



Base 8 Plug & Play

Fiber Solutions

WWW.SIMON.COM



LightHouse[™]
Advanced Fiber Cabling Solutions



▶ About Base 8 Plug & Play

Current 40 Gig (40GBASE-SR4) and 100 Gig (100GBASE-SR4) multimode fiber applications, as well as future 200 and 400 Gig multimode and singlemode applications are based on 8 optical fibers with 4 fibers transmitting and 4 receiving at either 10 Gb/s or 25 Gb/s.

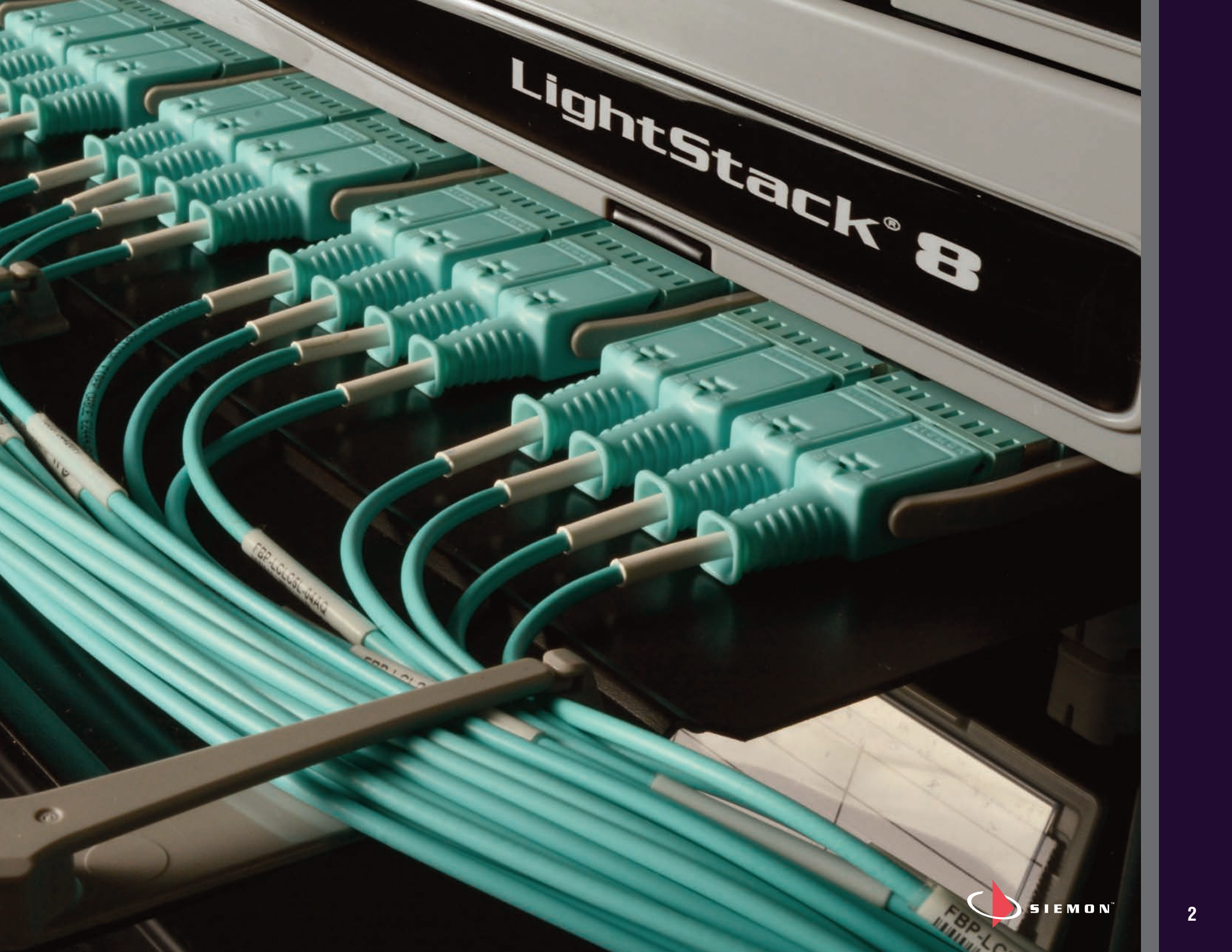
Part of Siemon's Lighthouse™ Advanced Fiber Cabling Solutions, Base 8 plug-and-play Solutions provide the simplest, most seamless transition from duplex 10 Gb/s to current and future 8-fiber applications.

