



# Siemon 40/100G

Fiber Cabling Solutions

[WWW.SIEMON.COM](http://WWW.SIEMON.COM)



## ▶▶ Siemon 40/100G Fiber Cabling Solutions

Siemon's MTP-based 40/100Gig Solutions provide a fast, simple and economical upgrade path from 10 Gigabit to 40 or 100 Gigabit applications. Simply replace the 10G Plug and Play modules with cost-effective MTP pass through adapter plates and replace the SC or LC fiber jumpers with MTP equipment cords and you are ready. Your existing Siemon Plug and Play enclosures and Trunks remain in place and are fully utilized.

The 40/100G Fiber Cabling Solution benefits

- Fast, simple and economical upgrades from 10G to 40 or 100G
- Superior Standard Loss and Low Loss optical performance options
- Ultra-high density with unmatched accessibility
- Small Cable diameter for more efficient pathway fill and air flow

## ▶▶ Parallel Optics

40G transmission is based on 8 fibers - 4 transmit and 4 receive at 10G each . Current 100G transmission is based on 20 fibers - 10 transmit and 10 receive at 10G each.

It is expected that 100GBASE-SR5 standard will be based on 8 fibers - 4 transmit and 4 receive at 25G each.





## Advanced Fiber Cabling Solutions

As part of Siemon's LightHouse™ advanced fiber cabling solutions, Siemon's 40/100G fiber cabling solutions enable next generation performance for network, server and storage applications 40/100G fiber cabling solutions are fully compatible with Siemon's expanded offering of Fiber Management enclosures and adapter plates:



**ULTRA-HIGH DENSITY LIGHTSTACK™**  
Enclosure and Adapter Plates



**RACK-MOUNT INTERCONNECT CENTER (RIC)**  
With Quick-Pack™ Adapter Plates

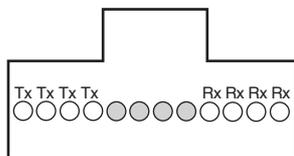


**FIBER CONNECT PANEL (FCP3)**  
With Quick-Pack Adapter Plates

# 40/100G EQUIPMENT CORDS

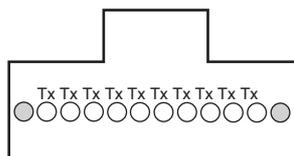
## MTP Jumpers

Siemon's MTP jumpers are used to connect the MTP trunk backbone to the active equipment. The compact design of the MTP footprint and Siemon's RazorCore™ cable achieves greater connectivity access, reduction in horizontal cable pathway congestion and improved airflow around the active equipment.



### 40G BASE-SR4 8-Fiber MTP

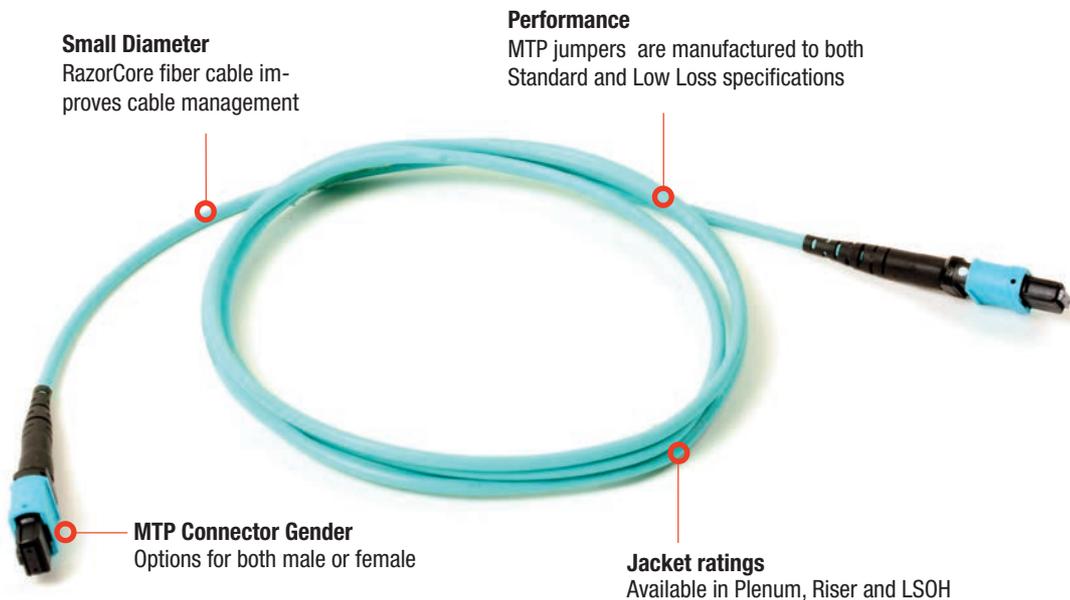
- With the 40G option (1) 12 strand MTP trunk is used for one link



