

# DCF-EY-10/128H

Erbium/Ytterbium co-doped double-clad fiber



This Erbium/Ytterbium co-doped fiber offers a high doping concentration and efficient energy transfer for operation in the 1.5  $\mu\text{m}$  region. With its high absorption, this product is an excellent choice for the design of high-power optical amplifiers (>5 W) used in various markets such as CATV in telecom or low-power LiDAR.

## Features & Benefits

- High doping concentration – provides highly efficient energy transfer, minimizing pump power requirements
- High absorption – minimizes fiber length and reduces nonlinearities
- Optimized Er/Yb core composition – reduces 1  $\mu\text{m}$  parasitic emission

## Applications

- High-power telecom amplifiers
- Low-power fiber lasers and optical amplifiers
- Sensing: LiDAR and spectroscopy

## Related Products

- [DCF-UN-8/125-14](#)  
Matched double-clad fiber
- [SCF-UN-8/125-14](#)  
Matched single-clad fiber

## Specifications

### Optical

Cladding Absorption @ 915 nm (dB/m)	2.4 $\pm$ 0.4
Core Absorption @ 1535 nm - Nominal (dB/m)	85 $\pm$ 25
Numerical Aperture - Core	0.20 $\pm$ 0.02
Numerical Aperture - Cladding	> 45
Background Loss @ 1200 nm (dB/km)	< 150

### Geometrical & Mechanical

Core Diameter ( $\mu\text{m}$ )	10 $\pm$ 1
Cladding Diameter ( $\mu\text{m}$ )	128 $\pm$ 3
Core/Cladding Concentricity Error ( $\mu\text{m}$ )	< 1.0
Cladding Geometry	Octagonal
Coating Diameter ( $\mu\text{m}$ )	260 $\pm$ 15
Proof Test (kpsi)	$\geq$ 100

### Environmental

Operating Humidity (%)	5 - 85
Operating Temperature (C $^{\circ}$ )	0 - 70
Storage Humidity (%)	5 - 85
Storage Temperature (C $^{\circ}$ )	-40 - 85

ISO 9001:2015 certified quality system | RoHS and REACH compliant.  
All specifications are subject to change without notice. Reference: 101-10-0840.R1