



Embracing 400G/800G and Beyond

Next-Generation Data Center Solutions

Data center bandwidth surge necessitates the development of new, innovative fiber interconnect solutions.

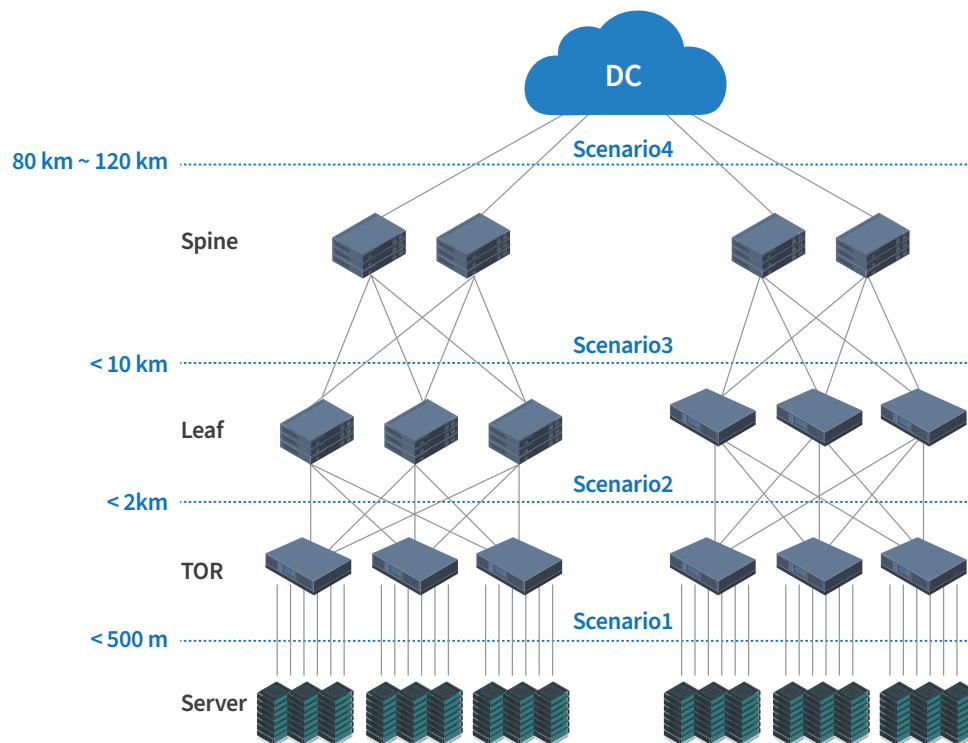
The adoption of artificial intelligence (AI) is swiftly growing across a range of markets, including consumer, enterprise, and various vertical sectors. This growth is set to profoundly impact data centers, Data Center Interconnects (DCIs), transport networks, Cloud Service Providers (CSPs), Internet Service Providers (ISPs), and

wholesalers. The unique characteristics of AI workloads and users impose stringent requirements on the communication components, data centers, and networks that support them. Furthermore, AI applications require significant bandwidth, starting within the data center, as high-performance GPUs are useless without

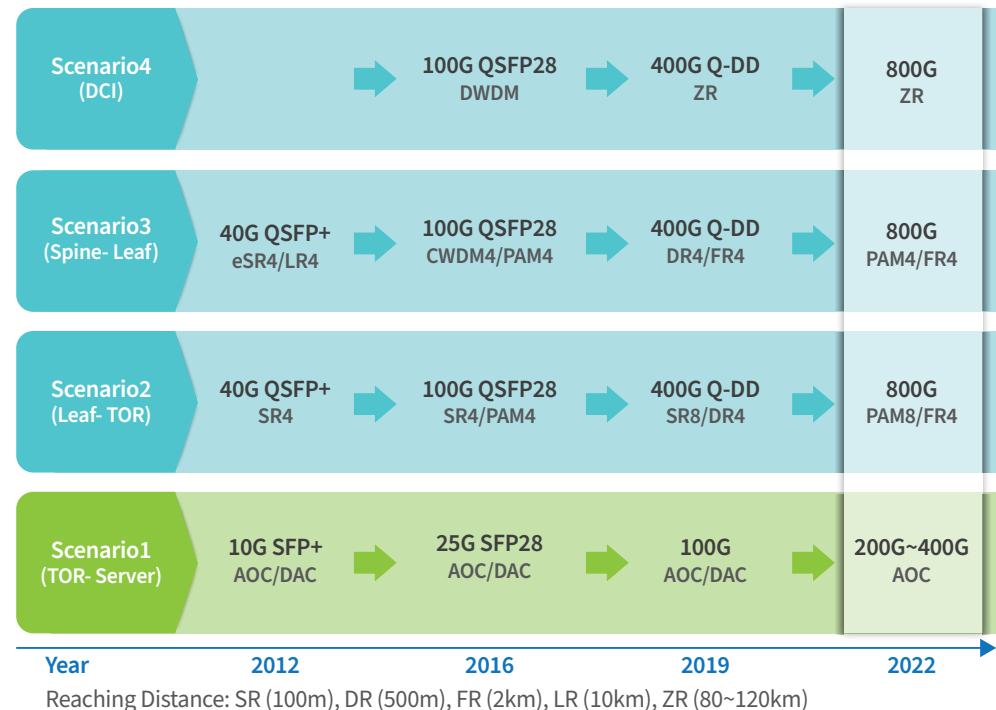
equally high-performance connectivity.