### 100G BASE-SR10, 2x12-Fiber MTP's

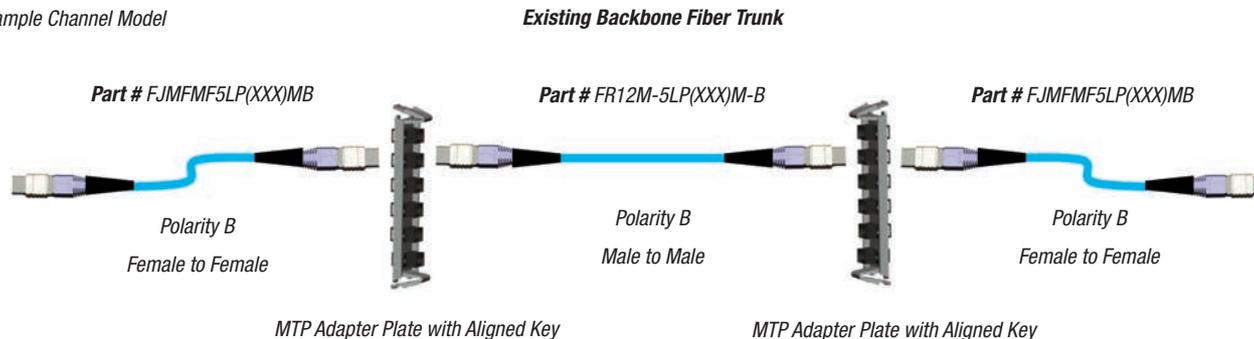
- With the 100G option (2) 12 strand MTP trunks are used for one link

- Active equipment has a male MTP/MPO connector
- All assemblies are B-polarity (straight-through wiring)
- MTP adapter plate has aligned key orientation
- The trunk is male-to-male (in contrast to typical 10G cassette-based MTP channels where the trunk is female-to-female)



