



12/130 Erbium/Ytterbium-Doped Multimode Double Clad Fibers

Nufern's proprietary rare earth doping technology is used to deliver Er:Yb co-doped fibers with industry leading performance and reliability. These fibers demonstrate high pump conversion efficiency and high power operation without rollover due to 1 μ m ASE, enabled by the double clad fiber design. The large core of the fiber allows for shorter fiber lengths in high power amplifiers to reduce the impact of non-linear effects.

Typical Applications

- LIDAR
- Eye-safe lasers and amplifiers
- High power pulsed fiber lasers and amplifiers

Features & Benefits

- NuCOAT™ fluoroacrylate coating — Greater fiber durability in extreme environmental operating & storage conditions
- Large core—Enables shorter fiber length for high power pulsed amplifiers
- Double clad design — High power performance and high power conversion efficiency
- All fiber proof tested to > 100 kpsi — Critical for ensuring long term reliability when coiling

Optical Specifications

Operating Wavelength (nominal)
Core NA
First Cladding NA (5%)
Cladding Attenuation
Normalized Cross Talk

Cladding Absorption
Core Absorption

MM-EYDF-12/130-HE

1550 nm
0.200
 ≥ 0.46
 ≤ 30.0 dB/km @ 1095 nm
N/A
 3.10 ± 0.50 dB/m at 915 nm
 70.0 ± 15.0 dB/m near 1530 nm

PM-EYDF-12/130-HE

1550 nm
0.200
 ≥ 0.46
 ≤ 30.0 dB/km @ 1095 nm
 ≤ -25.0 dB at 10 m @ 1300 nm
 3.30 ± 0.50 dB/m at 915 nm
 75.0 ± 15.0 dB/m near 1530 nm

Geometrical & Mechanical Specifications

Cladding Diameter
Cladding Diameter (flat-to-flat)
Core Diameter
Coating Diameter
Coating Material
Prooftest Level

N/A
 130.0 ± 3.0 μ m
 12.0 ± 1.5 μ m
 215.0 ± 5.0 μ m
Low Index Polymer
 ≥ 100 kpsi (0.7 GN/m²)

130.0 ± 2.0 μ m
N/A
 12.0 ± 1.5 μ m
 215.0 ± 5.0 μ m
Low Index Polymer
 ≥ 100 kpsi (0.7 GN/m²)

The passive version of each fiber is also available.



7 Airport Park Road, East Granby, CT 06026 • 860.408.5000 • Toll-free 866.466.0214 • Fax 860.844.0210 E-mail info @ nufern.com • www.nufern.com Nufern products are manufactured under an ISO 9001:2008 certified quality management system.

Standard specifications and design parameters are listed above. 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.