ACON OPTICS offers extensive range of high-performance connectivity and cabling products and solutions helping data centers around the world to meet these challenges. For those with special needs, we can also offer customized solutions.

The Evolution of Data Center Optical Interconnection Leaf-Spine Architecture



Typical Optical Module Evolution



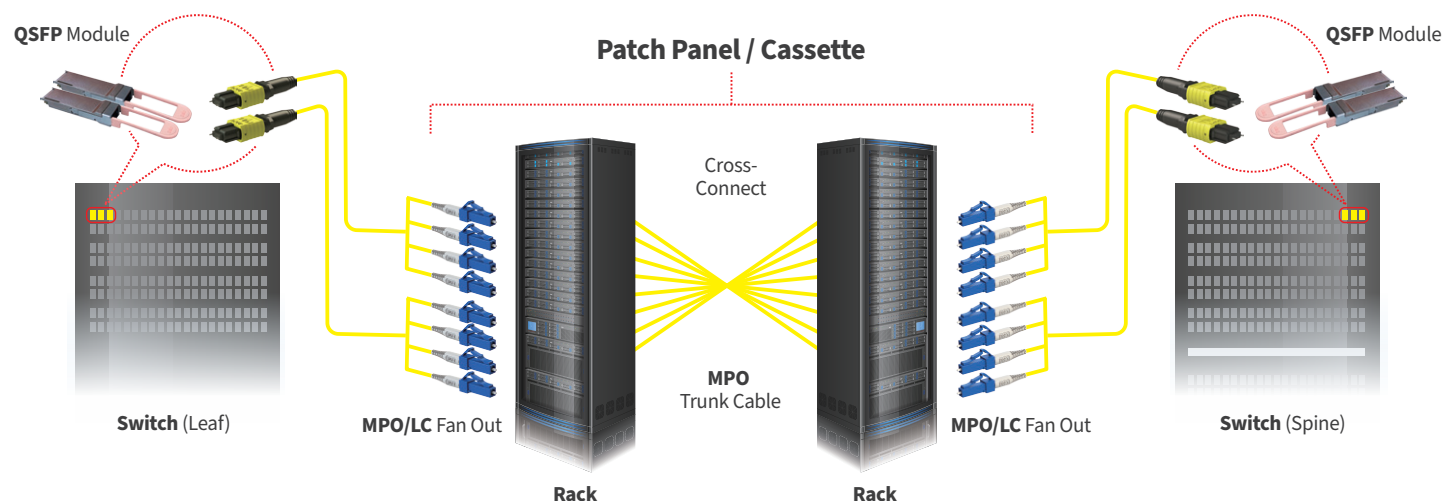
Data Center Connectivity and Cabling Solutions for your Migration to 400G/800G and Beyond

Transitioning to 400G/800G and beyond can be complex, but focusing on four key areas—switch-port densities, optical transceivers, connector options, and cabling advances—can simplify the process. These elements are essential for developing a migration strategy that meets both current and future needs.