## 40G Channel

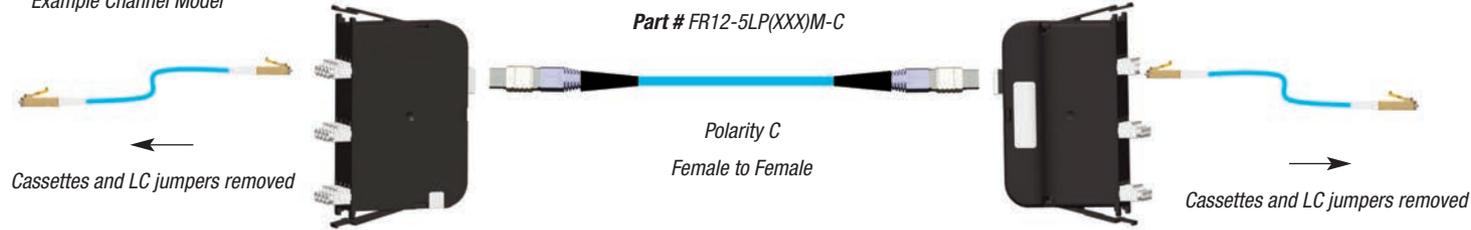
Example Channel Model



# 10G CASSETTE-BASED CHANNEL MIGRATION TO 40G Channel

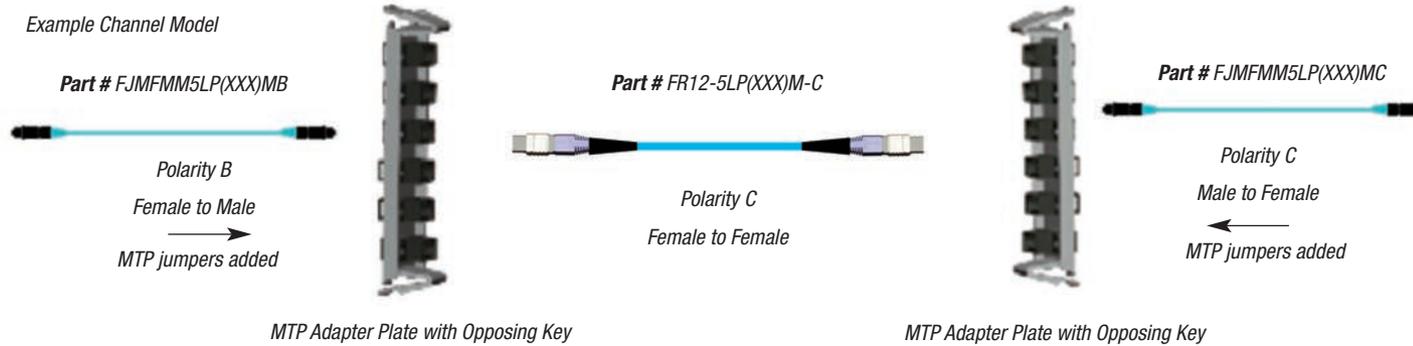
## 10G Channel

Example Channel Model



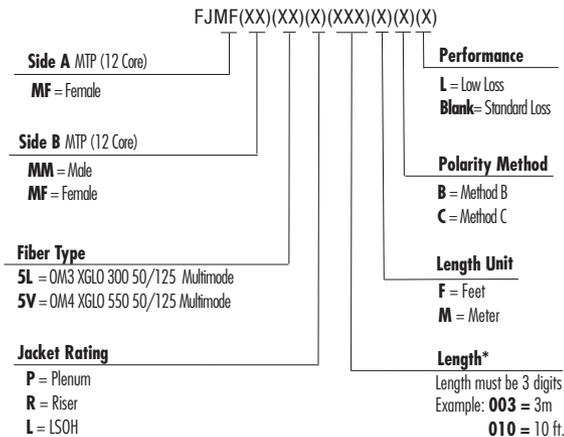
## 40G Channel

Example Channel Model



## Ordering Information

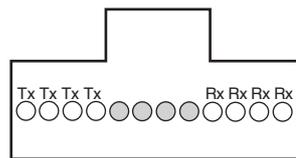
### 40/100G EQUIPMENT CORDS



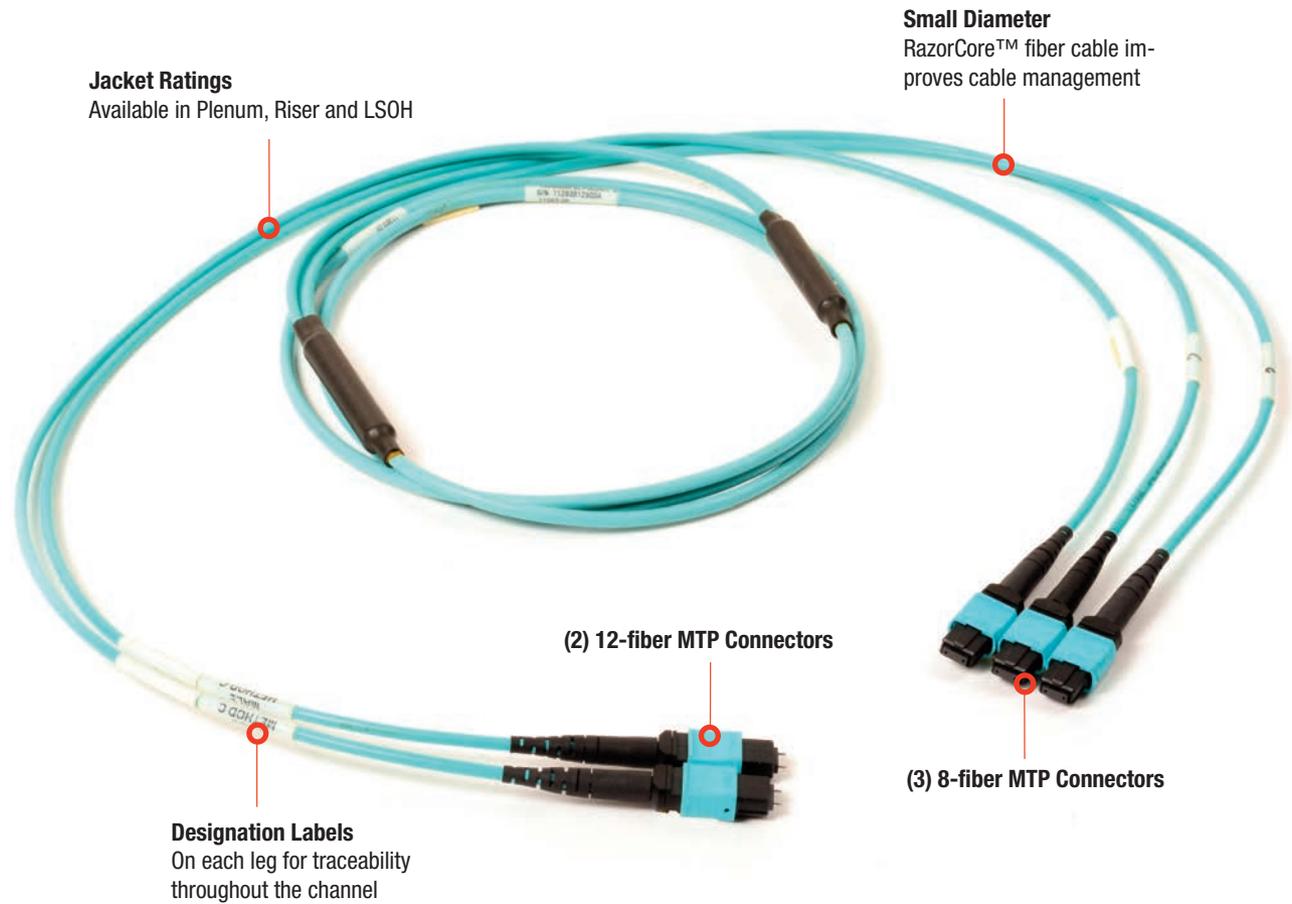
# 40/100G EQUIPMENT CONVERSION CORDS

## CONVERSION CORD FOR 40G: (2) 12F MTP TO (3) 8F MTP

Siemon's Conversion cord ensures 100 percent utilization of 12 fiber MTP to MTP trunks at 40 and 100G transmission. The cords transition (2)12-fiber MTP connectivity from the backbone trunk to (3) 8-fiber MTP connector.