Siemon's Base 8 Plug-and-Play Solutions:

- Include enclosures, modules, adapters, trunk assemblies and jumpers to enable a complete end-to-end 8-fiber system
- Enable 100% fiber utilization without the need for conversion cords or modules in 40/100 Gig applications and beyond
- Available in multimode OM3 and OM4 standard and low loss, as well as singlemode fiber types
- Feature smaller diameter RazorCore™ fiber to reduce cable diameter of assemblies and provide a 2mm diameter MTP jumper for better airflow and pathway capacity
- Offer the most efficient, simplest form of migration from duplex fiber applications to current and future 8-fiber applications to 400 Gig



LightStack® 8



▶▶ LightStack® 8 Ultra High Density Fiber Enclosure

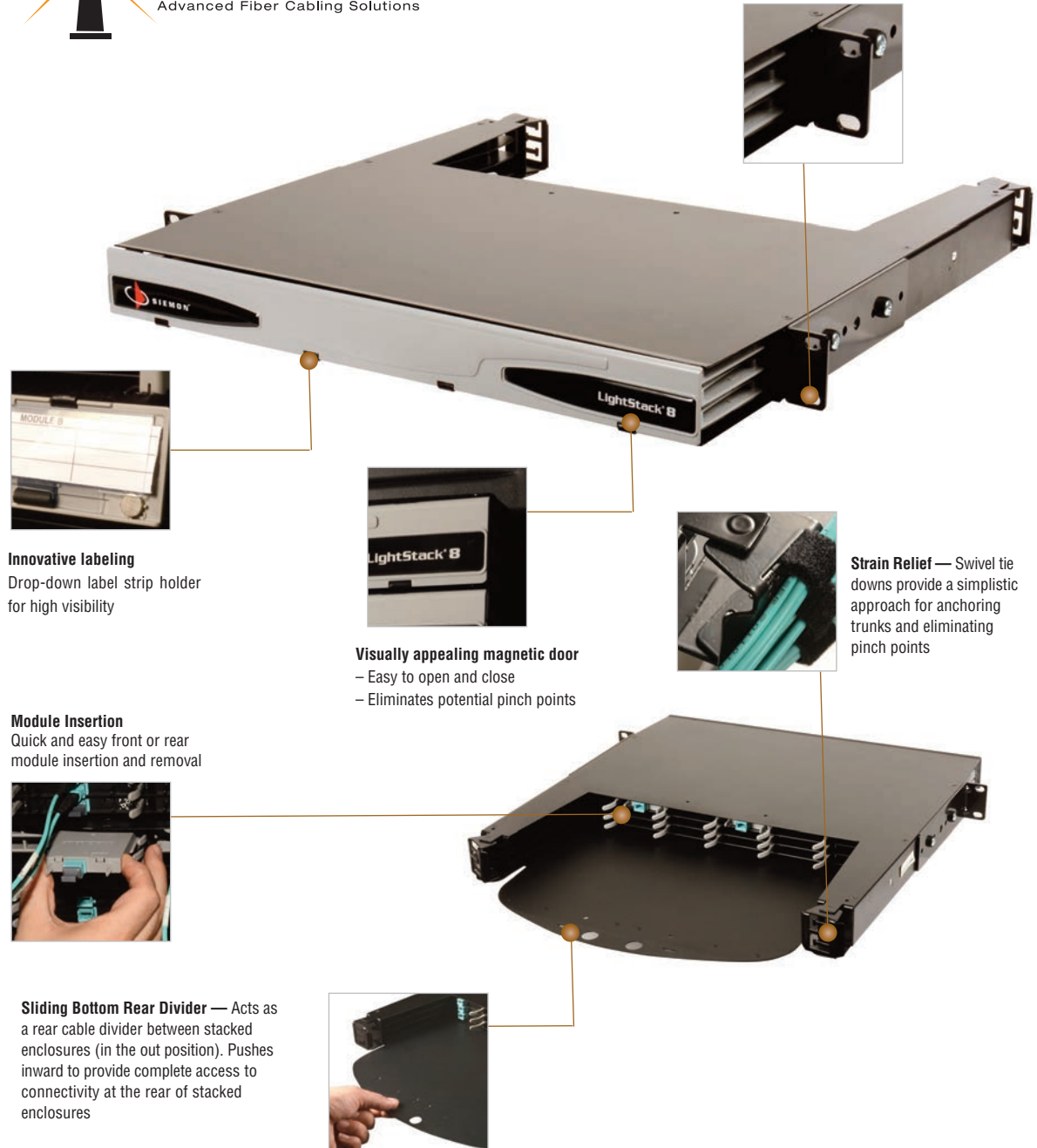
As today's high-density Data Centers migrate from 10 to 40 and 100 gigabit speeds and beyond, they require low loss plug-and-play fiber solutions that enable 100% fiber utilization in advanced high-speed Base 8 parallel optic applications, eliminating the need for conversion cords or conversion modules.