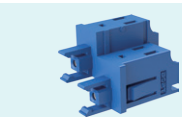
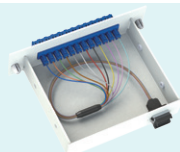
ACON OPTICS delivers a robust structured cabling and connectivity solution designed to provide the necessary bandwidth, headroom, design flexibility, and ease of installation to keep up with your evolving data center requirements. Our MPO 12-fiber, 16-fiber, and 24-fiber cabling and connectivity solutions enable a smooth transition to more efficient 400G/800G deployments while maintaining support for legacy 8-fiber, 4-fiber, and 2-fiber applications.

In addition, ACON OPTICS offers a wide range of connector options to handle the increased bandwidth demands of 400G/800G migrations. These options include MPO connectors in 12-fiber, 16-fiber, and 24-fiber series, as well as LC Duplex High Density Uniboot and Micro LC series connectors.

Leaf-Spine Cross Connection



Option A



Micro LC Stackable Adapter

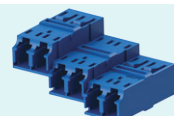
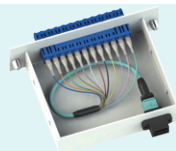


Micro LC Snap-in Connector



MT-MPO Pro Adapter

Option B



LC Stackable Adapter



LC Lite 0.9mm Connector

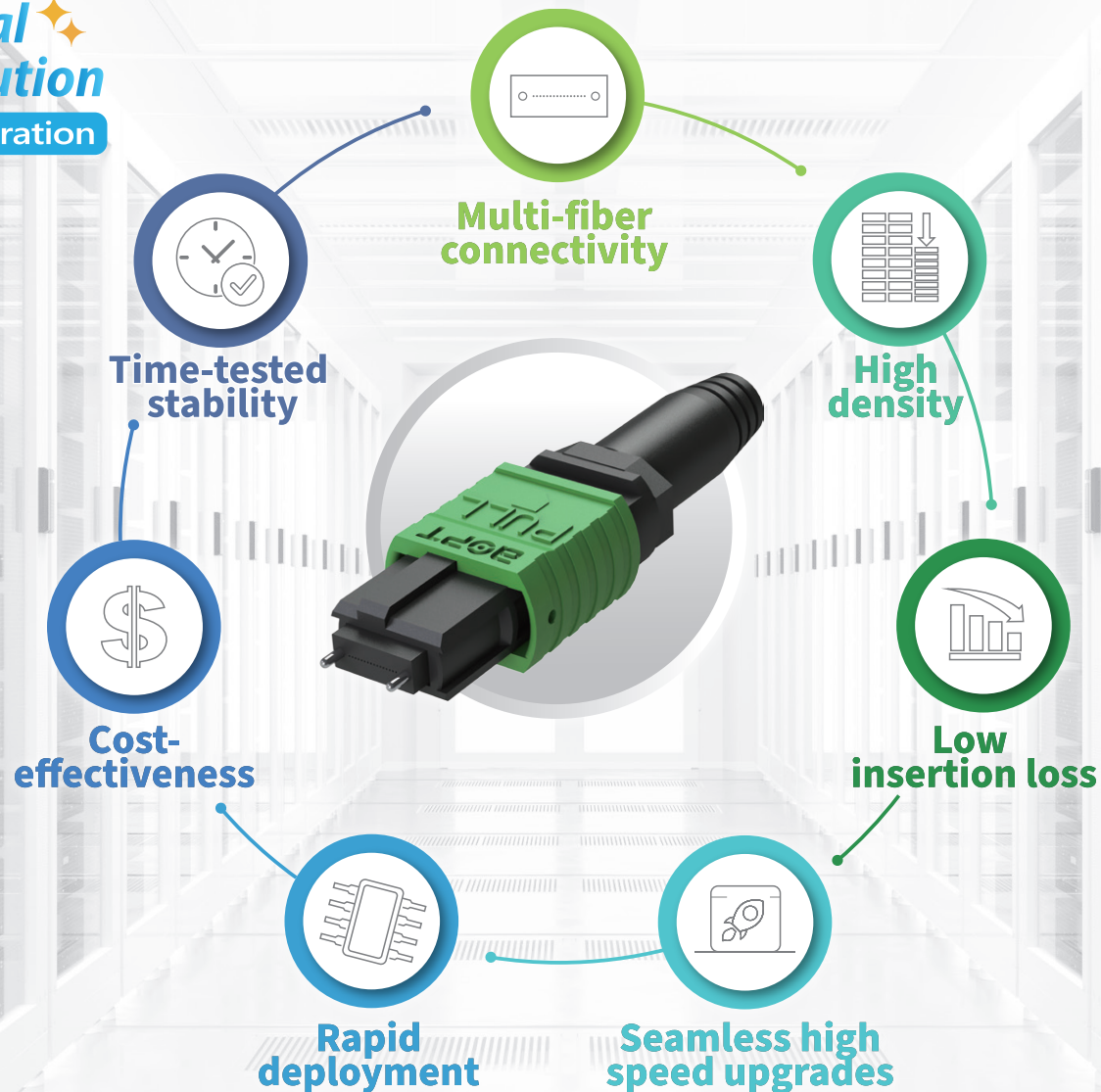


MPO Adapter

Why Choose ACON OPTICS MPO Total Solutions?

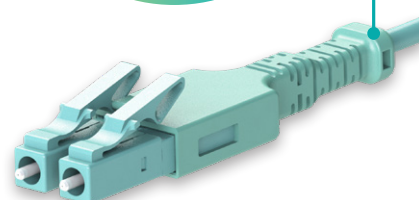
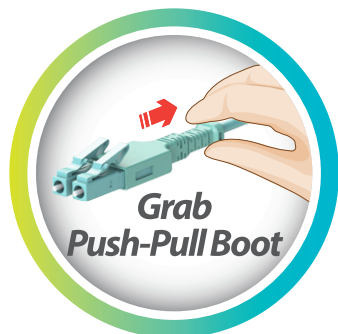
MPO *Total Solution*

Best for 400G/800G Migration



New Products

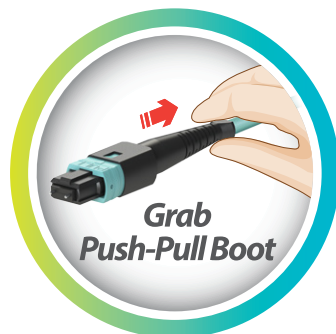
