



Doped Fiber

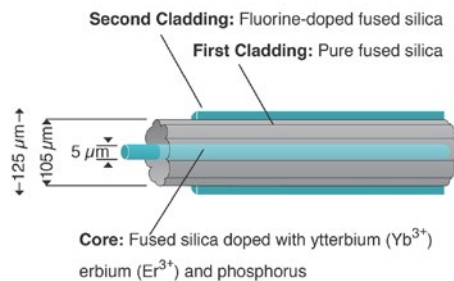
VERSION: MD11/4
RELEASE DATE: 04 JANUARY 2018

Datasheet

Dual Clad Erbium/Ytterbium Doped Fiber

Unlike other cladding pump or dual clad fibers, Fibercore's Dual Clad Erbium/Ytterbium Doped Fiber (CP1500Y) was originally designed as a high power communications amplifier fiber. The pump light is guided within an all-silica structure, using a fluorinated secondary cladding to create the pump guide boundary, without the need for low index polymers. The all-silica design gives outstanding power handling across full temperature and humidity ranges, without the reliability problems observed in low index polymer cladding designs.

The all-silica design means the fiber can be stripped, cleaved and spliced using standard telecoms industry equipment, without the need to recoat the fiber.



Advantages:

- All-silica design engineered for environmental stability
- Easy to strip, cleave and splice
- Petal structure optimizes pump conversion effectively
- Pump guiding structure is not removed after coating stripping process. Therefore, there is no need for low index recoating
- Field proven in volume applications since 1999

Related Products:

- Isolating Wavelength Division Multiplexer (CP-IWDM)
- Large Core Fiber (MM105)
- All Silica Double Clad Fiber (SMM900)

Typical applications:

- High Power Erbium Doped Fiber Amplifiers (EDFAs)
- Ytterbium/Erbium Doped Fiber Amplifier (YEDFA)
- Fiber Lasers
- Light Radar (LIDAR)
- Cable Television (CATV)

Product Variant:

- **CP1500Y** Double clad ErYb doped fiber for high power amplifiers for CATV applications



Specifications

	CP1500Y
Laser Core	
Composition	Phosphosilicate with erbium and ytterbium
Operating Wavelength (nm)	1520 - 1570
Numerical Aperture	0.20 - 0.22
Mode Field Diameter (μm)	5.6 - 6.5 @1550nm
Cut-Off Wavelength (nm)	1290 - 1510
Absorption (dB/m)	19 (nominal) @1550nm
Pump Guide	
Composition	Pure silica with F-doped silica cladding
Numerical Aperture	0.24 - 0.28
Mean Pump Guide Diameter (μm)	85 - 105
Absorption (dB/m)	1 (nominal) @940nm
General Guide	
Proof Test (%)	1 (100 kpsi)
Coating Type	Dual Layer Acrylate
Cladding Diameter (μm)	125 ± 1
Coating Diameter (μm)	245 ± 7
Operating Temperature (°C)	-55 to +85