Part of Siemon's LightHouse™ Advanced Fiber Cabling Solutions, the LightStack 8 Ultra High Density Plug-and-Play System offers superior density, port access and cable management in a sleek, modern enclosure. It offers the most simplest form of migration from duplex 10 Gig to 8-fiber 40/100 Gig and future 8-fiber 200/400 Gig applications. Siemon also offers a variety of Base 8 MTP trunks, jumpers and hybrid equipment cords for use with LightStack 8, providing a complete ultra high-density end-to-end Base 8 plug-and-play fiber system.



Mounting options

Rack mounting brackets can be attached at any of 3 horizontal positions



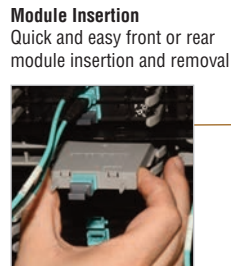
Innovative labeling
Drop-down label strip holder for high visibility



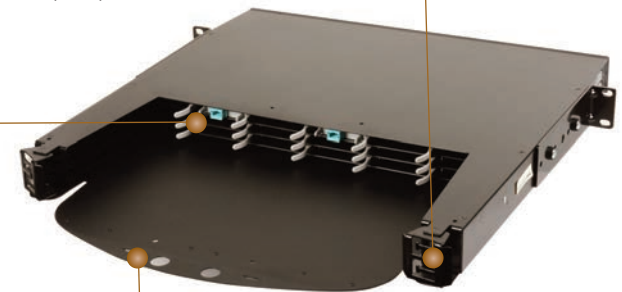
Visually appealing magnetic door
– Easy to open and close
– Eliminates potential pinch points



Strain Relief — Swivel tie downs provide a simplistic approach for anchoring trunks and eliminating pinch points



Module Insertion
Quick and easy front or rear module insertion and removal



Sliding Bottom Rear Divider — Acts as a rear cable divider between stacked enclosures (in the out position). Pushes inward to provide complete access to connectivity at the rear of stacked enclosures



LightStack® 8 Enclosures

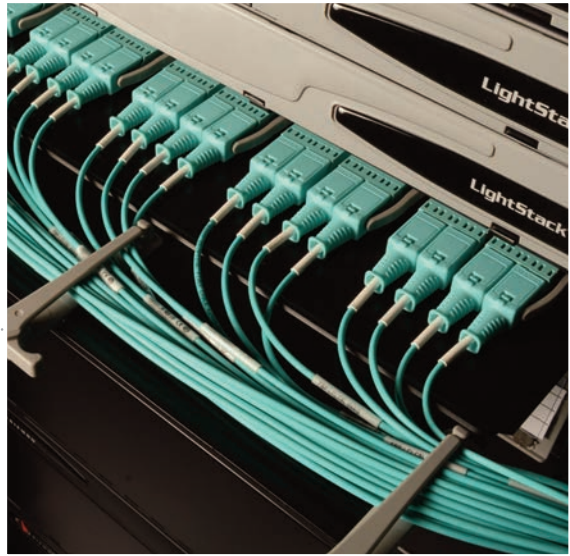


Ultra High Density
144 fibers per 1U (LC interface)
864 fibers per 1U (MTP interface)
576 fibers per 4U (LC interface)
3456 fibers per 4U (MTP interface)



Cable Management Clips
Unlatch and swing open for full access to any jumper

High Capacity Design
Handles both traditional 2mm zipcord and interconnect tight-buffered jumper types