LC Plus Uniboot Easy-Pull Connector



Features

- Easy Push-Pull Boot: Quick insertion and removal without a tab.
- Seamless Polarity Reversal: Tool-free polarity change.
- Space-Saving Design: Optimized for high-density panels.
- Uniboot: Simplifies cable management.

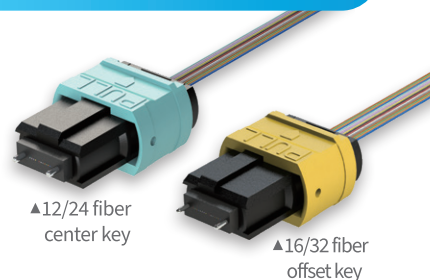
MPO Easy-Pull Connector



Features

- Easy Push-Pull Boot: Quick connection without tabs.
- High-Density Design: Perfect for tight spaces.
- Enhanced Boot: Durable and reliable.

MPO Mini Connector

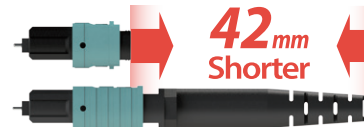


▲12/24 fiber
center key

▲16/32 fiber
offset key

**70% Reduction
in size**

▼MPO Mini Connector



▲Conventional MPO Connector

Features

- World's most compact BTW MPO connector—only 18mm total length for ribbon fiber
- Supports 12/24 fiber center key and 16/32 fiber offset key options
- 18mm compact length supports improved space efficiency in back panels and small cassettes
- Ideal solution for high-density, space-constrained environments

MPO Internal Shutter Adapter



▲Simplex 16F/32F

▲Simplex 12F/24F/36F



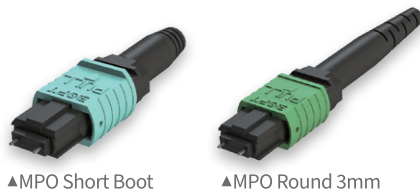
▲Duplex 12F/24F/36F

Features

- Internal Shutter for dust and laser protection
- No dust cap required on shutter side
- Snap-In design for quick and easy installation
- Compatible with SC Footprint
- Supports key-up/key-down and key-up/key-up orientations.