**40G BASE-SR4 8-Fiber MTP**  
• With the 40G option (1) 12 strand MTP trunk is used for one link

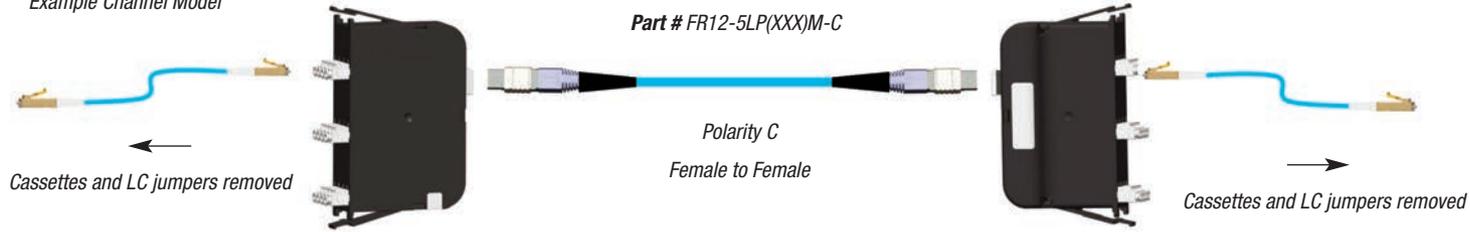


- Utilizes conversion jumper on each end of the channel instead of traditional 12-fiber MTP jumper
- 40G channels use 8 of the 12 available fibers leaving 33% of the backbone unused. The conversion jumper eliminates the unused fibers allowing 100% backbone fiber utilization

# 10G CASSETTE-BASED CHANNEL MIGRATION TO 40G Channel

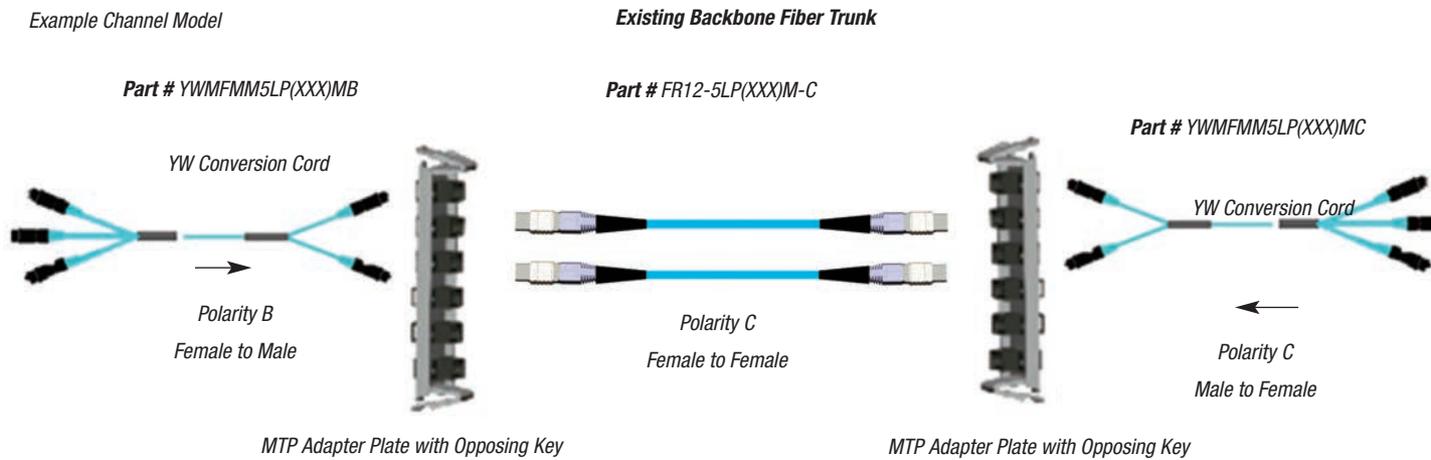
## 10G Channel

Example Channel Model



## 40G Channel

Example Channel Model



## Ordering Information

### 40/100G EQUIPMENT CONVERSION CORDS



YWMF(XX)(XX)(X)(XXX)(X)(X)(X)

