

Rad Hard Fibers



• Main Specifications

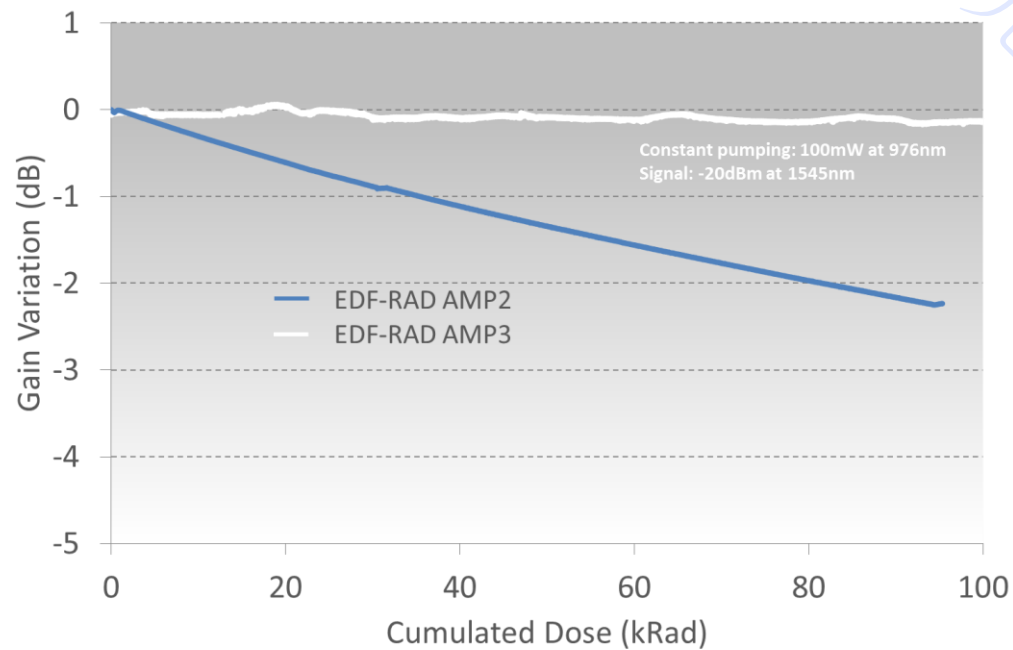
Fiber Type	Product Name	Abs. @980nm (dB/m)	Abs. @1530nm (dB/m)	MFD @1550nm (μm)	Background losses (dB/km)	Cutoff wavelength (nm)	Splice loss (dB)	RIGV (dB/krad)*
Low Power ASE Source & Low Medium Power Amplifier for C&L band, PM or non PM	IXF-RAD-AMP-1	7 – 9	12 – 16	5.5 +/- 1	< 15	< 1150	< 0.20 (to smf28)	< 0.07
	IXF-RAD-AMP-2	12 – 15	22 – 28	5.5 +/- 1	< 20	< 1150	< 0.20 (to smf28)	< 0.03
	IXF-RAD-AMP-3	8 – 11	14 – 18	5.5 +/- 1	< 15	< 1150	< 0.20 (to smf28)	< 0.005
	IXF-RAD-AMP-2-PM	12 – 15	22 – 28	5.5 +/- 1	< 20	< 1150	< 0.20 (to smf28)	< 0.03
Fiber Type	Product Name	Core diam. (mm)	Clad abs. @915nm (dB/m)	Clad abs. @976nm (dB/m)	Core abs. @1536nm (dB/m)	Core NA (+/- 0.02)	Cladding diam. Flat/Flat (mm)	RIGV (dB/krad)**
Medium Power Amplifier for C&L band, PM or non PM	IXF-2CF-EY-O-6-130-LNF-RAD	6 +/-0.5	> 0.6	> 2	> 35	0.18	130 +/-2	< 0.02
	IXF-2CF-EY-O-12-130-RAD	12 +/- 1	> 1.8	> 7.2	> 30			
	IXF-2CF-EY-PM-12-130-RAD	12 +/- 2	> 1.8	> 7.2	> 30			

- * RIGV : Radiation Induced Gain Variation for constant forward pumping : 100mW at 976nm, Signal: -20dBm at 1545nm
- ** Backward multimode pumping at 915nm
- PM fiber: Round shape & PANDA type, birefringence >1.10⁻⁴
- Double Clad structure with low refractive index coating : NA > 0.46

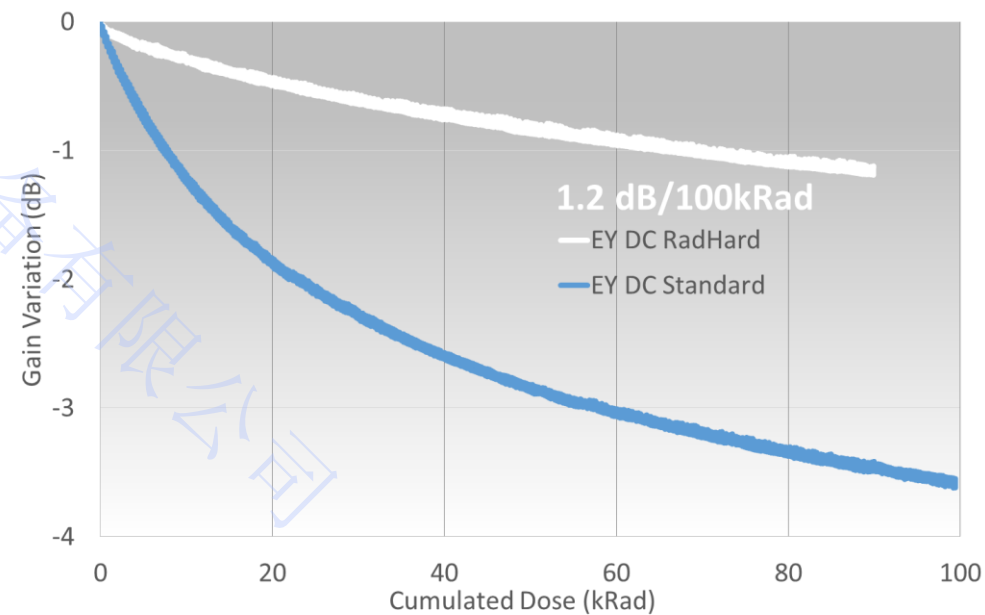
Rad Hard
Fibers



Single mode erbium doped Fiber
Radiation Induced Attenuation Gain Variation



Double clad erbium/ytterbium doped Fiber
Radiation Induced Gain Variation (12μm core)



Test configuration: ~1W output power / ~18dB Gain, Input wavelength: 1545nm
Backward MM pumping ~4W, Pumping wavelength : 915nm