

Fiber Optic Depolarizer – PolaZero™



Capable of depolarizing lasers with coherence lengths of kilometers, General Photonics' passive depolarizer is miles ahead of the competition. This patented device comes in a surprisingly small package (85 × 60 × 10 mm) for lasers with coherence lengths less than 10 meters. Devices for coherence lengths in the kilometer range can be custom made. This device is ideal for eliminating the effects of PDL or polarization sensitivity of optical components and instruments. Equally important, it can be used for depolarizing pump lasers to eliminate the polarization sensitivity of Raman amplifiers. The rugged package provides high performance and superb environmental stability.

Specifications:

Center Operating Wavelength ¹	1310 nm, 1550 nm
Operating Wavelength Range	±50 nm
Coherence Length of Light Source	10 m standard, others specify
Output Degree of Polarization	< 5%
Insertion Loss	1.0 dB typical, 1.4 dB max.
Residual Extinction Ratio	< 0.5 dB
Return Loss	55 dB
Optical Power Handling	300 mW min.
Operating Temperature	0 to 70 °C
Storage Temperature	-40 to 85 °C
Fiber Type	Input: PM Panda fiber, Output: SMF-28
Dimensions	85 × 60 × 10 mm for coherence lengths ≤ 20m 85 × 85 × 15 mm for coherence lengths ≤ 100m

Notes: Values are referenced without connectors.

1. Contact General Photonics regarding other wavelengths.

Features:

- For lasers with coherence length up to and beyond 10m
- Low degree of polarization
- Wide operating wavelength range
- Low insertion loss
- Compact size

Applications:

- Minimize polarization sensitivity of fiber sensors
- Remove polarization sensitivity of Raman amplifiers
- Eliminate polarization sensitivity of optical instruments
- Reduce PDL effects of optical components

FAQ: p. 228

Typical Performance Data:

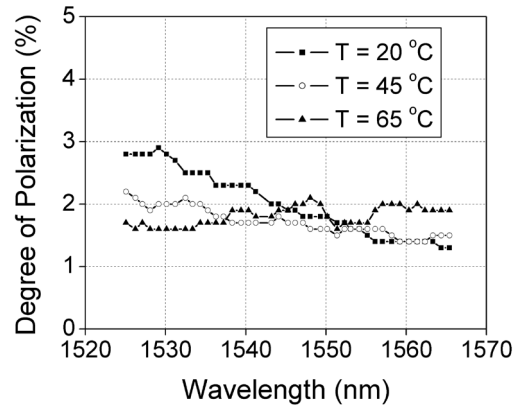
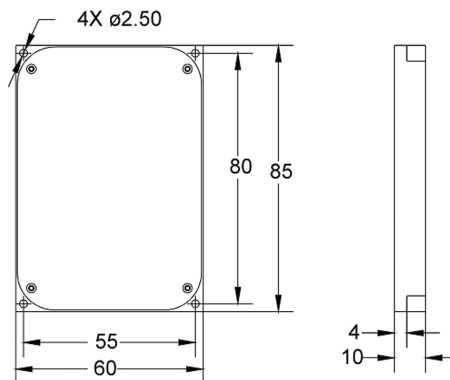


Figure 1. Degree of Polarization (DOP) as function of wavelength and temperature.

Dimensions: (standard package)



Ordering Information:

Visit our online store at www.generalphotonics.com for detailed configuration information.

See pages 30, 43, 46 and 48 for polarization scramblers