



# Data-Sheet

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## 12 Fiber MPO Trunk Cable Assembly

# 12 Fiber MPO Trunk Cable MPO(F) - MPO(F)

JTOPTICS MPO trunk patch cable, a cost-effective alternative to time-consuming field termination, is designed for high-density fiber patching in data centers which need space saving and reduce cable management troubles. MPO trunk type is for 40G QSFP+ SR4/CSR4, 100G QSFP28 SR4/PSM4, 400G SR4/DR4, optics direct connection and high-density data center applications.

MPO cables are factory pre-terminated, tested and packed along with test reports. They are built with high-quality components of Japanese MT ferrules and JTOPTICS brand connector kits. The trunk cable assemblies are composed of high quality LSZH/OFNP jacketed fiber optic cables



Low insertion loss 0.35dB for SM MPO

JTOPTICS MPO connector features the industry's highest-precision thermoplastic MT ferrule, designed to 0.35dB IL for elite. Standard loss 0.6dB.

## 100% 3D Interferometer Test

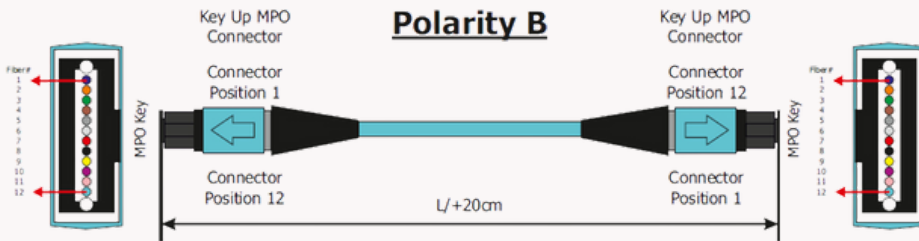
Besides insertion loss, 3D geometry data affects the performances for MPO cable assemblies. 3D control for MT ferrule is more complex than normal ceramic ferrule. JTOPTICS tests 3D 100% for all MPO cables strictly.



- High performance in IL & RL
- Low Insertion Loss
- 100% 3D Test
- Complied to ANSI/TIA-568-C.3, IEEE 802.3ba and adheres to ANSI/TIA-942
- Compliant for MPO/MTP interfaces



Name	12 Fiber Single Mode OS2 MPO Trunk Cable	12 Fiber Multi-Mode OM3 MPO Trunk Cable	12 Fiber Multi-Mode OM4 MPO Trunk Cable	12 Fiber Multi-Mode OM5 MPO Trunk Cable
Part Code	<u>JTMPS212MOSFMOSFXX</u>	<u>JTMPS312MOSFMOSFXX</u>	<u>JTMPS412MOSFMOSFXX</u>	<u>JTMPM512OMOSFMOSFXX</u>
Connector A	MPO Female (12 Fiber) APC	MPO Female (12 Fiber) UPC	MPO Female (12 Fiber) UPC	MPO Female (12 Fiber) UPC
Connector B	MPO Female (12 Fiber) APC	MPO Female (12 Fiber) UPC	MPO Female (12 Fiber) UPC	MPO Female (12 Fiber) UPC
Cable Jacket	LSZH /OFNR (Riser)	Plenum (OFNP)	Plenum (OFNP)	Plenum (OFNP)
Jacket OD	3.0mm	3.0mm	3.0mm	3.0mm
Fiber Mode	Single Mode (OS2 9/125µm)	Multimode (OM3 50/125µm)	Multimode (OM4 50/125µm)	Multimode (OM5 50/125µm)
Wavelength	1310/1550nm	850/1300nm	850/1300nm	850/1300nm
Insertion Loss	0.35dB Max	0.7dB Max	0.7dB Max	0.7dB Max
Return Loss	≥60dB	≥30dB	≥30dB	≥30dB
Installation Tensile Load	100 N	100 N	100 N	100 N
Long-Term Tensile Load	50 N	50 N	50 N	50 N
Operating Temp Range	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C	-10°C to +70°C
Storage Temp Range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Minimum Bend Radius	30mm	30mm	30mm	30mm
Connector Make	JTOPTICS	JTOPTICS	JTOPTICS	JTOPTICS
Connector Quality	Elite	Standard	Standard	Standard
Polarity	B Type	B Type	B Type	B Type
Applications	100G to 100G PSM4 400G to 400G DR4/FR4	40GE to 40GE SR4 100G to 100G SR4 400G to 400G SR4	40GE to 40GE SR4 100G to 100G SR4 400G to 400G SR4	40GE to 40GE SR4 100G to 100G SR4 400G to 400G SR4