**Side A** MTP (8 Core)

**MF** = Female

**Side B** MTP (12 Core)

**MM** = Male

**MF** = Female

**Fiber Type**

**5L** = OM3 XGLO 300 50/125 Multimode

**5V** = OM4 XGLO 550 50/125 Multimode

**Jacket Rating**

**P** = Plenum

**R** = Riser

**L** = LSOH

**Performance**

**L** = Low Loss

**Blank** = Standard Loss

**Polarity Method**

**B** = Method B

**C** = Method C

**Length Unit**

**F** = Feet

**M** = Meter

**Length\***

Length must be 3 digits

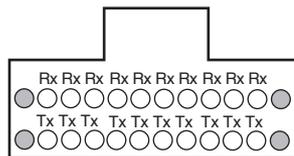
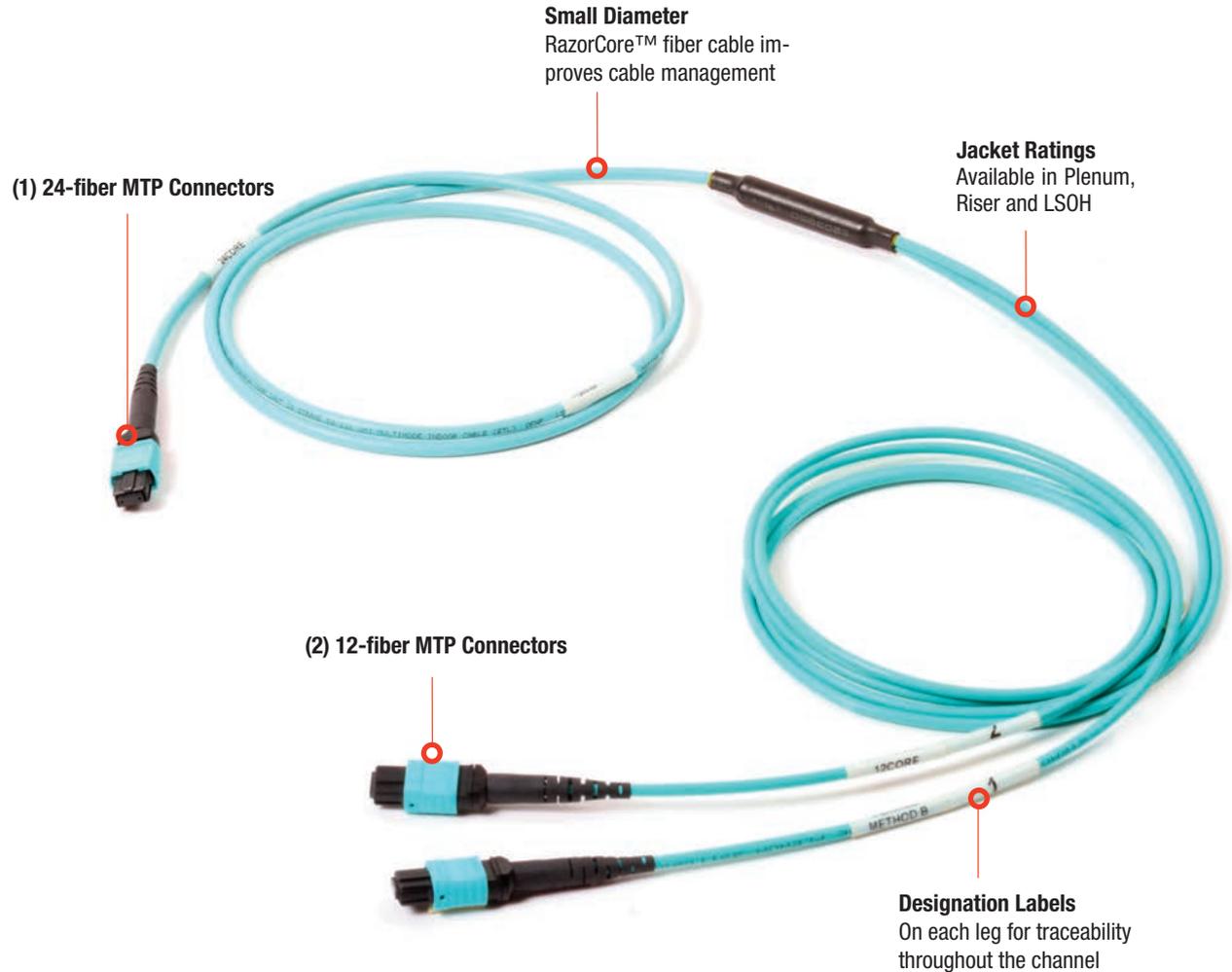
Example: **003** = 3m

**010** = 10 ft.

# 40/100G EQUIPMENT CONVERSION CORDS

## CONVERSION JUMPER FOR 100G: (2) 12F MTP TO (1) 24F MTP

Siemon's Conversion cords utilizes (2) 12 fiber MTP to MTP trunks and transitions them from the backbone trunk to (1) 24-fiber MTP connector to connect to the active equipment.



