



10/125 Erbium/Ytterbium-Doped Multimode Double Clad Fiber

Nufern's proprietary rare earth doping technology is used to deliver Er/Yb co-doped fibers with industry leading performance and reliability. These fibers feature 10 micron diameter core and a 125 micron diameter cladding with a 0.21 NA. The fiber design has been finely optimized to deliver the best performances for two distinct configurations. MM-EYDF-10/125-XP is designed to deliver ultra-high efficiencies while ensuring low threshold and high gain factors, ideal for CATV and telecom amplifiers. On the other hand, MM-EYDF-10/125-XP is optimized to achieve tens of Watts of output power with high efficiency and suppressed 1 μ m parasitic ASE, offering unmatched stability. The large core of the fiber allows for shorter fiber lengths in amplifier and laser systems to reduce the impact of non-linear effects. Utilizing Nufern's proprietary NuCOAT-FA coating technology, these fibers offer the best damp and dry heat performance available and ensure extended operating lifetime.

Typical Applications

- Laser and amplifiers at 1.5 μ m (CATV and Telecom)
- Military and commercial LIDAR
- High peak power, pulsed fiber amplifiers

Features & Benefits

- Optimized XP design — High efficiency and low parasitic 1 μ m ASE
- Large core — Enables shorter fiber length for high-power pulsed amplifiers
- Double clad design — High power performance and high power conversion efficiency
- NuCOAT-FA fluoroacrylate coating — Greater fiber durability in extreme operating and storage conditions
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications

Operating Wavelength
Core NA
First Cladding NA (5%)
Cladding Attenuation
Cladding Absorption
Core Absorption

Smart # MM-EYDF-10/125-XP Smart # MM-EYDF-10/125-XP

1530 – 1625 nm
0.210
 ≥ 0.46
 ≤ 30.0 dB/km @ 1095 nm
 2.90 ± 0.60 dB/m at 915 nm
 50.0 ± 20.0 dB/m near 1530 nm

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0.210
 ≥ 0.46
 ≤ 30.0 dB/km @ 1095 nm
 2.90 ± 0.60 dB/m at 915 nm
 100.0 ± 20.0 dB/m near 1530 nm

Geometrical & Mechanical Specifications

Cladding Diameter (flat-to-flat)
Core Diameter
Coating Diameter
Coating Concentricity
Core/Clad Offset
Coating Material
Proof test Level

125.0 ± 2.0 μ m
 10.0 ± 1.0 μ m
 215.0 ± 5.0 μ m
< 5.0 μ m
 ≤ 1.00 μ m
Low Index Acrylate
 ≥ 100 kpsi (0.7 GN/m²)

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Custom developed fiber (FUD) specifications are subject to change without notice. Other configurations such as alternative form factors, optimized cut-off and UV cured color coating may be available. Let us know how Nufern can assist with your requirements.

