faces of the connectors are never touched. These shutters replace the standard dust caps that typically once removed are never replaced, exposing the interior end faces to dust particles and possible damage.

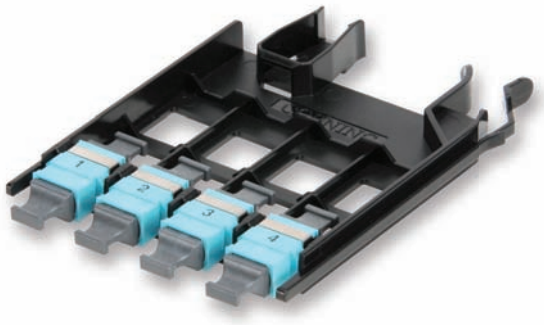
The Pretium EDGE Ultra Low Loss module allows for extended reach capabilities in high speed serial duplex transmission. The OM3/OM4 Pretium EDGE Ultra Low Loss modules are specified to 0.35 dB compared to 0.5 dB for the standard Pretium EDGE module.

Pretium EDGE Module with VFL-Compatible Shutters | Photo LAN1542

Part Number	Adapter Type Front	Adapter Color Front	Adapter Type Back	Fiber Category
ECM-UM12-04-89G	Shuttered LC	Blue	MTP	SM (OS2)
ECM-UM12-05-93Q	Shuttered LC	Aqua	MTP	50 µm MM (OM4)
ECM-UM12-05-93T	Shuttered LC	Aqua	MTP	50 µm MM (OM3)
ECM-UM12-18-89G	Shuttered LC APC	Green	MTP	SM (OS2)
ECM-UM12-05-93Q-ULL	Shuttered LC	Aqua	MTP	50 µm MM (OM4)

MTP® Adapter Panels

Pretium EDGE® MTP® Adapter Panels provide a simple interface to mate MTP Connectors. This occurs when connecting MTP trunks to MTP extender trunks, MTP trunks to trunk harnesses and in 40G multimode networks when MTP trunks are connected to 40G jumpers.



MTP Adapter Panel with Four MTP Adapters
| Photo LAN2695

Part Number	Fiber Count	Fiber Category
EDGE-CP24-E3	24	50 µm MM (OM3/OM4)
EDGE-CP24-90	24	SM (OS2)
EDGE-CP48-E3	48	50 µm MM (OM3/OM4)
EDGE-CP48-90	48	SM (OS2)

Trunk Specifications

Mechanical Characteristics							
Fiber Count	Nominal Outer Diameter	Pulling Grip Outer Diameter	Strain-Relief Bracket Type	Minimum Conduit Size with 18-in Elbow	Weight	Min. Bend Radius Installation	Min. Bend Radius Operation
12	5.5 mm ± 0.3 mm (0.22 in)	41 mm (1.6 in)	1	2.5 in	32 kg/km (21 lb/1000 ft)	82.5 mm (3.25 in)	27.5 mm (1.08 in)
24	7.7 mm ± 0.3 mm (0.30 in)	41 mm (1.6 in)	1	2.5 in	50 kg/km (34 lb/1000 ft)	115.5 mm (4.55 in)	38.5 mm (1.52 in)
36	8.0 mm ± 0.3 mm (0.31 in)	41 mm (1.6 in)	1	2.5 in	56 kg/km (38 lb/1000 ft)	120 mm (4.72 in)	40 mm (1.57 in)
48	8.5 mm ± 0.3 mm (0.33 in)	56 mm (2.2 in)	2	3.0 in	63 kg/km (42 lb/1000 ft)	127.5 mm (5.02 in)	42.5 mm (1.67 in)
72	10.5 mm ± 0.3 mm (0.41 in)	56 mm (2.2 in)	2	3.0 in	95 kg/km (64 lb/1000 ft)	157.5 mm (6.2 in)	52.5 mm (2.07 in)
96	11.9 mm ± 0.3 mm (0.47 in)	56 mm (2.2 in)	2	3.0 in	111 kg/km (74 lb/1000 ft)	178.5 mm (7.03 in)	59.5 mm (2.34 in)
144	12.5 mm ± 0.3 mm (0.49 in)	56 mm (2.2 in)	2	3.0 in	122 kg/km (82 lb/1000 ft)	187.5 mm (7.38 in)	62.5 mm (2.46 in)