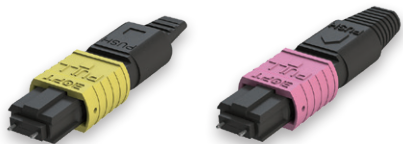
MPO Total Solutions

MPO Connector



▲MPO Short Boot

▲MPO Round 3mm



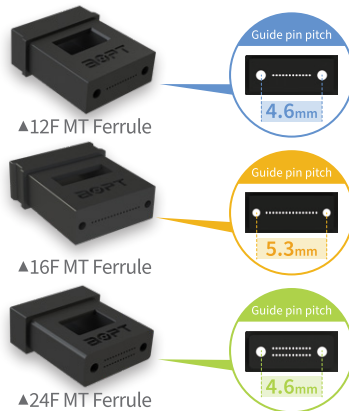
▲MPO Bare Ribbon

▲MPO Ribbon Boot

Features

- Meet IEC 61755-3-31 Grade B standard.
- Low insertion loss, 0.35dB Max.
- Trapezoid spring enhances mechanical performance.
- Available to support 40G/100G/200G/400G/800G.
- Various boots are available for MPO connectors.

MT Ferrule 12/16/24 Fiber



▲12F MT Ferrule

▲16F MT Ferrule

▲24F MT Ferrule

Features

- High precision guide pin.
- Guide pin pitch of 4.6mm (12, 24, 36 fiber) / 5.3mm (16, 32 fiber).
- Fiber pitch of 0.25mm.
- High precision molding for high performance.
- Standard insertion loss of Max 0.7dB.
- Low insertion loss of Max 0.35dB.
- Available to support for 100G, 200G, 400G and 800G link applications.

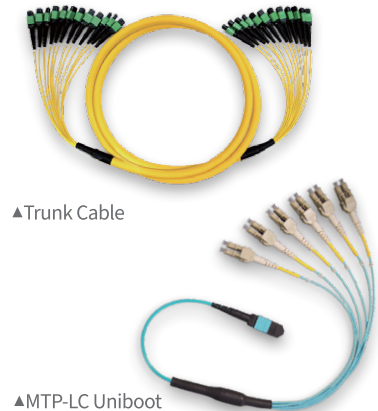
MT-MPO Pro Adapter



Features

- Hybrid adapter accommodates MT ferrule and MPO connector.
- One piece housing design without welding point enhances structure strength.
- Design makes connecting and disconnecting MT ferrule simple and straightforward.
- The best option for BTW application and high density solution.

MPO / MTP Patchcord



▲Trunk Cable

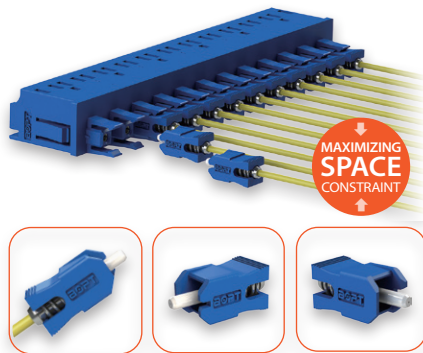
▲MTP-LC Uniboot

Features

- With MPO/MTP cable assembly capability, ACON OPTICS has been offering all kinds of customized design and ODM/OEM manufacturing services for years in market, including 8 fiber, 12 fiber, 16 fiber, 24 fiber, 32 fiber, 48 fiber multi-mode and single-mode products of jumpers, Fanout/Breakout cables, short cables with OFNP, OFNR, LSZH materials for Datacom and Telecom applications.

Micro LC / LC Connector and Adapter

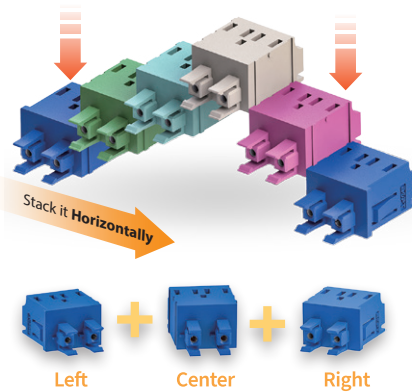
Micro LC Snap-in Connector



Features

- Simple snap-in connector design makes ease of connecting and disconnecting.
- Compatible to conventional LC.
- Remarkable increase in space on the back end panel and in small cassette.
- Micro LC adapter is a hybrid adapter which can accommodate micro LC connector and conventional LC connector.
- The best option for BTW application and high density solution.