### 100G BASE-SR10, 1 x 24-Fiber MTP's

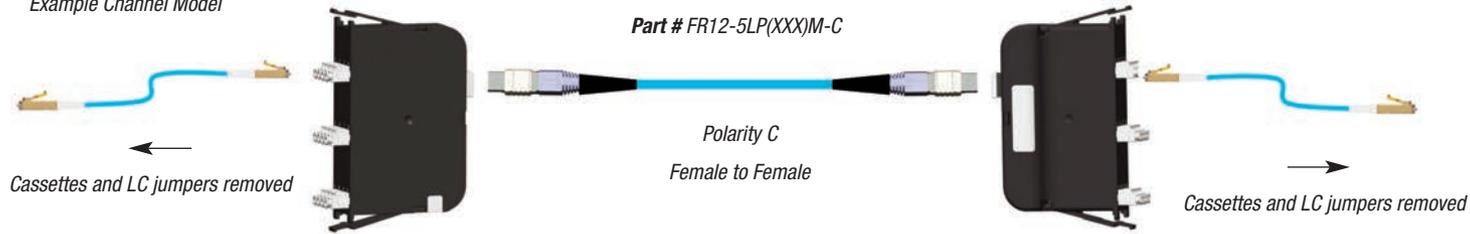
- With the 100G option (1)  
24 strand MTP trunks are used for one link

- Utilizes conversion jumper on each end of the channel instead of traditional 12-fiber MTP jumper
- 40G channels use 8 of the 12 available fibers leaving 33% of the backbone unused.  
The conversion jumper eliminates the unused fibers allowing 100% backbone fiber utilization