Trunk Shipping Information

Reel Capacities						
Packaging Method	Box E	Reel 1	Reel 2	Reel 3	Reel W	Reel Z
Packaging Material	Corrugated box	Plastic reel	Plastic reel	Plastic reel	Plywood reel	Plywood reel
Reel Diameter (in)		23.5	23.5	23.5	36	41
Reel Width (in)		5	12	18	32	32
Box Dimensions (in)	21x21x3.3	26x25.5x7	26x25.5x14	26x25.5x20	-	-
Fiber Count	Capacities (ft)					
12	10-29	30-1178	1179-2500	-	-	-
24	10-29	30-601	602-1442	1443-2163	2164-2500	-
36	10-29	30-557	558-1336	1337-2004	2005-2500	-
48	10-29	30-493	494-1183	1184-1775	1776-2500	-
72	10-29	30-323	324-776	777-1163	1164-2106	2107-2500
96	10-29	30-252	253-604	605-906	907-1639	1640-2500
144	10-29	30-228	229-547	548-821	822-1486	1487-2500

Note: Trunks under 30 ft are shipped in a cardboard box and not on a reel.

Transmission Performance

Fiber Type	Multimode	Multimode	Single-mode
Fiber Core Diameter (µm)	50	50	8.2
Fiber Category	OM3	OM4	OS2
Fiber Code	T	Q	G
Performance Option Code	80	90	01
Wavelengths (nm)	850/1300	850/1300	1310/1383/1550
Maximum Attenuation (dB/km)	2.8/1.0	2.8/1.0	0.4/0.4/0.3
Serial 1 Gigabit Ethernet (m)	1000/600	1100/600	5000/-/-
Serial 10 Gigabit Ethernet (m)	300/-	550/-	10000/-/40000
Min. Overfilled Launch (OFL) Bandwidth (MHz*km)	1500/500	3500/500	-
Minimum Effective Modal Bandwidth (EMB) (MHz*km)	2000/-	4700/-	-
Induced Attenuation @ 7.5 mm Radius (dB)	< 0.2(2 turns, 850 nm)	< 0.2(2 turns, 850 nm)	-

** Single-mode (OS2) fiber is ITU-T G.652.D compliant.*
** 50 µm multimode fiber (OM3/OM4) meets 0.75 ns optical skew when used in all Corning Plug & Play™/Pretium EDGE® systems solutions.*
** OM3/OM4 Multimode fiber minimum effective modal bandwidth assumes 1.0 dB maximum total connector/splice loss.*

Notes: 1) *Improved attenuation and bandwidth options available.*
2) *Bend-insensitive single-mode fibers available on request.*
3) *Contact a Corning Customer Care Representative for additional information.*

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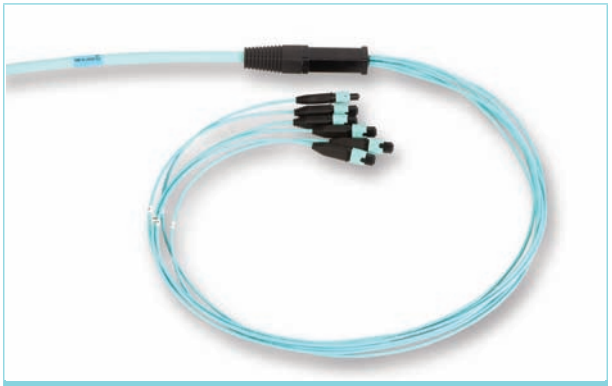
MTP® Trunks

Pretium EDGE® MTP trunks provide the backbone of the Pretium EDGE Solution. With non-pinned MTP connectors on both ends of the cable, these trunks are designed to interface with the Pretium EDGE Solutions or Plug & Play™ Systems modules. All trunks are shipped with strain-relief clips that allow for the tool-less installation in both Pretium EDGE Solutions and Plug & Play Systems housings. These trunks conform to TIA-568 Type-B polarity.



