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MPO Cable Assemblies and Adapters ❯

Designed to unleash high-speed data center capabilities, MPO Cable Assemblies and Adapters use high-density MTP® and MPO-style connectors to deliver streamlined connectivity, high port density, superior loss performance and simplified maintenance for the high-bandwidth networks of tomorrow.

ADVANTAGES AND FEATURES

Improves fiber density for high-speed applications
The connectors incorporate up to 48 fibers into a compact connector, enabling high-speed data transmission while using less rack space.

Enhances routing flexibility
Using round instead of flat cables allows installers greater 360-degree flexibility when routing multiple jacketed cables in dense system networks and constrained spaces.

Reduces maintenance and lowers costs
Rugged connectors that consolidate higher fiber counts into fewer cables help simplify inspection and maintenance operations.
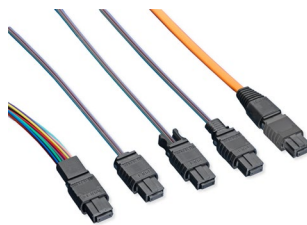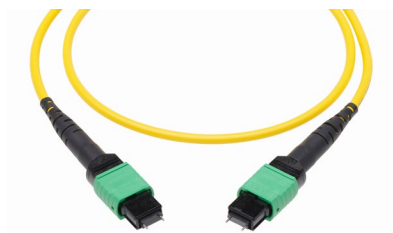
Connector Types	MTP, MPO
Fiber Counts	8, 12, 16, 24, 32, 48, 72, 144, 288
Fiber Types	Multi-mode, low-loss single-mode
Use With	MPO adapters/QSFP transceivers
Durability (min.)	50 mating cycles
Cable Lengths	1.0 to 20.0m (longer cables available as custom solutions)
Operating Temperatures	-5 to +70°C

Streamlines installation
Color-coded and keyed MTP-brand and MPO-style connectors help accelerate assembly operations and prevent improper connections or assembly errors.

Offers superior design flexibility
Using industry-standard MPO connectors and offering a range of fiber counts with single-mode and multi-mode options help ease system design challenges for a variety of applications.

MARKETS AND APPLICATIONS

Networking
Data center storage systems

Servers and Storage
Servers

Telecommunications
Optical electrical modules
Optical switches
PC cards and patch panels
Routers

Data Center Storage Systems

Servers

Routers

MTP® is a registered trademark of US Conec.

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SPECIFICATIONS

Reference Information

Packaging: Individually bagged

Cable Assemblies: MTP- and MPO-compatible

Mates With/Use With: MPO adapters/QSFP
   transceivers

Connector Types:
   Multi-mode (MM)—aqua
   Single-mode (SM) low loss—yellow or green

Cable Types:
   MM—OM3 or OM4 bend-insensitive
   SM—OS2 ITU-T G.657.A1 bend-insensitive

Designed in: Millimeters

RoHS: Yes

Optical

Connector Insertion Loss (IL): 0.75 dB (SM),
   0.35 dB (MM)

Connector Return Loss (RL): 55 dB (SM max.),
   25 dB (MM max.)

Low-Loss IL: 0.35 to 0.5 dB

Low-Loss RL (max.):
   MM flat polish—20 dB
   MM angled physical contact (APC)—20 dB
   SM APC—50 dB

Mechanical

Fiber Count: 8, 12, 16, 24, 32, 48
   (72, 144, 288 fibers available in trunk cables)

Durability (min.): 50 mating cycles

Physical

Connector Housing:
   SM APC—yellow or green
   MM—aqua (ultra physical contact,
   or UPC) or green (APC)

Boot Type: Straight

Cable Lengths: 1.0 to 20.0m (jumpers),
   1.0m (breakouts), longer lengths available
   as custom solutions

Fiber Core Diameter: 9µm (SM) or 50µm (MM)

Fiber Cladding Diameter: 125µm

Cable Outside Diameter: 3.00mm

Operating Temperatures: -5 to +70°C

www.molex.com