# 10G CASSETTE-BASED CHANNEL MIGRATION TO 100G Channel

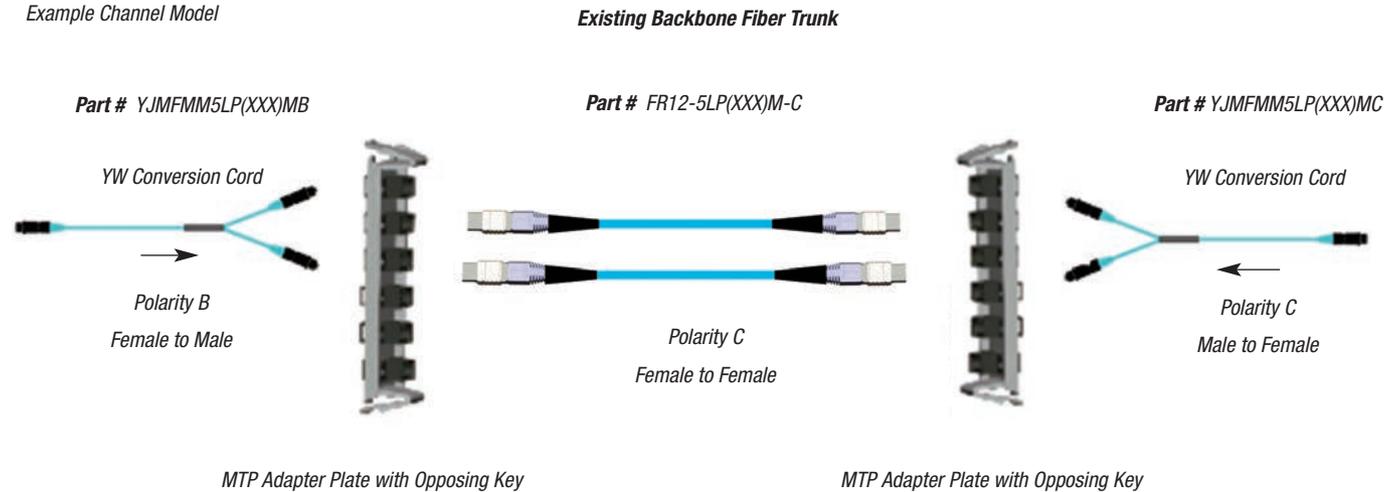
## 10G Channel

Example Channel Model



## 100G Channel

Example Channel Model



## Ordering Information

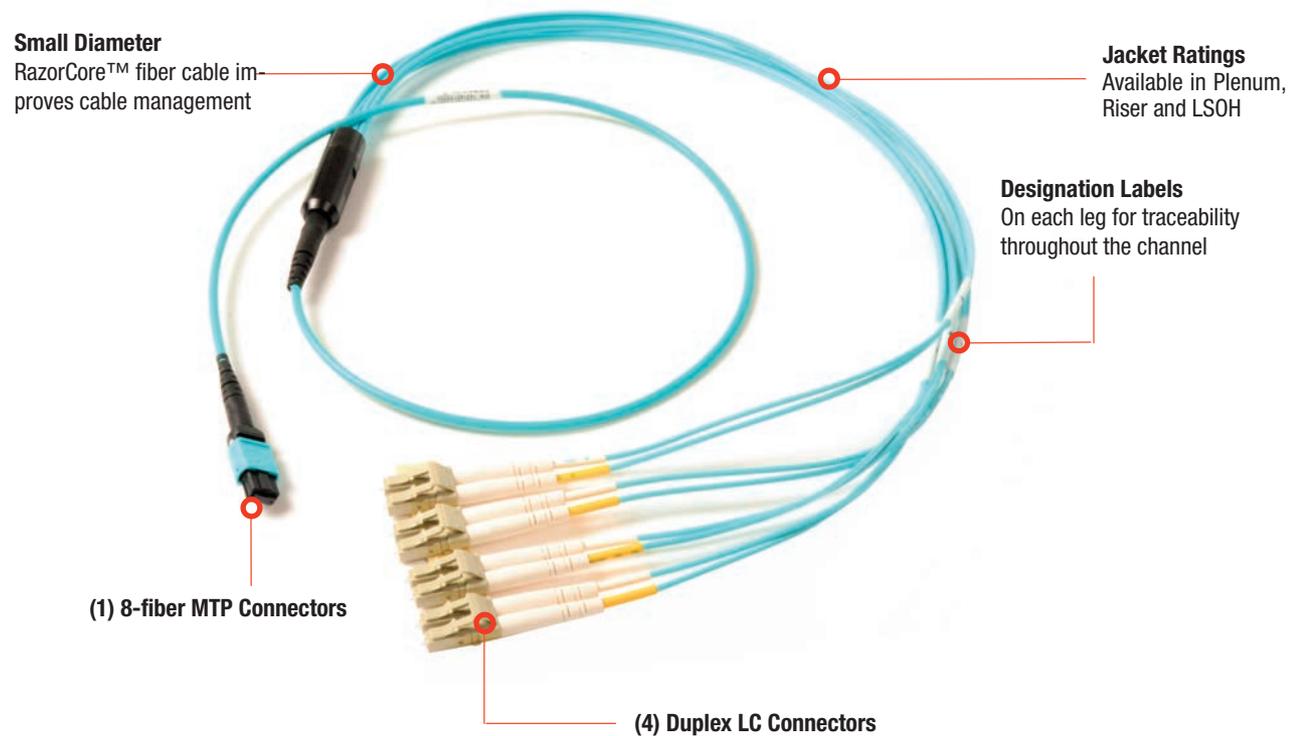
### 40/100G EQUIPMENT CONVERSION CORDS



YJMF(XX)(XX)(X)(XXX)(X)(X)(X)	
<p><b>Side A</b> MTP (24 Core)  <b>MF</b> = Female</p> <p><b>Side B</b> MTP (12 Core)  <b>MM</b> = Male  <b>MF</b> = Female</p> <p><b>Fiber Type</b>  <b>5L</b> = OM3 XGLO 300 50/125 Multimode  <b>5V</b> = OM4 XGLO 550 50/125 Multimode</p> <p><b>Jacket Rating</b>  <b>P</b> = Plenum  <b>R</b> = Riser  <b>L</b> = LSOH</p>	<p><b>Performance</b>  <b>L</b> = Low Loss  <b>Blank</b> = Standard Loss</p> <p><b>Polarity Method</b>  <b>B</b> = Method B  <b>C</b> = Method C</p> <p><b>Length Unit</b>  <b>F</b> = Feet  <b>M</b> = Meter</p> <p><b>Length*</b>                  Length must be 3 digits                  Example: <b>003</b> = 3m  <b>010</b> = 10 ft.</p>

