

In-line Polarization Analyzer -- PolaDetect™ POD-101A

The POD-101A is an in-line polarimeter specially designed for high-speed polarization analysis and monitoring. The instrument uses four channels to simultaneously obtain the four Stokes parameters and measure the instantaneous state of polarization (SOP) and degree of polarization (DOP) of an input light beam. A simple USB interface enables data to be transferred directly to a computer without the need for any additional hardware. With a sampling rate of up to 48 KS/s, this polarimeter easily monitors and analyzes fast polarization changes. The POD-101A comes with PolaView™ software for real-time graphic display of polarization state either on a Poincaré Sphere window for viewing SOP traces or on an oscilloscope window for tracking polarization changes over time. The oscilloscope window has three operation modes: continuous scan mode, for instantaneous display of various polarization parameters; external trigger mode, for capturing transient events; and long term monitoring mode, for recording only the polarization changes above a predetermined threshold, in order to save hard drive space. The POD-101A is ideal for PMD compensation, polarization stabilization, system polarization monitoring, polarization analysis, and sensor analysis.



Preliminary Specifications

Operating Wavelength Range	1480 - 1620 nm
Measurement bandwidth	20 kHz
Sampling rate	48 KS/s Max., user selectable
SOP accuracy ¹	1% max.
DOP accuracy ¹	± 2%
Insertion loss	1.2 dB max.
Return loss	55 dB
PDL	0.25 dB
PMD	<0.1 ps
Operating Power Range	-15 dBm to +7 dBm
Optical Power Accuracy	± 0.25 dB
Optical Power Damage Threshold	500 mW
Operating Temperature	0 °C to 40 °C
Storage Temperature	-20 °C to 60 °C
Computer interface	USB 2.0
Electrical Power supply	9VDC/0.6A
Software	PolaView™ (included)
Dimensions	7.3" (L) × 9" (W) × 2.5" (H)

(Values are referenced without connectors)

1. Compared with Agilent 8509C polarization analyzer.

Note: Please specify power supply and connector type when ordering.

Applications:

- PMD monitoring & compensation
- SOP/DOP monitoring
- Polarization analysis
- Polarization stabilization
- Sensor systems
- Optical SNR monitoring/measurement

Unique Features:

- Up to 48 KS/s polarization sampling rate
- 20 kHz analog bandwidth
- Real time Poincaré Sphere display
- Continuous scan mode
- External trigger mode
- Long term monitoring mode

Ordering Information:

POD - 101A

Making Light Work Lighter
General Photonics
Corporation

General Photonics Corp.
5228 Edison Ave.
Chino, CA 91710

Tel: 909.590.5473
Fax: 909.902.5536

Email:
info@generalphotonics.com

Website:
www.generalphotonics.com