



# 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  $\mu$ 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  
Core NA  
First Cladding NA (5%)  
Cladding Attenuation  
Normalized Cross Talk

Cladding Absorption  
Core Absorption

## MM-EYDF-12/130-HE

1530 – 1625 nm  
0.200  
 $\geq 0.46$   
 $\leq 30.0$  dB/km @ 1095 nm  
N/A

$3.10 \pm 0.50$  dB/m at 915 nm  
 $70.0 \pm 15.0$  dB/m near 1530 nm

## PM-EYDF-12/130-HE

1530 – 1625 nm  
0.200  
 $\geq 0.46$   
 $\leq 30.0$  dB/km @ 1095 nm  
 $\leq -25.0$  dB at 10 m @ 1300 nm

$3.30 \pm 0.50$  dB/m at 915 nm  
 $75.0 \pm 15.0$  dB/m near 1530 nm

## Geometrical & Mechanical Specifications

Cladding Diameter  
Cladding Diameter (flat-to-flat)  
Core Diameter  
Coating Diameter  
Coating Material  
Proof test Level

N/A  
 $130.0 \pm 3.0$   $\mu$ m  
 $12.0 \pm 1.5$   $\mu$ m  
 $215.0 \pm 5.0$   $\mu$ m  
Low Index Polymer  
 $\geq 100$  kpsi (0.7 GN/m<sup>2</sup>)

$130.0 \pm 2.0$   $\mu$ m  
N/A  
 $12.0 \pm 1.5$   $\mu$ m  
 $215.0 \pm 5.0$   $\mu$ m  
Low Index Polymer  
 $\geq 100$  kpsi (0.7 GN/m<sup>2</sup>)

The passive version of each fiber is also available.



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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.

