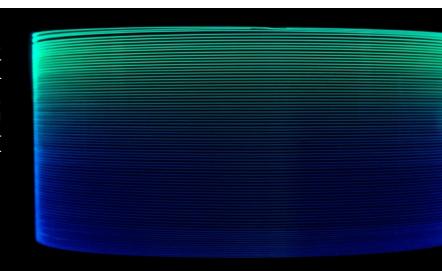




Er80-4/125-HD-PM — Erbium Doped Fiber

LIEKKI[®] Er80-4/125-HD-PM fiber is a highly doped, polarization-maintaining erbium fiber designed for fiber lasers. The core refractive index profile is tailored for normal dispersion higher than standard step-index fibers. The high Erbium concentration provides a strong gain and reduces the required application length for minimal non-linear effects. This makes this fiber particularly suitable for ultra-short pulse applications.



Features

- High Erbium concentration for reduced non-linear effects.
- · Tailored core refractive index for high normal dispersion
- · Polarization maintaining fiber
- Suitable for both 980 nm and 1480 nm pumping
- · Dual layer UV-cured acrylate coating

Applications

- Ultra-short pulse (femtosecond) amplifiers and lasers
- Low non-linearity applications

Typical Fiber Specifications

Fiber		LIEKKI [®] Er80-4/125-HD-PM	
Optical	Units		
Mode Field Diameter at 1550 nm	μm	6.5 ± 1.0	
Peak Core Absorption at 1530 nm	dB/m	80.0 ± 20.0	
Core Numerical Aperture (nominal)		0.2	
Cut-off Wavelength	nm	890 ± 90	
Dispersion parameter at 1550 nm (nominal) ¹	ps/ (nm*km)	- 22	
Birefringence, ≥	1E-04	1.0	
Geometrical and mechanical			
Core Concentricity Error, ≤	μm	0.7	
Cladding Diameter (flat-to-flat)	μm	125 ± 2	
Cladding Geometry		Round, panda	
Coating Diameter		245 ± 15	
Coating Material		Dual coated high index acrylate	
Proof Test, ≥	kpsi	100	

¹ Actual dispersion in fiber might slightly vary depending on core diameter, refractive index profile and Erbium ion inversion level.