## LC to MTP 4 X 10G HYBRID EQUIPMENT CORDS

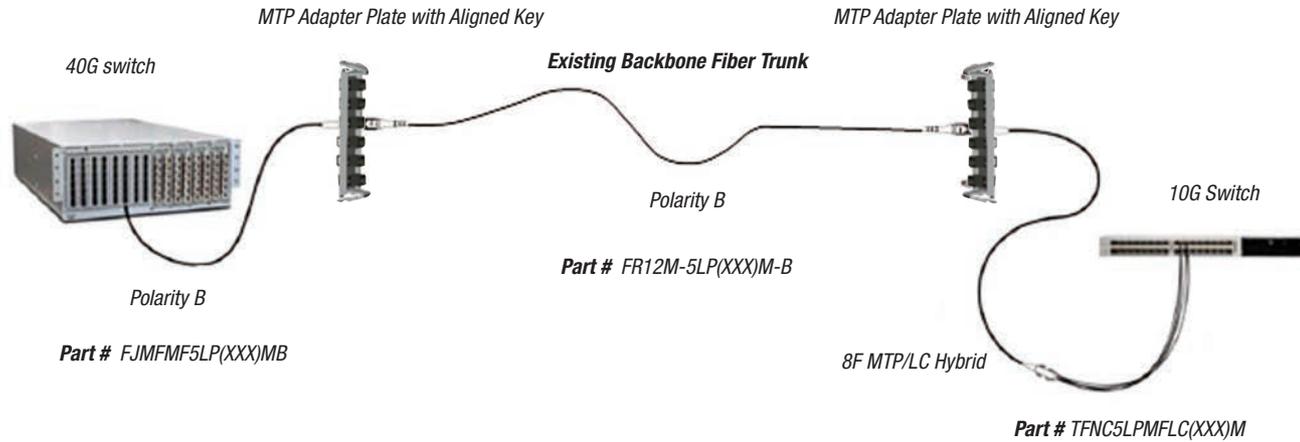
Siemon's LC to MTP 4 X 10G Hybrid Equipment Cords have (1) MTP connector on one end and (4) duplex LC connectors on the other for connection to active equipment with LC ports used in aggregation of multiple 10G ports to one 40G port.



- Specifically wired to manage polarity for transmit to receive

# 40G to 4 X 10G Channel

Example Channel Model



## Ordering Information

LC TO MTP 4 X 10G HYBRID EQUIPMENT CORDS



	T(X)NC(XX)(X)(XX)LC(XXX)(X)	
<b>Performance</b>		<b>Length Unit</b>
F = Standard Loss		F = Feet
L = Low Loss		M = Meter
		<b>Length*</b>
		Length must be 3 digits
		Example: 005 = 5m
		050 = 50 ft.
<b>Strand Count</b>		<b>Side A MTP (8 Core)</b>
N = 8 Fibers		MM = Male
		MF = Female
<b>Pulling Eye Option</b>		<b>Jacket Rating</b>
C = None		P = Plenum
		R = Riser
<b>Fiber Type</b>		L = LSOH
5L = OM3 XGLO 300 50/125 Multimode		
5V = OM4 XGLO 550 50/125 Multimode		

# ▶▶ MTP Adapter Plates

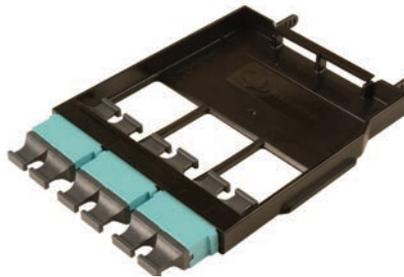
## Ordering Information

### RIC QuickPack™ Adapter Plates

RIC-F-MP(XX)-01 ..... MTP Adapter Plate, black

**Fiber Count**

- 12 = 12 (1 port)
- 24 = 24 (2 ports)
- 48 = 48 (4 ports)
- 72 = 72 (6 ports)
- 96 = 96 (8 ports)



### LightStack™ Adapter Plates

LS-MP(X)-01(X)(XX)

<p><b>MTP Port Count</b></p> <p>2 = 2 (MTP ports)</p> <p>4 = 4 (MTP ports)</p> <p>6 = 6 (MTP ports)</p>	<p><b>Key Orientation</b></p> <p><b>B</b> = Aligned (key up to key up)</p> <p><b>C</b> = Opposed (key up to key down)</p>	<p><b>Adapter Color</b></p> <p><b>AQ</b> = Aqua **</p> <p><b>BK</b> = Black**</p> <p><b>GR</b> = Gray*</p>
---	---	--

\* Polarity Method B Only  
 \*\* Polarity Method C Only

### High Density FCP3 Adapter Plates

PPM-F-MP(XX)-01-(X)

<p><b>Fiber Count</b></p> <p>12 = 12 strands (1 port)</p> <p>24 = 24 strands (2 ports)</p> <p>48 = 48 strands (4 ports)</p> <p>72 = 72 strands (6 ports)</p>	<p><b>Polarity</b></p> <p><b>Blank</b> = Standard Polarity</p> <p><b>B</b> = Method B</p>
--	---