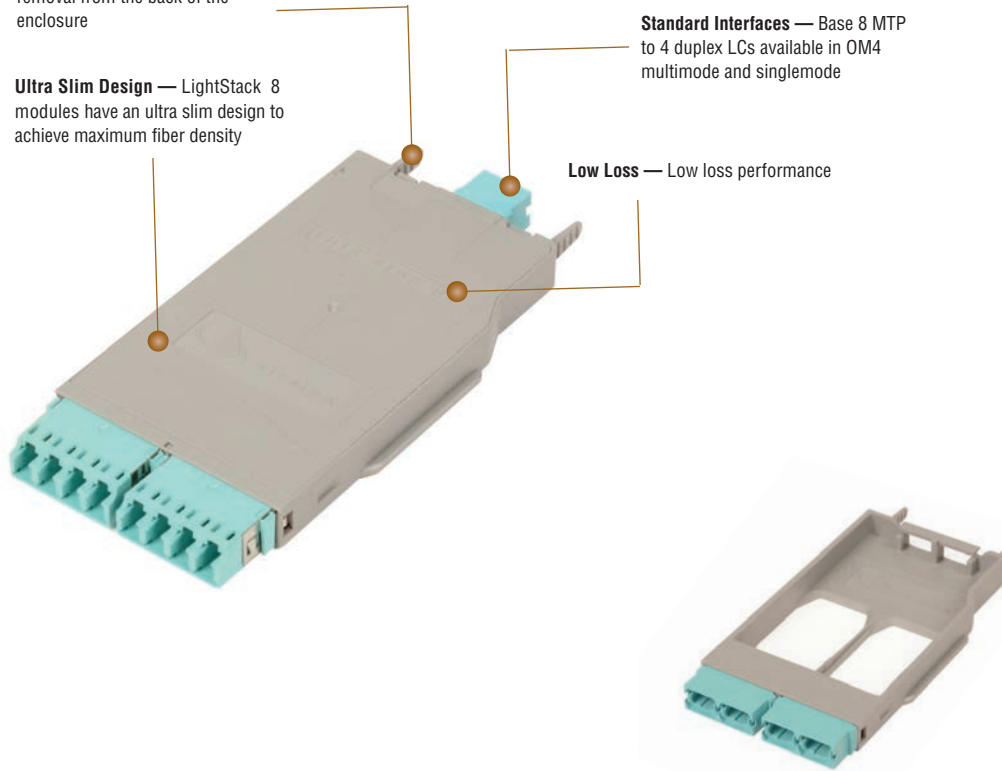
LightStack® 8 Modules

Rear Module Handles — Handles in the rear of module help facilitate removal from the back of the enclosure

Ultra Slim Design — LightStack 8 modules have an ultra slim design to achieve maximum fiber density

Standard Interfaces — Base 8 MTP to 4 duplex LCs available in OM4 multimode and singlemode

Low Loss — Low loss performance



LightStack® 8 Adapter Plates

- Ultra slim design to achieve maximum fiber density
- Used with Base 8 MTP trunks and MTP jumpers or MTP to LC cords (MTP adapter plates) or LC BladePatch® RazorCore™ trunks (LC adapter plates)
- Handles in the rear of module helps facilitate removal from the back of the enclosure

MTP Adapter Plate



LC Adapter Plate



LightStack® 8 Modules and Adapter Plates

LightStack 8 1U enclosures house up to 18 LightStack 8 modules or adapter plates, and LightStack 8 4U enclosures house up to 72 LightStack 8 modules or adapter plates, supporting up to 576 LC fibers and 3456 MTP fibers. Their ultra slim design allows for superior fiber density, and the modules and adapters are easily inserted or removed from the front and rear of the enclosures.

For 10 Gig or other duplex applications, the MTP to LC modules are deployed with Base 8 MTP plug-and-play trunk cables for the backbone and LC BladePatch® jumpers for equipment connections. When used in conjunction with LC BladePatch RazorCore™ trunks (for rear connections), the LC adapter plates provide a simple way to integrate traditional LC to LC connectivity within the LightStack 8 enclosure.

Base 8 MTP adapter plates are deployed with Base 8 MTP plug-and-play trunk cables for the backbone and MTP jumpers for day-one 40 and 100 Gig 8-fiber applications, as well as future 200 and 400 Gig 8-fiber applications.

▶▶ High Density FCP3 Fiber Connect Panel

High Density FCP3 Fiber Connect Panel

Economically connect, protect and manage up to 96 fibers within 1 rack mount unit. Designed to integrate with high density FCP3 fiber Plug and Play modules.

