IXS-POL-1310-80

PZ Fiber-Based Polarizer

Contrary to In-line Polarizers, the PZ fiber-based polarizer is an All-Fiber solution offering superior polarization extinction ratio, low loss and excellent stability over temperature.

An all-fiber polarizer IXS-POL is a polarizing fiber with the optimal length coiled at the appropriate diameter to operate at the operational wavelength.

Exail also offers customized solutions including connectors, various packages, patch-cords and cables.



Benefits & Features

- Polarizing wavelengths available: 780, 840, 980, 1060, 1310 or 1550 nm
- Fiber diameter: 80 or 125 μm
- · Tiger design
- > 100 nm polarizing window
- > 30 dB extinction ratio

Applications

- Quantum optics, cold atoms
- · All-Fiber polarizer
- Fiber optics current sensors and gyros

Parameters

20 dB fast edge* (nm)	< 1270	
3 dB slow edge* (nm)	> 1370	
Extinction ratio (dB)	< -30	
Attenuation @1310nm (dB/km)	< 20	
Mode field diameter @1310nm (μm)	9 ± 2.5	
Numerical aperture	0. 13 ± 0.01	
Core/Clad concentricity (µm)	<1	
Cladding diameter (µm)	80 ± 2	
Coating diameter (µm)	170 ± 5	
Proof test level (kpsi)	100	

Design parameters

Operating wavelength (nm)	1310
Design	Tiger
Core shape	Round
Coating material	Dual acrylate
Operating temperature range (°C)	-40 to +85

Comments:

^{*}Typical polarization performance with deployment conditions of 5m length in a 80mm coil.