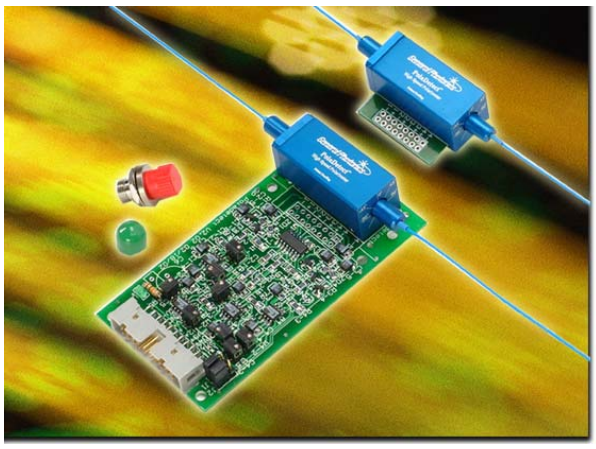
PATENT PENDING

High Speed In-line Polarimeter - PolaDetect™

NEW!



General Photonics' in-line polarimeter is specially designed for low cost and high-speed polarization characterization without interrupting data traffic. It outputs four voltage signals for calculating both the degree of polarization (DOP) and the state of polarization (SOP) of the light passing through the device in microseconds. PolaDetect is ideal for integrating into polarization monitoring and polarization stabilization modules, or in polarization characterization instruments. It comes with a pre-amplification board to provide analog signals for SOP/DOP calculation, feedback control, and computer interface. A calibration matrix is provided with every device for the calculation. Devices without preamplification board and calibration matrix are also available for OEM. The output fiber can either be single mode fiber or PM fiber.

Preliminary Specifications

Insertion Loss	0.8 dB typical, 1.2 dB max.
Return Loss	50 dB typical, 40 dB min.
PDL	< 0.25 dB
PMD	< 0.1 ps
Wavelength Dependent Loss	0.15 dB across C band
Optical Power Sensitivity	5 µW
Max. Optical Input Power	5 mW
Dynamic Range	30 dB
Optical Damage Power	300 mW min.
Measurement Bandwidth	700 kHz
SOP Accuracy [1] (at calibration wavelengths)	1% max.
DOP Accuracy [1] (at calibration wavelengths)	+/-2% max.
Wavelength Range	1550 ±50 nm
Operation Temperature	0 to 40 °C
Storage Temperature	-40 to 85 °C
Optical module size	39mm(L) x 20.3mm(W) x 18mm(H)
Fiber Types	SM to SM, SM to PM
Electrical Connection	16 pin without preamplifier 20 pin with preamplifier
Electrical Power Supply	-5V to –10V without preamplifier +/-12 V with preamplifier
Preamplifier Board Size	125 mm x 50 mm

Note: 1. Compared with Agilent 8509C.

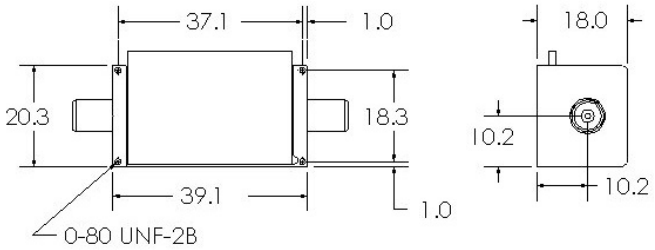
Applications:

- *Polarization stabilization*
- *Polarization division multiplexing*
- *PMD compensation/measurement*
- *Polarization analysis/monitoring*

Unique Features:

- *High speed and low loss*
- *Compact size*
- *No moving parts*

Mounting Dimensions (in mm)



Ordering Information:

POD–XX–XX–XX

Working Wavelength	Pigtail Options	Electrical Output
15 = 1550 nm 13 = 1310 nm	SS = SM in / SM out SP = SM in / PM out	01 = Current without pre amplificationboard 02 = Voltage with pre amplification board

Making Light Work Lighter
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