High Density

Supports up to 96 fibers in 1U

Enhanced Accessibility

Fiber drawer slides to the front and rear for maximum access to fiber connections

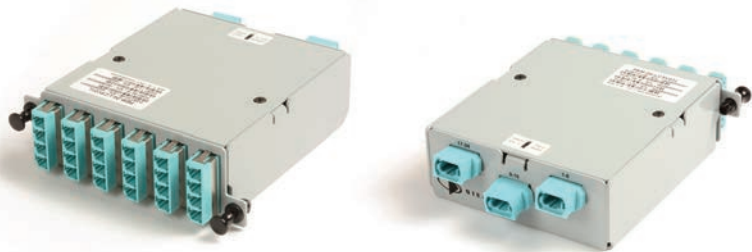
Bend Radius Management

Recessed modules provide a high-capacity jumper management zone that helps maintain proper fiber bend radius



High Density FCP3 Connect Panel Plug and Play Modules and Adapter Plates

Siemon LC to MTP® FCP3 Plug and Play modules and LC and MTP adapter plates are designed for simple, snap-in deployment within the high density FCP3 fiber connect panel. Providing up to 24 LC fibers per module, the factory terminated and tested modules are available in OM3 and OM4 multimode and singlemode configurations. The LC adapter plates provide a simple way to integrate traditional LC to LC connectivity within the high density FCP3 enclosure, while the MTP adapter plates support 40 and 100 Gig applications and beyond.



Base 8 Modules



MTP Adapter Plates

High Density

Modules provide up to 24 LC fibers per module, supporting up to 96 ports within the 1U FCP3 fiber connect panel

100% Fiber Utilization and Future Application Support

Base 8 modules feature three 8-fiber MTPs for use with 8-fiber assemblies used in 40 and 100 Gig applications and beyond, eliminating the need for conversion cords

Fast Deployment

Snap-in mounting and multi-fiber MTP connectivity offers ultra-fast deployment of high-performance fiber channels

Easy Identification

Base 8 modules are color coded gray to easily distinguish from Base 12 systems

Compact Housing

Reduces mounting depth for greater cable management space within enclosures

Optimized Adapter Spacing

Enables easy finger access to fiber jumper connector latches in high density patching environments

Multimode and Singlemode Modules

Utilizes zirconia ceramic sleeves for optimum performance

▶▶ Base 8 Plug and Play Trunk Assemblies

Combining Siemon's reduced-diameter RazorCore™ cable with 8-fiber MTP connectors, Base 8 Plug and Play MTP Trunk Assemblies are designed to be quickly routed and connected to Siemon Plug-and-Play Modules and MTP Adapter Plates. Custom configurable to precise application requirements, these Base 8 assemblies put high-performance, high-density fiber connections exactly where you need them while providing more efficient migration to support high-speed 8-fiber applications.

Multiple Fiber Types

Available in multimode laser-optimized OM3 and OM4 50/125 and singlemode OS1/OS2

Reduced Pathway Fill

Siemon's RazorCore cable has significantly reduced cable diameter

Low Loss Versions

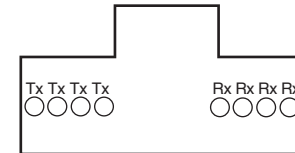
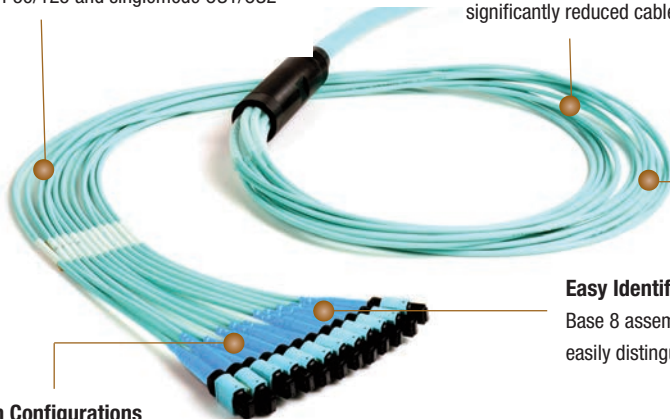
Siemon's Plug and Play cable assemblies are also available in low loss multimode to support multiple mated pairs in 10/40/100G applications

Easy Identification

Base 8 assemblies feature a blue boot to easily distinguish from Base 12 assemblies

Custom Configurations

Available from 8 to 144 fiber counts in increments of 8 fibers



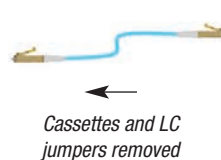
40GBASE-SR4 8-Fiber and 100GBASE-SR4 8-Fiber MTP

