



FotonShield MD MPO-LC Cassette, 24F with 2Nos. of 12F MPO (Male) Low Loss - 12 x LC/APC, SM OS2



Applicable Standards

- IEC 61754-20 : Fiber Optic Connector Interfaces – Part 20: LC Connectors
- IEC 61754-7 : Fiber Optic Connector Interfaces – MPO Connectors
- ISO/IEC 11801 : Generic Cabling for Customer Premises
- IEC 61300-3-35 (End-Face Cleanliness)
- RoHS and REACH

Product Part Number

N176.MPO12x2LCA5A

Product Description

The **FotonShield MD MPO-LC Cassette** is a high-density fiber breakout module designed for **OS2 Single Mode applications**. It features **two 12-fiber MPO (Male) Low Loss connectors** at the rear and **12 LC/APC Duplex adapters** at the front. This cassette ensures efficient **24-fiber management** and streamlined MPO-to-LC transitions. Engineered for high-performance in data centers, telecom rooms, and enterprise backbones, it delivers minimal signal loss, quick deployment, and consistent reliability. Fully compatible with **FotonShield MD modular enclosures**, it supports **plug-and-play operation** for networks up to **100G and beyond**.

Product Features

- **Dual 12F MPO (Male) Low-Loss Connectivity :** Supports two 12-fiber MPO trunk cables, delivering reliable and high-speed single mode optical networking.
- **Two 12x LC/APC Ports for Breakout :** Provides a structured, high-density fiber termination solution with low insertion loss.
- **Low-Loss Performance :** Utilizes premium-grade ferrules to ensure minimal insertion loss, supporting long-distance OS2 networks.
- **Polarity A (Straight-Through Configuration) :** Ensures proper alignment in structured cabling environments.
- **UL-94 V0 Flame-Retardant ABS + PC Housing :** High durability, impact resistance, and enhanced fire safety.
- **Plug-and-Play Modular Design :** Enables fast and easy deployment in high-density rack-mount environments.
- **Reliable Locking Mechanism :** Push-Down to Release & Pull to Remove system for secure and effortless cassette mounting.



Material Specifications

Type	MD MPO-LC Cassette (with 2 Nos. of 12F MPO Low Loss - 12 x LC/APC)
Fiber Type	Single Mode OS2
LC Connector	Insertion Loss : ≤ 0.25 dB, Return Loss : APC ≥ 65 dB
MPO (Elite) Connector	Insertion Loss : ≤ 0.35 dB, Return Loss : APC ≥ 65 dB
Adapter Type	Duplex LC/APC
Polarity	Type A (Straight-Through)
Housing Material	ABS + PC (UL-94 V0 Flame-Retardant)
Application	Data Centers, Enterprise Networks, High-Density Fiber Distribution, 40G/100G/400G Deployments

Environmental Specifications

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

Ordering Information

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