Data-Sheet

12/8 Fiber MPO Breakout Cable Assembly

JT **PTICS** ®

Next-Gen Network Solutions

JTOPTICS®
Next-Gen Network Solution..

12/8 Fiber MPO-LC Breakout Cable 12 MPO(F) -4xLC

JTOPTICS MPO breakout cable allows the redistribution of various optical fibers to individual devices without additional networking equipment. JTOPTICS MPO harness cables reduce the overall cost and setup time for complex high-density networking and used in data center, telecom and backbone application for 40G / 100G /200G/ 400G connectivity.

8/12 Fiber MPO Fanout Assemblies provide connections between QSFP+ to 4 x SFP+, QSFP28 to 4 x SFP28 and QSFP-DD to 4 x QSFP-28 Transceiver Modules.

JTOPTICS MPO harness 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
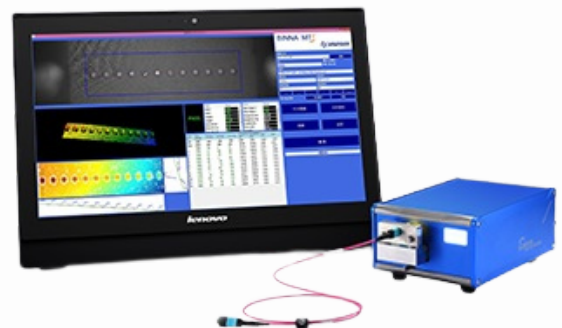
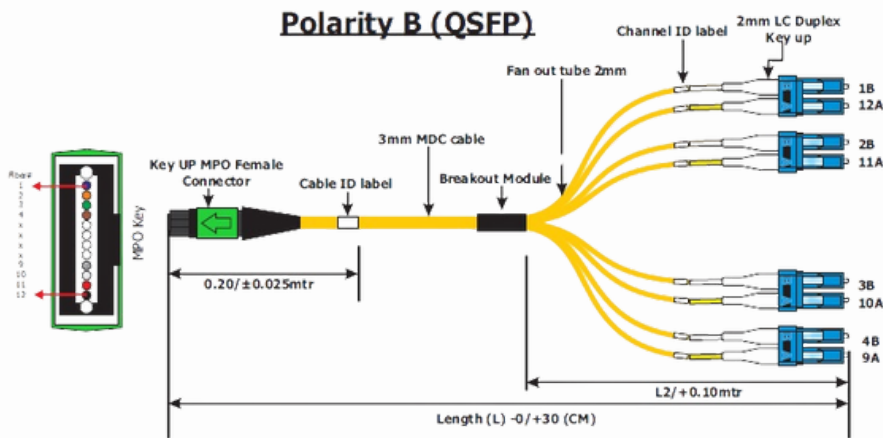**100% 3D Interferometer Test**

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.

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.

- 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

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Name	8 Fiber Single Mode OS2 MPO Breakout Cable	8 Fiber Multi Mode OM3 MPO Breakout Cable	8 Fiber Multi Mode OM4 MPO Breakout Cable	8 Fiber Multi Mode OM5 MPO Breakout Cable
Part Code	JTMPS208MOSFLCPXX	JTMPS308MOSFLCPXX	JTMP408MOSFLCPXX	JTMPS508MOSFLCPXX
Connector A	MPO Female (12 Fiber)	MPO Female (12 Fiber)	MPO Female (12 Fiber)	MPO Female (12 Fiber)
Connector B	4xLC UPC Duplex	4xLC UPC Duplex	4xLC UPC Duplex	4xLC UPC Duplex
Cable Jacket	LSZH	Plenum (OFNP)	Plenum (OFNP)	Plenum (OFNP)
Jacket OD	3.0mm	3.0mm	3.0mm	3.0mm
Fiber Count	8 Fibers	8 Fibers	8 Fibers	8 Fibers
Fiber Mode	Single mode (OS2 50/125µm)	Multi mode (OM3 9/125µm)	Multi mode (OM4 50/125µm)	Multi mode (OM5 50/125µm)
Wavelength	1310/1550nm	850/1300nm	850/1550nm	850/1550nm
MPO Insertion Loss	0.35dB Max	0.7dB Max	0.7dB Max	0.7dB Max
MPO Return Loss	≥60dB	≥30dB	≥30dB	≥30dB
LC Insertion Loss	≤0.2dB	≤0.3dB	≤0.3dB	≤0.3dB
LC Return Loss	≥50dB	≥25dB	≥25dB	≥25dB
Fan Out Cable Outer Diameter	2.0mm	2.0mm	2.0mm	2.0mm
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	–10ºC to +70ºC	–10ºC to +70ºC	–10ºC to +70ºC	–10ºC to +70ºC
Storage Temp Range	–40ºC to +85ºC	–40ºC to +85ºC	–40ºC to +85ºC	–40ºC to +85ºC
Minimum Bend Radius	30mm	30mm	30mm	30mm
Polarity	B polarity	B polarity	B polarity	B polarity
Application	QSFP+ to SFP+ QSFP28 to SFP28 QSFP-DD to QSFP-28	QSFP+ to SFP+ QSFP28 to SFP28 QSFP-DD to QSFP-28	QSFP+ to SFP+ QSFP28 to SFP28 QSFP-DD to QSFP-28	QSFP+ to SFP+ QSFP28 to SFP28 QSFP-DD to QSFP-28

Polarity B (QSFP)

Channel ID label
2mm LC Duplex Key up
Fan out tube 2mm
3mm MDC cable
Key UP MPO Female Connector
Cable ID label
Breakout Module
MPO Key
Fiber#
0.20/±0.025mtr
L2/+0.10mtr
Length (L) -0/+30 (CM)

1B 12A
2B 11A
3B 10A
4B 9A

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

**Standard Breakout Length is 0.5 Meter for custom length contact sales team.

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

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

ciena

ADVA
Optical Networking

colt

CISCO

Coriant

MAVENIR

DEFENCE R&D ORGANISATION
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