Pretium EDGE MTP Trunk
| Photo LAN1550

Ordering Information

□ □□□□ □□ □ PNDDU - □□□ F
1 2 3 4 5

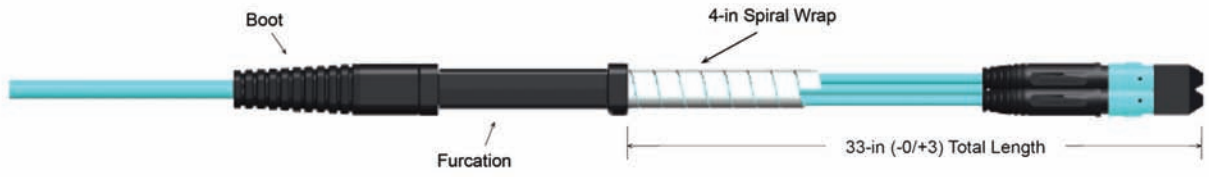
1 Select grip application.
G = Grip on one end
Z = No grips

2 Select non-pinned MTP Connectors.
7575 = Multimode
9090 = Single-mode

3 Select fiber count.
12 = 12 fibers
24 = 24 fibers
48 = 48 fibers
72 = 72 fibers
96 = 96 fibers
E4 = 144 fibers

4 Select fiber type.
T = 50 µm multimode (OM3)
Q = 50 µm multimode (OM4)
G = Single-mode (OS2)

5 Select cable length in ft (measured from furcation to furcation).
030, 040, 050, 060, 070, 080, 090, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190 or 200
Note: Other cable lengths available upon request.



Pretium EDGE Solutions Trunk Cable Configuration
| Drawing ZA-3496

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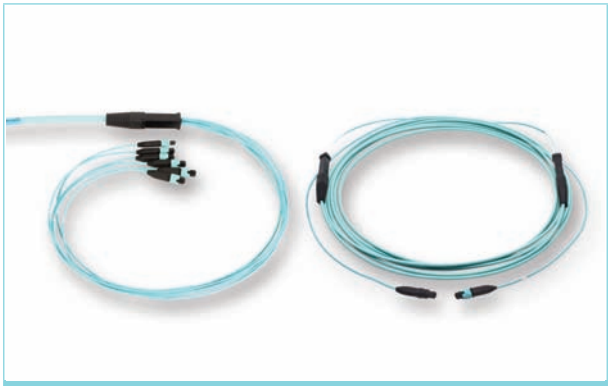
MTP® Extender Trunks

Pretium EDGE® MTP® extender trunks provide additional distance for the backbone of the Pretium EDGE Solution. With a non-pinned MTP connector on one end of the cable, a pinned MTP connector on the other, and a TIA-568 Type-A polarity, these trunks are designed to interface with a Pretium EDGE Solutions or Plug & Play™ Systems module and an MTP trunk. All trunks are shipped with strain-relief clips that allow for the tool-less installation in both Pretium EDGE Solutions and Plug & Play Systems housings. Most often these extender trunks will be used in a zone distribution area (ZDA).



Pretium EDGE MTP Extender Trunk
| Photos LAN1548 and LAN1550

Ordering Information

□ □□ □□ □□ □ PNCDX □□□ F
1 2 3 4 5 6

1 Select grip application.
G = Grip on one end
Z = No grips

2 Select pinned MTP Connectors.
93 = Multimode
89 = Single-mode

3 Select non-pinned MTP Connectors.
75 = Multimode
90 = Single-mode

4 Select fiber count.
12 = 12 fibers 72 = 72 fibers
24 = 24 fibers 96 = 96 fibers
48 = 48 fibers E4 = 144 fibers

5 Select fiber type.
T = 50 µm multimode (OM3)
Q = 50 µm multimode (OM4)
G = Single-mode (OS2)

6 Select cable length in ft (measured from furcation to furcation).
030, 040, 050, 060, 070, 080, 090, 100, 110, 120, 130, 140, 150, 160,

Pretium EDGE Extender Trunk Configuration
| Drawing ZA-3869

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Hybrid MTP® to LC Duplex Uniboot Trunks

Pretium EDGE® Hybrid MTP to LC duplex uniboot Trunks combine non-pinned MTP connectors that connect to Pretium EDGE modules and duplex uniboot LC connectors that connect directly to the electronics enabling more options for the cabling of data centers.