MTP is a registered trademark of US Connect, The MTP connector offers ferrule float to improve mechanical performance. MPO and MTP are 100% compatible.



**IL and RL Testing**

Evaluate insertion loss and return loss of cables to ensure high-quality and stable signal transmission.

**Polarity Testing**

Measure the polarity to ensure data from Tx at one end can be properly transmitted to Rx at the other end via light signals.



**End-face Inspection**

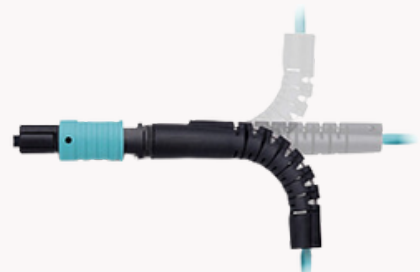
Inspect the connector end face for scratches, defects and contamination to ensure reliable fiber connections.

**Optional Connector**

MPO Push-Pull Connector



MPO Flex-Boot Connector



# About JT

In the dynamic realm of technology and innovation, the emergence of **Jayani Technologies Limited** has been nothing short of a saga marked by ingenuity, resilience, and a steadfast commitment to excellence. Originating as Jayani Technologies LLP in 2011 in the vibrant city of Mumbai, India, the company has evolved into a trailblazer in its domain. This narrative unfolds against the backdrop of the company's expansion into Hong Kong, a strategic move signaling its intent to conquer new horizons.

Established in 2011, Jayani Technologies (**JTOPTICS®**) was conceived as a response to the evolving technological landscape, recognizing the need for cutting-edge solutions that marry innovation with reliability. The Mumbai headquarters became the crucible for the company's early endeavor, a melting pot of talent and vision that propelled Jayani Technologies into the forefront of its industry and emerged as a leading manufacturer and supplier of cutting-edge solutions in the fields of optical Fiber, data center, networking, and electric vehicle components.

From its inception, the company distinguished itself by its unwavering commitment to client satisfaction, a commitment that became the cornerstone of its success. Jayani Technologies quickly became synonymous with technological prowess and an unwavering dedication to delivering solutions that transcended conventional boundaries.

JTOPTICS® has developed and produced many active and passive interconnection and connectivity products suitable for different networks, aiming to become a one-stop device integration solution provider in the open optical network field, products include MPO Cables, AOC cable, passive DAC cable, optical transceivers, optical modules & subsystems, active & passive optical components, and high-density cabling products.

## **Vision**

Our vision is to be recognized by clients as trustful a trusted business partner whose mission is to help our clients by offering state-of-the-art products and services.

## **Mission**

Our mission is to catalyze the success of its clients by providing unparalleled technological solutions. The company envisions itself as a catalyst for positive change, aiming to reshape industries through innovation, integrity, and a relentless pursuit of excellence.



# Our Clients

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**NTPC**

**TATA**

**LARSEN & TOUBRO**





# Our Contact



+91-86-9309-9309



[info@jtoptics.com](mailto:info@jtoptics.com)



[www.jtoptics.com](http://www.jtoptics.com)



409-410 Lodha I-Think, B-Block, Palava,  
Dombivali (E), Thane, MH 421204

**Hongkong**

**India**

**Singapore**

**Malaysia**

**Qatar**

**JAYANI TECHNOLOGIES LLP**