



# DCF-EY-16/128-18

## Erbium/Ytterbium co-doped double-clad fiber

This Erbium/Ytterbium co-doped double-clad fiber features a large mode area and high doping concentration, which are key parameters for the development of eye-safe high-power fiber lasers. The DCF-EY-16/128-18's high slope efficiency makes this fiber ideal for the design of high-power/peak power eye-safe pulsed fiber lasers and amplifiers for LiDAR applications.

### Features & Benefits

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

### Applications

- Eye-safe fiber lasers and amplifiers
- High peak power pulsed fiber lasers and amplifiers
- Sensing: LiDAR and spectroscopy
- Scientific

### Related Products

- DCF-UN-16/125-16  
Matched double-clad passive fiber
- SCF-UN-16/125-16  
Matched single-clad passive fiber

### Specifications

#### Optical

Cladding Absorption @ 915 nm (dB/m)	6 $\pm$ 1
Core Absorption @ 1535 nm (dB/m)	65 $\pm$ 20
Numerical Aperture - Cladding	Min 0.46
Numerical Aperture - Core	0.18 $\pm$ 0.015

#### Geometrical & Mechanical

Cladding diameter ( $\mu\text{m}$ )	128 $\pm$ 3
Cladding geometry	Octagonal
Coating Diameter ( $\mu\text{m}$ )	260 $\pm$ 15
Core Diameter ( $\mu\text{m}$ )	16 $\pm$ 1
Core/Cladding Concentricity Error ( $\mu\text{m}$ )	$\leq$ 1
Proof Test (kpsi)	$\leq$ 100

#### Environmental

Storage Temperature ( $^{\circ}\text{C}$ )	-40 to +85
--	------------