MPO Fiber Patch cord 3.00mm OM4

Variants

F-F 12 PIN 10M   F-F 12 PIN 3M   F-F 12 PIN 5M   F-F 12 PIN 15M

Details

MPO Fiber Patch Cord 3.00mm OM4

Overview: The MPO Fiber Patch Cord 3.00mm OM4 is a high-performance optical fiber cable designed for high-speed data transmission over short and long distances in various network environments. This patch cord is specifically designed for Multi-fiber Push-On (MPO) connectors and is built with OM4-grade optical fiber, which provides an efficient and reliable solution for high-density data applications. The 3.00mm outer diameter ensures durability, flexibility, and ease of installation in tight spaces or high-density patch panels.

Key Features:

1. MPO Connector:

- Equipped with a Multi-fiber Push-On (MPO) connector, the MPO fiber patch cord is ideal for high-density fiber optic applications such as data centers, telecom networks, and enterprise networks.

- MPO connectors are capable of supporting 12, 24, or more fiber channels, allowing for efficient space utilization and simplified cable management.

2. OM4 Fiber Type:

- The OM4 fiber standard supports high bandwidth and long-distance transmission with a low modal dispersion, ensuring faster data transfer rates and greater efficiency.

- OM4 is designed for 100Gbps Ethernet, Fiber Channel, and other high-speed data transmission applications.

- OM4 fiber can support 10 Gigabit Ethernet (10GbE) transmission up to 550 meters, 40GbE and 100GbE transmission up to 150 meters, making it ideal for backbone and data center environments.

3. 3.00mm Outer Diameter:

- The 3.00mm jacket provides durability and protection to the internal fibers while maintaining a flexible design for easy routing and installation.

- This size is particularly useful in high-density environments where space-saving and ease of cable management are crucial.

4. Low Insertion Loss:

- The patch cord is engineered with minimal insertion loss, ensuring the integrity and quality of data transmission, particularly for high-speed network operations.

- High-quality polishing of the connectors minimizes signal loss and improves overall performance.

5. Rugged Construction:

- The outer jacket of the patch cord is made from a robust material that resists mechanical stresses, ensuring longevity and resistance to environmental conditions.

- It also provides protection against dust, moisture, and other potential contaminants in the network.

6. Compatibility:

- Fully compatible with standard MPO fiber optic systems, making it easy to integrate into existing infrastructures.

- Suitable for use with both active and passive optical components like MPO cassettes, patch panels, and fiber distribution units (FDUs).

7. Color Coding:

- Typically, the OM4 patch cord features a distinct aqua color, providing easy identification and compatibility with the OM4 standard.

RoHS Compliant:

- The MPO fiber patch cord complies with the RoHS (Restriction of Hazardous Substances) directive, ensuring it is free from harmful substances like lead, mercury, and cadmium.

8.Operating Temperature:

- The patch cord can operate in a wide range of temperatures, typically from -20°C to 70°C, making it suitable for use in various environments, including harsh industrial or outdoor settings.

Applications:

Data Centers: Ideal for high-density data center environments requiring efficient and high-speed data transmission.

Telecommunications Networks: Supports the backbone of telecom networks, ensuring fast and reliable communication across large distances.

High-Speed Ethernet: Perfect for 10G, 40G, and 100G Ethernet applications, offering future-proofing for evolving network speeds.

Server Farms: Utilized in server farms where high-density and long-distance data transmission is necessary for smooth operations.

Enterprise Networks: Suitable for large-scale enterprise environments, enabling efficient connectivity and reducing network congestion.

Specifications:

Connector Type: MPO/MTP (Male or Female)

Fiber Count: 12 fibers (standard) or customizable for 24 fibers

Fiber Type: OM4 Multimode Fiber

Jacket Type: LSZH (Low Smoke Zero Halogen) or OFNR (Optical Fiber Non-Communicating Riser)

Outer Jacket Diameter: 3.00mm

Insertion Loss: Typically 0.35dB per connector (depending on connector type)

Return Loss: ?30dB

Wavelength: 850nm (optimized for OM4)

Operating Temperature Range: -20°C to 70°C

Compliance: RoHS, IEC 61754-7, TIA-604-5 (MPO)

Color: Aqua (for OM4)

Why Choose MPO Fiber Patch Cord OM4 3.00mm?

The MPO Fiber Patch Cord 3.00mm OM4 is the ideal choice for those looking to improve network efficiency with a reliable and high-performance fiber optic solution. With its exceptional bandwidth capabilities, low insertion loss, and rugged construction, it is perfect for applications that demand high-speed data transfer, such as modern data centers, telecom infrastructures, and enterprise networks.

Whether upgrading your existing network or deploying a new high-speed system, this fiber patch cord provides the reliability and performance required for today's demanding environments, all while ensuring cost-effective installation and maintenance.