

## POLARIZER

# IXS-POL-1550-80

## 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  $\mu\text{m}$
- 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)	< 1500
3 dB slow edge* (nm)	> 1600
Extinction ratio (dB)	< -30
Attenuation @1550nm (dB/km)	< 20
Mode field diameter @1550nm ( $\mu\text{m}$ )	11 $\pm$ 2.5
Numerical aperture	0.13 $\pm$ 0.01
Core/Clad concentricity ( $\mu\text{m}$ )	< 1
Cladding diameter ( $\mu\text{m}$ )	80 $\pm$ 2
Coating diameter ( $\mu\text{m}$ )	170 $\pm$ 5
Proof test level (kpsi)	100

### Design parameters

Operating wavelength (nm)	1550
Design	Tiger
Core shape	Round
Coating material	Dual acrylate
Operating temperature range ( $^{\circ}\text{C}$ )	-40 to +85

#### Comments:

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

Exail reserves the right to change, at any time and without notice, the specifications, design, function or form of its products described herein.

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