

# ER50-7-PM

Polarization-maintaining erbium-doped fiber



This Er-doped PM fiber features very a high absorption that is ideal for the design of fiber lasers and amplifiers. As it significantly reduces nonlinear effects while offering high peak power, applications such as LiDAR may benefit from this fiber. Moreover, this PM fiber offers high birefringence, which is essential for the design of ultrafast fiber lasers and amplifiers.

## Features & Benefits

- High absorption- reduces nonlinear effects
- High birefringence – minimizes stress
- Provides highly efficient energy transfer, minimizing pump power requirements
- Low background losses

## Applications

- Ultrafast fiber lasers & amplifiers
- Second Harmonic Generation
- Medical
- LiDAR
- Scientific

## Specifications

### Optical

Core Absorption @ 1530 nm – Nominal (dB/m)	50 ± 5
Numerical Aperture – Core	0.21
Cutoff Wavelength (nm)	1450 ± 50
Mode Field Diameter @ 1550 nm (µm)	6.5 ± 0.5
Birefringence	≥ 1.4E-04

### Geometrical & Mechanical

Core Diameter (µm)	5.8 ± 0.5
Cladding Diameter (µm)	125 ± 2
Core/Cladding Concentricity Error (µm)	< 1.0
Coating Diameter (µm)	245 ± 10
Proof Test (kpsi)	≥ 100

ISO 9001:2015 certified quality system | RoHS and REACH compliant.  
All specifications are subject to change without notice. Reference: 100-10-0854.R1