# L-BAND ERBIUM DOPED FIBER<sup>TM</sup>



Fibercore's L-band Erbium Doped Fiber (EDF) product, L-35(1530/125)HC, offers a pioneering fiber design that provides superior performance for L-band Erbium Doped Fiber Amplifiers (EDFAs).

The core composition of L-35(1530/125)HC has been engineered to maximise the gain performance between 1570 nm to 1630 nm and beyond. This allows use of the fiber in L, L+, L++ and Super L-band amplifiers.

Fibercore's high cut-off wavelength (HC) fibers have larger core diameters, reducing non-linear effects and increasing efficiency at higher pump powers.

Due to high power L-band amplifiers typically requiring long lengths of optical fiber, the fiber has been designed to minimize the total size of the optical fiber required. The coating diameter has been reduced from the industry standard 245µm to 200µm and the core absorption is high. This results in smaller fiber coils with less fiber, ultimately leading to smaller footprint amplifiers.

# FEATURES

#### Advantages

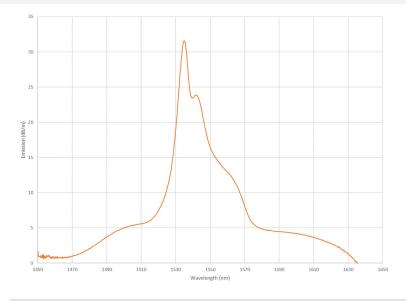
- High efficiency core composition specifically for L-band amplifiers
- 'HC' variant optimized for high pump power EDFAs
- Long wavelength emission for L, L+, L++ and Super L-band amplifiers
- Reduced coating diameter for smaller fiber coils
- High absorption for shorter lengths

#### **Typical Applications:**

- L-band EDFAs / Telecoms
- Low Power Fiber lasers
- Wide band ASE sources
- Lidar

#### **Product Variants**

• L-35(1530/125)HC: High cut-off wavelength, high level absorption fiber for L-band EDFAs



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### **SPECIFICATIONS**

	L-35(1530/125)HC
Cut-Off Wavelength (nm)	1150 - 1400
Numerical Aperture	0.20 - 0.23
Mode Field Diameter (µm)	5.3-6.6@1550nm
Absorption (dB/m)	31.5-38.5@1531nm
Proof Test (%)	2 (200 kpsi)
Polarization Mode Dispersion (ps/m)	≤0.005
Cladding Diameter (µm)	125 ± 1
Core Cladding Concentricity (µm)	≤0.3
Coating Diameter (µm)	200 ± 7
Coating Type	Dual Layer Acrylate
Operating Temperature (°C)	-55 to +85

## **RELATED PRODUCTS**

• Erbium Doped Fiber IsoGain™

Dual Clad Erbium/Ytterbium Doped Fiber

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