(1) 8 strand MTP trunk is used for one link

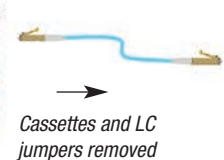
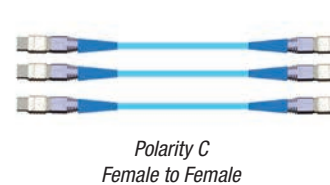
10G CASSETTE-BASED CHANNEL MIGRATION TO BASE 8 40/100G

10G Channel

Example Channel Model



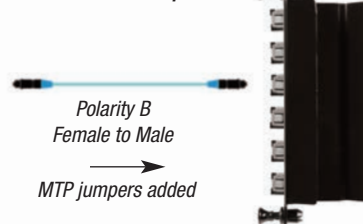
Existing Base 8 Backbone Fiber Trunk



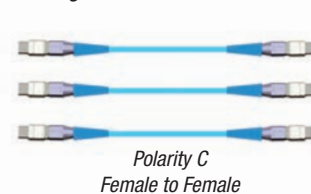
Base 8 40G Channel

Example Channel Model

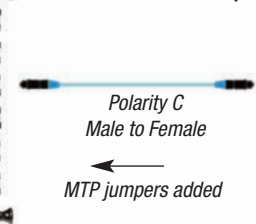
Base 8 MTP 2mm Jumper



Existing Base 8 Backbone Fiber Trunk



Base 8 MTP 2mm Jumper



MTP Adapter Plate with Opposing Key added

MTP Adapter Plate with Opposing Key added

BASE 8 40/100G Equipment Cords

BASE 8 MTP 2mm Jumpers

Siemon's Base 8 MTP jumpers are used to connect the MTP trunk backbone to the active equipment. The 8-fiber design ensures 100% utilization of fiber in 8-fiber 40/100G applications, while the compact design of the MTP footprint and Siemon's 2mm diameter RazorCore™ cable achieves greater connectivity access, reduction in cable pathway congestion and improved airflow.

Small Diameter
2mm RazorCore fiber cable improves cable management and pathway fill.

Multiple Fiber Types
Available in Multimode laser-optimized OM3 and OM4 and Singlemode OS1/OS2

Jacket ratings
Available in Plenum, Riser and LSOH

MTP Connector Gender
Options for both male or female

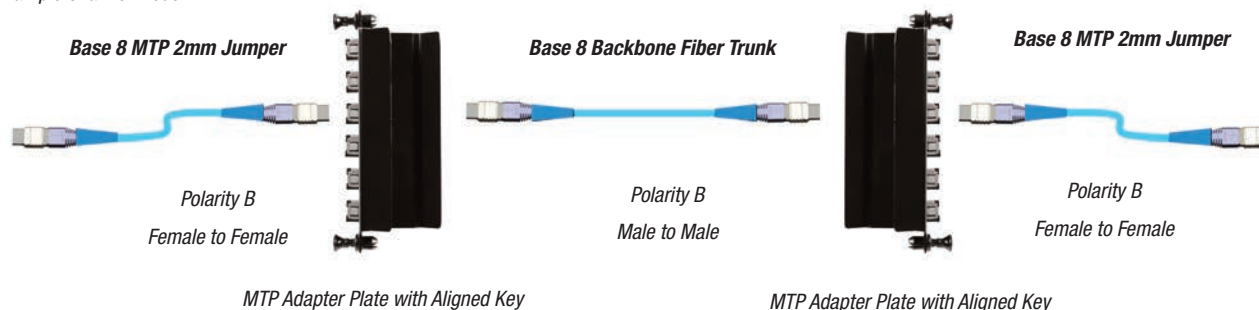
Easy Identification
Base 8 assemblies feature a blue boot to easily distinguish from Base 12 assemblies

40GBASE-SR4 8-Fiber and 100GBASE-SR4 8-Fiber MTP
(1) 8 strand MTP trunk is 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



▶▶ Base 8 MTP® to LC Hybrid Equipment Cords

Utilizing high quality Siemon RazorCore™ cable, Base 8 MTP to LC Equipment Cords offer a connectivity transition from 8-fiber MTP connectors to duplex LC. Ideal to facilitate interconnects or cross connects between active equipment, these Base 8 MTP to LC Cords may be implemented using Siemon's MTP to MTP Adapter Plates to provide direct MTP to LC patching options over a wide range of distances and infrastructure configurations.