Ordering Information

1	2	3	4		5		6	
☐	☐☐☐☐	☐☐	☐	PND	☐	W	☐☐☐	F

1 Select grip application.
- G = Grip on one end
- Z = No grips

2 Select fiber type.
- 7579 = Multimode
- 9078 = Single-mode

3 Select fiber count.
- 12 = 12 fibers
- 24 = 24 fibers
- 48 = 48 fibers
- 72 = 72 fibers
- 96 = 96 fibers
- E4 = 144 fibers

4 Select fiber type.
- T = OM3
- Q = OM4
- G = OS2

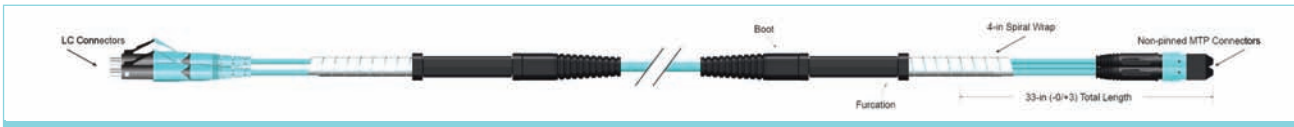
5 Select 2.0 mm LC leg length.
- J = 12 (-0/+3) in
- K = 24 (-0/+3) in
- L = 36 (-0/+3) in (standard)
- M = 48 (-0/+3) in
- N = 60 (-0/+3) in
- P = 72 (-0/+3) in

6 Select cable length in ft.

(measured from furcation to furcation)

030, 040, 050, 060, 070, 080, 090, 100, 110, 120, 130, 140, 150, 170, 180, 190 or 200

Note: Other cable lengths available upon request.



Pretium EDGE Solutions Hybrid Trunk Configuration
| Drawing ZA-3870

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Pretium EDGE® HD Solutions

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Hybrid MTP® to LC Duplex Uniboot Extender Trunks

Pretium EDGE® hybrid MTP to LC duplex uniboot trunks combine pinned MTP connectors that connect into MTP trunks and duplex uniboot LC connectors that connect directly into the electronics providing more options for the cabling of data centers. These hybrid extender trunks are most often used in a zone distribution area (ZDA).

Ordering Information

☐ ☐☐☐☐ ☐☐ ☐ PNC ☐ Z ☐☐☐ F

1 2 3 4 5 6

1 Select grip application.

G = Grip on MTP Connector side
Z = No grip

2 Select fiber type.

9379 = Multimode
8978 = Single-mode

3 Select fiber count.

12 = 12 fibers
24 = 24 fibers
48 = 48 fibers
72 = 72 fibers
96 = 96 fibers
E4 = 144 fibers

4 Select fiber type.

T = OM3
Q = OM4
G = OS2

5 Select 2.0 mm LC leg length (-0/+3).

J = 12 in
K = 24 in
L = 36 in (standard)
M = 48 in
N = 60 in
P = 72 in

6 Select cable length in ft. (measured from furcation to furcation)

030, 040, 050, 060, 070, 080, 090, 100, 110, 120, 130, 140, 150, 170, 180, 190 or 200

Note: Other cable lengths available upon request.

Pretium EDGE Solutions Hybrid Extender Trunk Configuration
| Drawing ZA-3871

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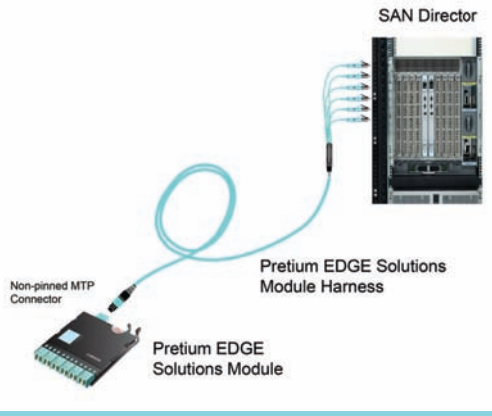
Module Harnesses

The Pretium EDGE module harness is designed to create a cross-connect point near the electronics by enabling port replication. This is possible with duplex LC connectors to interface with the electronics and a non-pinned MTP® connector to connect into the back of a module. With port replication, your installation will look the same even after multiple moves, adds, and changes (MACs). This solution can be used in a horizontal distribution area (HDA).



Pretium EDGE Module Harness
| Drawing ZA-3642

Ordering Information

H □□□□ 12 □ PH-□ W0 □□ F
1 2 3 4

1 Select fiber type.
- 7579 = Multimode (OM3/OM4)
- 9078 = Single-mode (OS2)

2 Select fiber type.
- T = OM3
- Q = OM4
- G = OS2

3 Select LC leg stagger.
- 1 = Cisco MDS 9506, 9509 and 9513 48-port blade
- 2 = Brocade 46000, DCX and DCX-4S 48-port blade
- 3 = Cisco Nexus 7010 and 7018 32-port
- 4 = Uniform length of 6 in

4 Select harness length in ft.
- 07 = Short harness for adjacent mounting of hardware and electronics
- 10 = Medium harness for flexible mounting options within cabinet
- 20 = Long harness for adjacent cabinet mounting

See Notes 1 and 2.

