

Er Doped | Fibers

Ideal for C and L Band amplifiers

The amplification of optical transmission signals is enabled through our high efficiency Erbium doped fibers. Our wide range of Erbium doped optical fibers allows for tailored optical amplifiers (EDFAs) performance based on your requirements.

iXblue's Erbium Doped Fibers (EDF) products have been optimized to fulfill the exigency of high efficiency and low noise EDFAs in the C & L bands.

Key Features

- Low noise figure & flat gain shape
- High efficiency
- Low splice loss
- Highly consistent spectroscopy
- 80 μm reduced cladding on request
- PM Panda structure

Related Products

- Gain flattening filters
- Custom design
- Space grade PM version

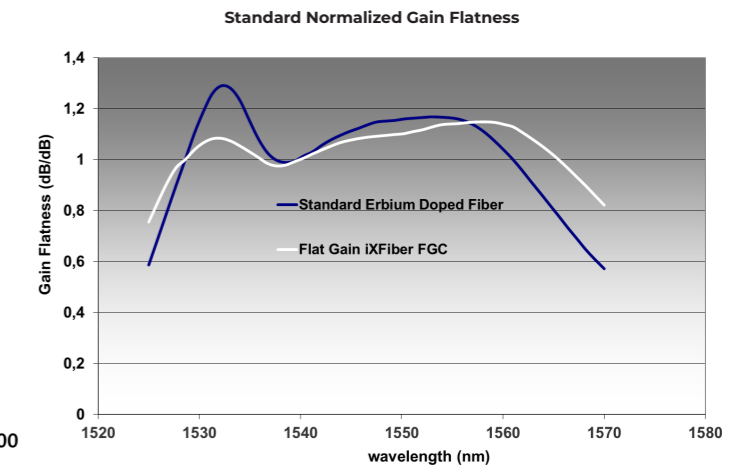
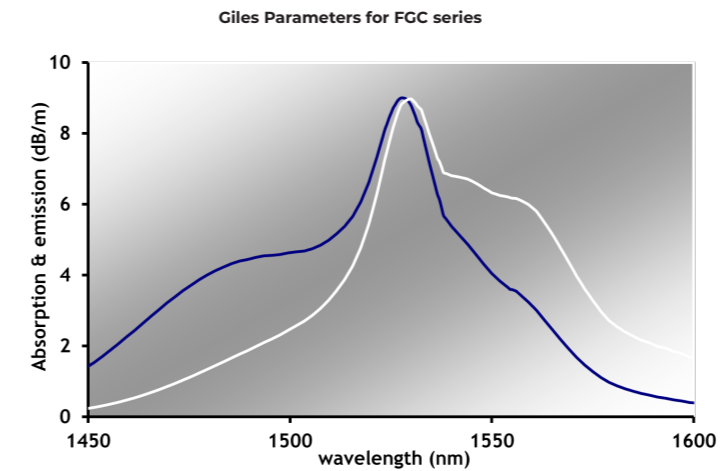


Main Specifications

Product Name	Fiber Type	Abs. @1480nm (dB/m)	Abs. @1530nm (dB/m)	MFD @1550nm (μm)	Background losses (dB/km)	Cutoff wavelength (nm)	Splice loss (dB)
IXF-EDF-FGC-980	C band	2 - 3	4.5 - 6.5	6.5 +/- 1	< 8	< 970	< 0.15 (to HI 980)
IXF-EDF-FGC-1480	C band	2.5 - 4.5	6 - 10	5.5 +/- 1	< 8	1150 +/- 100	< 0.15 (to HI 1060)
IXF-EDF-FGL	C & L band	9 - 16	20 - 35	5 +/- 1	< 15	< 1300	< 0.15 (to HI 1060)
IXF-EDF-SHD	Ase Source	4 - 6	12 - 16	5.5 +/- 1	< 15	< 1150	< 0.15 (to HI 980)
IXF-EDF-HD	-	35 +/- 5	75 +/- 10	7.5 +/- 1	< 40	< 970	< 0.20 (to HI 980)
Polarization Maintaining Fibers:							
IXF-EDF-FGC-980-PM	PM C band	2 - 3	4.5 - 6.5	6.5 +/- 1	< 8	< 970	< 0.20
IXF-EDF-FGC-1480-PM	PM C band	2.5 - 4.5	6 - 10	5.5 +/- 1	< 8	< 1400	< 0.20
IXF-EDF-FGL-PM	PM C & L band	7 - 14	15 - 30	5 +/- 1	< 20	< 1300	< 0.20
IXF-EDF-HD-PM	-	35 +/- 5	75 +/- 10	7.5 +/- 1	< 40	< 970	< 0.20

Common specifications

- Birefringence: > 2.10⁻⁴/ Panda type
- Cladding diameter (μm): 125 +/- 2 (80 μm available)
- Coating diameter (μm): 245 +/- 15
- Proof test level (kpsi): 100
- PMD factor (fs/dB): < 0.25



Parameter	Value
Erbium Lifetime (ms)	10
Er Absorption Cross Section @ 1530 nm (m ²)	6,72E-25
Er Emission Cross Section @ 1530 nm (m ²)	6,55E-25

EY Double Clad Fiber for Power Amplifier in C&L band, PM or non PM

Product Name	Abs. @980nm (dB/m)	Abs. @1530nm (dB/m)	MFD @1550nm (μm)	Background losses (dB/km)	Cutoff wavelength (nm)	Splice loss (dB)	RIGV (dB/krad)*
IXF-RAD-AMP-1	8 +/- 1	14 +/- 2	5.5 +/- 1	< 15	< 1150	< 0.20 (to smf28)	< 0.07
IXF-RAD-AMP-2	17 +/- 2	25 +/- 3	5.5 +/- 1	< 20	< 1150	< 0.20 (to smf28)	< 0.03
IXF-RAD-AMP-3	13.5 +/- 1.5	16 +/- 2	9.5 +/- 1.5	< 15	< 1150	< 0.20 (to smf28)	< 0.005
Polarization Maintaining Fibers:							
IXF-RAD-AMP-2-PM	15.5 +/- 1.5	25 +/- 3	5.5 +/- 1	< 20	< 1200	< 0.20 (to smf28)	< 0.03