Multiple Fiber Types

Available in multimode laser-optimized 50/125 OM3 and OM4 and singlemode OS1/OS2

Small Diameter

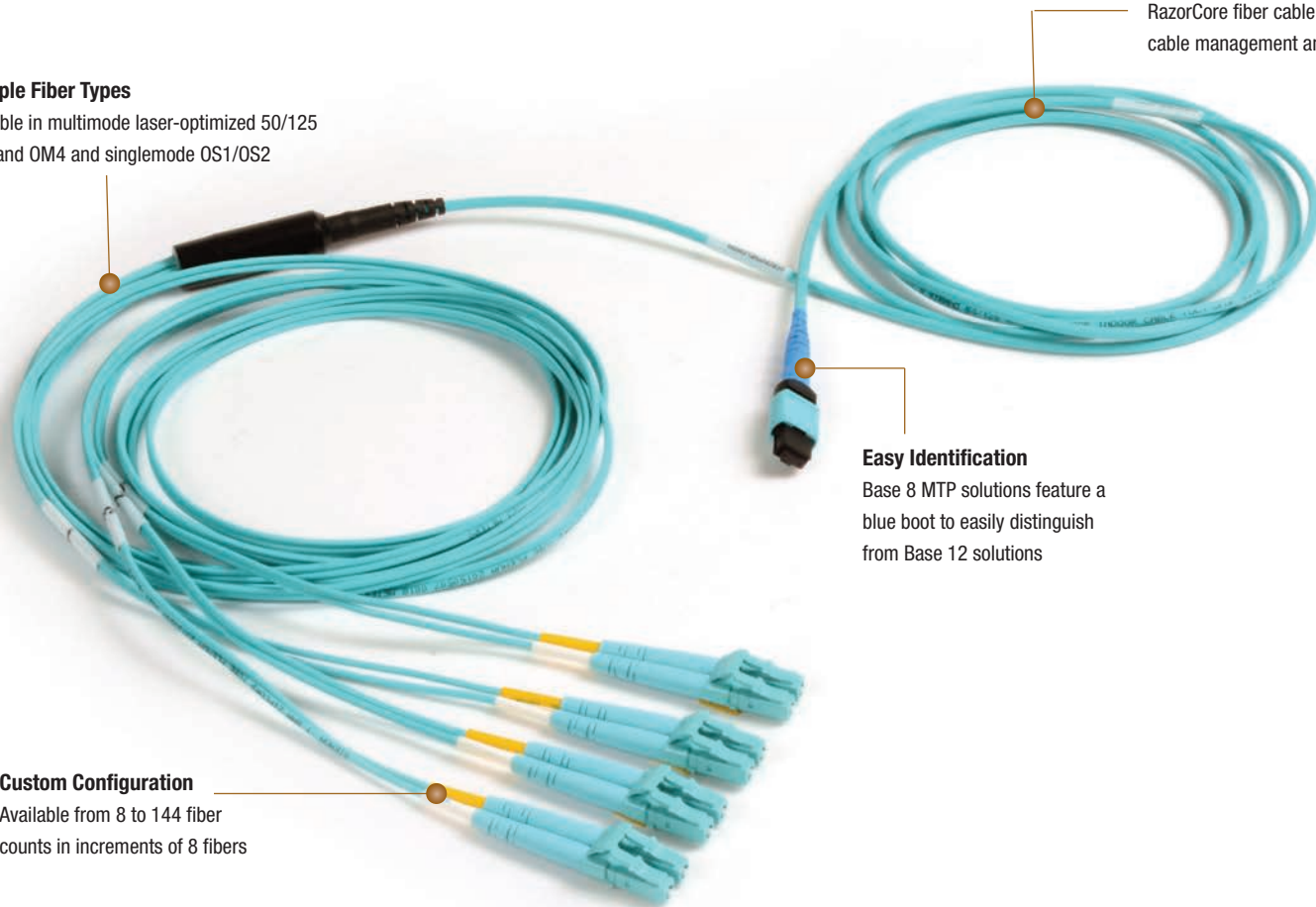
RazorCore fiber cable improves cable management and pathway fill

Easy Identification

Base 8 MTP solutions feature a blue boot to easily distinguish from Base 12 solutions

Custom Configuration

Available from 8 to 144 fiber counts in increments of 8 fibers



Base 8 MTP® to LC BladePatch® 4 X 10G Hybrid Equipment Cords

Utilizing high quality Siemon RazorCore™ cable, Base 8 MTP to LC 4 X10G equipment cords offer a connectivity transition from one 8-fiber MTP connector to four duplex LC BladePatch connectors that feature an innovative push-pull boot design to control the latch, enabling easy access and removal in tight-fitting areas. Ideal to facilitate interconnects or cross connects between active equipment, these Base 8 MTP to LC BladePatch cords may be implemented using Siemon's MTP to MTP Adapter Plates to provide direct MTP to LC patching options over a wide range of distances and infrastructure configurations. They are used for connection to active equipment with LC ports used in aggregation of four 10G ports to one 40G port.