1) Harness length is measured from MTP Compatible Connector to furcation plug and therefore does not include LC leg length.
2) Harnesses can be made in 1-ft increments from 3 to 20 ft.

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Trunk Harnesses

The Pretium EDGE trunk harness is designed to facilitate an interconnect point when the electronics are located in a separate area than the cross-connect or patching field. This is possible with duplex LC connectors to interface with the electronics and a pinned MTP® connector to connect into a trunk. This solution can be used in an equipment distribution area (EDA).

Ordering Information

H □□□□ 12 □ PH-□ Z 0□□ F

1 2 3 4

1 Select fiber type.

9379 = Multimode (OM3/OM4)
8978 = Single-mode (OS2)

2 Select fiber type.

T = OM3
Q = OM4
G = OS2

3 Select LC leg stagger.

1 = Cisco MDS 9506, 9509 and 9513 48-port blade
2 = Brocade 48000, DCX and DCX-4S 48-port blade
3 = Cisco Nexus 7010 and 7018 32-port blade
4 = Uniform length of 6 in

4 Select harness length in ft.

07 = Short harness for adjacent mounting of hardware and electronics
10 = Medium harness for flexible mounting options within cabinet
20 = Long harness for adjacent cabinet mounting

See Notes 1 and 2.

1) Harness length is measured from MTP Compatible Connector to furcation plug and therefore does not include LC leg length.
2) Harnesses can be made in 1-ft increments from 3 to 20 ft.

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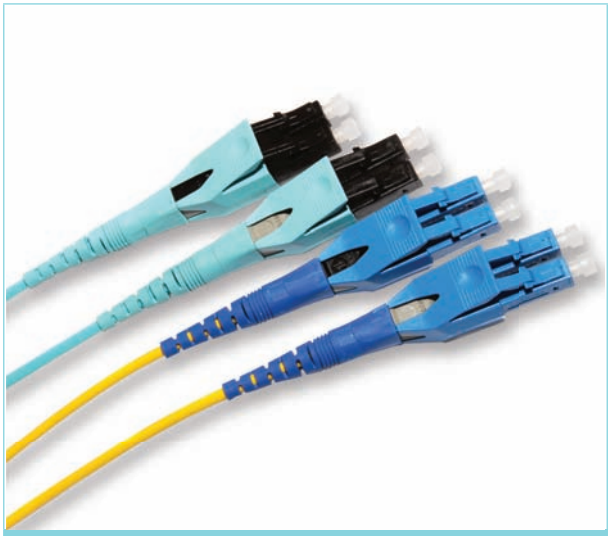
Reverse Polarity Uniboot Duplex Jumpers

Pretium EDGE® Reverse Polarity Uniboot Duplex Jumpers allow for the quick and easy conversion from a TIA-568 A-B polarity to a TIA-568 A-A polarity without exposing the fibers or needing any tools. This jumper comes with a straight-through polarity from the factory, but you can convert it to a flipped jumper with no tools. This uniboot design allows one cable to carry both fibers, reducing jumper bulk when routing.



Pretium EDGE Reverse Polarity Uniboot Duplex Jumpers | Photo LAN2223

Ordering Information

□□ □□ 02 □ D □ 20 □□□ □

1 2 3 4 5 6

1 Select connector one type.

Multimode

05 = Multimode (OM3/OM4) LC duplex
57 = Multimode (OM3/OM4) SC duplex
79 = Multimode (OM3/OM4) LC reverse polarity uniboot

Single-mode

04 = Single-mode (OS2) LC duplex
72 = Single-mode (OS2) SC duplex
78 = Single-mode (OS2) LC UPC
80 = Single-mode (OS2) LC APC reverse polarity uniboot

2 Select connector two type.

79 = Multimode (OM3/OM4) LC reverse polarity uniboot
78 = Single-mode (OS2) LC UPC
80 = Single-mode (OS2) LC APC reverse polarity uniboot

3 Select fiber type.

T = 50 um multimode (OM3)
Q = 50 um multimode (OM4)
G = Bend-improved single-mode (OS2)

4 Select flame rating.

1 = Riser
8 = Plenum

5 Select length.

001-999

6 Select unit of measure.

M= Meters
F = Feet

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Reverse Polarity LC Duplex Clips

All Pretium EDGE® reverse polarity uniboot LC duplex connectors come with a clip that is removable. We offer a total of 10 colors to allow for easy link identification or fabric segmentation.

