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 developmente 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 µm 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 ± 1.0
Core Absorption @ 1535 nm – Nominal (dB/m)	65 ± 20
Numerical Aperture – Core	0.18 ± 0.015
Numerical Aperture – Cladding	> 0.45
Background Loss @ 1200 nm (dB/km)	< 50.0

Geometrical & Mechanical

Core Diameter (µm)	16 ± 1
Cladding Diameter (µm)	128 ± 3
Core/Cladding Concentricity Error (µm)	< 1.0
Cladding Geometry	Octogonal
Coating Diameter (µm)	260 ± 20
Proof Test (kpsi)	≥ 100