Multiple Fiber Types

Available in multimode laser optimized 50/125 OM3 and OM4 and singlemode OS1/OS2

Small Diameter

RazorCore fiber cable improves cable management and pathway fill

Easy Identification

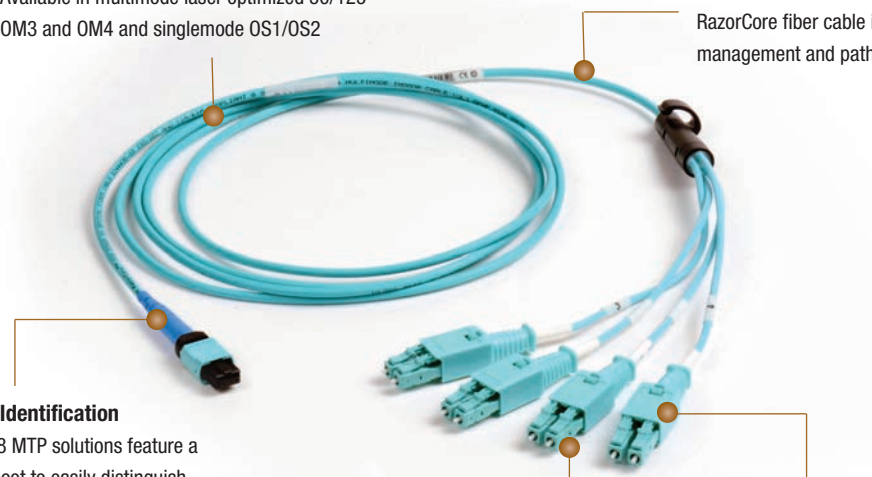
Base 8 MTP solutions feature a blue boot to easily distinguish from Base 12 solutions

Enhanced Installation and Removal

Innovative and patented LC BladePatch with push-pull latch activation for easy access in high density environment

Low Profile Boot

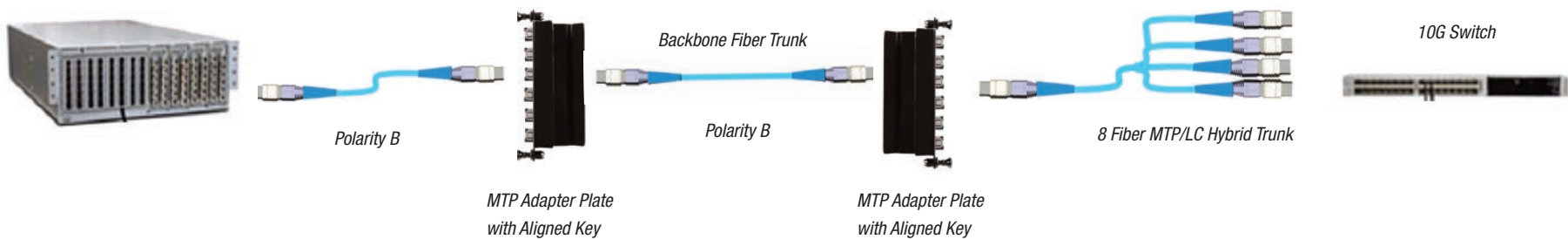
Optimizes side-stackability



40G to 4 X 10G Channel

Example Channel Model

40G Switch



**Worldwide Headquarters
North America**
Watertown, CT USA
Phone (1) 860 945 4200

**Regional Headquarters
India Middle East**
Dubai, United Arab Emirates
Phone (971) 4 3689743

**Regional Headquarters
Europe Russia Africa**
Chertsy, Surrey, England
Phone (44) 0 1932 571771

**Regional Headquarters
Asia Pacific**
Sydney, Australia
Phone (86) 21 5385 0303

**Regional Headquarters
China**
Shanghai, P.R. China
Phone (86) 215385 0303

**Regional Headquarters
Latin America**
Bogota, Colombia
Phone (571) 657 1950/51/52

**Siemon Interconnect Solutions
Watertown, CT USA**
Phone (1) 860 945 4213 US
www.siemon.com/SIS