Pretium EDGE Reverse Polarity Uniboot LC Duplex Clips | Photo LAN2254

Ordering Information

TRIGGER - BP - U [ ]
1

1 Select color.

- N = Blue
- R = Red
- E = Orange
- B = Black
- G = Green
- Y = Yellow
- K = Beige
- P = Rose
- C = Slate
- A = Aqua

Note: Must order in multiples of 100.

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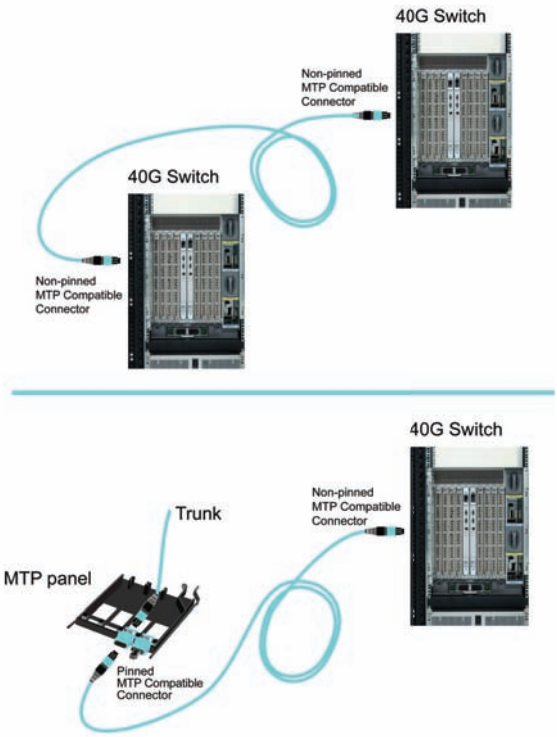
MTP® Jumpers

Pretium EDGE® MTP® Jumpers allow for the seamless migration to higher data rates for multimode systems in the data center when used in conjunction with universal trunks. This jumper is based around pinned or non-pinned 12-fiber MTP Compatible Connectors. Pictured here are the two most common applications for this type of jumper to make ordering easier. All the jumpers listed have a TIA-568 Type-B polarity and are plenum rated.



Pretium EDGE MTP Jumper
| Drawings ZA-3866 and ZA-3868

Ordering Information

J □□ □□ 1 2 □ E 8 - N B □□□ F
1 2 3 4

1 Select MTP® Compatible Connector one.
75 = Non-pinned OM3/OM4
93 = Pinned OM3/OM4
89 = Pinned OS2
90 = Non-pinned OS2

2 Select MTP Compatible Connector two.
75 = Non-pinned OM3/OM4
93 = Pinned OM3/OM4
89 = Pinned OS2
90 = Non-pinned OS2
See Note 1.

3 Select fiber type.
T = 50 µm multimode (OM3)
Q = 50 µm multimode (OM4)
G = Single-mode (OS2)

4 Select length in feet.
001-999

1) Always list lowest numbered connector first.
2) Other polarities available.

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Housing Accessories

Part Number	Product Description	Units per Delivery	
EDGE-BKT-WT-2RU	Wire Tray Mounting Bracket for up to 2U of housing mounting space	1/1	
EDGE-BKT-WT-4RU	Wire Tray Mounting Bracket for up to 4U of housing mounting space	1/1	
EDGE-BKT-LR-2RU	Ladder Rack Mounting Bracket for up to 2U of housing mounting space	1/1	
EDGE-BKT-LR-4RU	Ladder Rack Mounting Bracket for up to 4U of housing mounting space	1/1	

Cleaning Accessories

Part Number	Product Description	Units per Delivery	
CLEANER-PORT-LC	Single-fiber Port Cleaner for LC, keyed LC, and MU connector end faces for both UPC and APC polishes	1/1	
2104466-01	Fiber Optic Cleaning Tool used to clean MTP® connector end faces as well as MTP Connectors installed in a module	1/1	

RoHS COMPLIANT

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