



FotonShield MD MPO-LC Cassette, 24F MPO (Male) Low Loss - 24 x LC/UPC, 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
- ANSI/TIA-568.3-D : Optical fiber cabling standard
- IEC 61300-3-35 (End-Face Cleanliness)
- RoHS and REACH

Product Part Number

N176.MPO24LCU5A

Product Description

The **FotonShield MD MPO-LC Cassette** is a high-density fiber breakout module optimized for **OS2 Single Mode** applications. It features a single **24-fiber MPO (Male) Low Loss connector** at the rear and **12 LC/UPC Duplex adapters** at the front, enabling seamless and efficient 24-fiber management. Designed for deployment in data centers, enterprise networks, and telecom environments, this cassette simplifies high-speed MPO-to-LC transitions while ensuring low insertion loss, quick installation, and long-term reliability. It is fully compatible with **FotonShield MD modular enclosures**, offering plug-and-play scalability for 10G to 100G+ network architectures.

Product Features

- **Single 24F MPO (Male) Low-Loss Connectivity :** Enables high-density fiber breakout with a single MPO trunk cable, reducing congestion and simplifying cable management.
- **Optimized for SM OS2 Applications :** Engineered for long-reach, high-bandwidth single mode fiber systems.
- **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 24F MPO Low Loss - 24 x LC/UPC)
Fiber Type	Single Mode OS2
LC Connector	Insertion Loss : ≤ 0.25 dB, Return Loss : UPC ≥ 55 dB
MPO (Elite) Connector	Insertion Loss : ≤ 0.35 dB, Return Loss : UPC ≥ 55 dB
Adapter Type	Duplex LC/UPC
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

N176.MPO24LCU5A	FotonShield MD MPO-LC Cassette, 24F MPO (Male) Low Loss - 24 x LC/UPC, SM OS2
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