

C-Band Erbium Doped Fibers



Coherent's high performance C-Band Erbium-Doped 980-HP Fibers are designed for use in single and multi-channel C-band amplifiers and ASE sources. The 80 μm version is suitable for small form-factor amplifiers and metro amps. The "HI" version is designed to achieve the highest possible optical efficiencies in applications where available pump power is limited. All Coherent erbium-doped fibers are fabricated with a proprietary technology and have highly consistent and reproducible spectroscopy

Typical Applications

- Single and multi-channel C-band amplifiers
- ASE sources
- Small form factor amps
- Metro amps

Features & Benefits

- Highly consistent and reproducible spectroscopy — high manufacturing yields when matching to a GFF
- Excellent core concentricity — low splice loss to single-mode fibers
- High aluminum concentration — inherent gain flatness

Optical Specifications

Operating Wavelength
Core NA
Mode Field Diameter
Cutoff
Core Attenuation
Core Absorption

EDFC-980-HP

1530 – 1565 nm
0.230
5.8 \pm 0.5 μm @ 1550 nm
920 \pm 50 nm
 \leq 15 dB/km @ 1200 nm
6 \pm 1 dB/m near 1530 nm
3.7 \pm 1 dB/m near 980 nm

EDFC-980-HP-80

1530 – 1565 nm
0.230
5.8 \pm 0.5 μm @ 1550 nm
920 \pm 50 nm
 \leq 15 dB/km @ 1200 nm
6 \pm 1 dB/m near 1530 nm
3.7 \pm 1 dB/m near 980 nm

Geometrical & Mechanical Specifications

Cladding Diameter
Core Diameter
Coating Diameter
Coating Concentricity
Core/Clad Offset
Coating Material
Operating Temperature Range
Proof Test Level

125.0 \pm 1.0 μm	80.0 \pm 1.0 μm
3.2 μm	3.2 μm
245.0 \pm 10.0 μm	165.0 \pm 10.0 μm
< 5.0 μm	< 5.0 μm
\leq 0.30 μm	\leq 0.30 μm
Acrylate	Acrylate
-40 to 85 $^{\circ}\text{C}$	-40 to 85 $^{\circ}\text{C}$
\geq 200 kpsi (1.4 GN/m ²)	\geq 200 kpsi (1.4 GN/m ²)