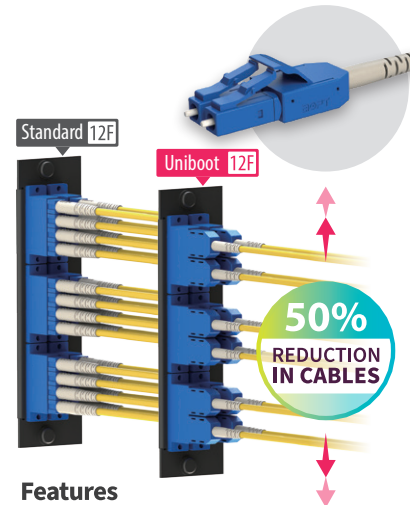
Micro LC Stackable Adapter



Features

- Micro LC Adapter is a hybrid adapter which can accommodate micro LC connector and conventional LC connector.
- Compatible to conventional LC.
- Remarkable increase in space on the back end panel and in small cassette.
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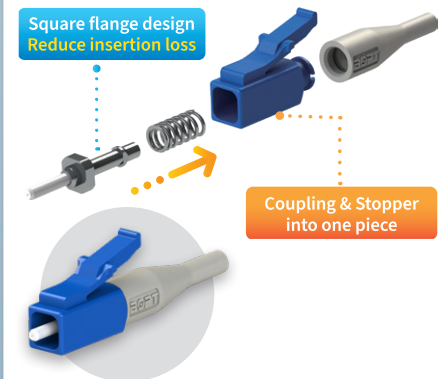
LC Switchable Uniboot Connector



Features

- Easy polarity reversal.
- Uniboot design is essential for maximizing space savings of up to 50%.
- Uniboot assists in cable management.
- Boot types available for 2.0mm and 4.8mm diameter.

LC Lite 0.9mm Connector

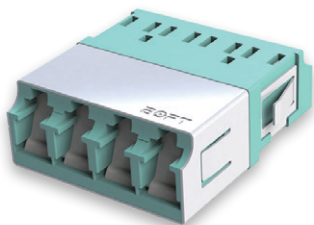


Features

- Simplified product injection reduces production costs.
- Reduced inventory items optimize inventory management.
- Simplified product assembly reduces complexity and enhances efficiency.
- Innovative square flange design to avoid the rotation and reduce insertion loss.

LC Adapter and AOC

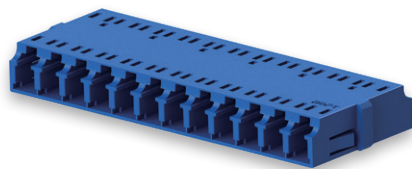
LC Inner Shutter Adapter



Features

- One-piece molding case, without welding.
- Compatible with SC adapter footprint.
- Protect eye exposure from laser light.
- Block out external dust for interior protection.
- The automatic opening and closing shutter for easily loading and unloading the LC connector.

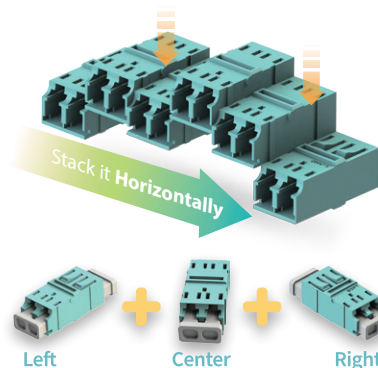
LC 12-Port Adapter



Features

- Maximizing space constraint.
- One piece housing design without welding point.
- Snap-in connector design.
- Reduces assembly time and simplifies training.
- Reduces maintenance and creates high optical performance.

LC Stackable Adapter



Features

- Maximize space constraint for high-density solution.
- One piece housing design without welding point enhances structure strength.
- Snap-in design.

AOC



Features

- 8-channel active optical cable
- 53.125GBd PAM4×8 channel
- 800G AUI-8 C2M Electrical interface
- Cable length available up to 100m on OM4 MMF 850nm VCSEL and PIN receiver
- OSFP MSA package
- Hot pluggable
- Very low EMI and excellent ESD protection
- +3.3V power supply
- Power consumption less than 15.5W
- Operating case temperature: 0~+70°C
- IIC rate up to 1MH

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