

High Speed In-line Polarimeter - PolaDetect™

NEW!



**PATENT
PENDING**

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 either the input or the output state of polarization of the light passing through the device in microsecond. PolaDetect is ideal for integrating into PMD compensation and polarization stabilization modules to increase their operation speeds. An integrated circuit board provides digital signals for SOP/DOP display, digital feedback/control, and computer interface. It can also be used in polarization characterization instruments. This unique device represents another major step forwards intelligent dynamic PMD compensation for high-speed networks.

Preliminary Specifications

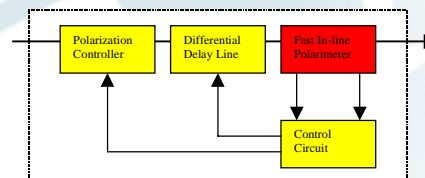
Insertion Loss	1.0 dB typical, 1.5 dB max
Measurement speed	1 μ s
Measurement Accuracy	< 5%
Return Loss	50 dB
Wavelength	1550 nm \pm 100 nm
PDL	< 0.2 dB
Temperature	0 to 75 °C
Electrical connection	Dual row 20 pin connector with 0.1" spacing
Power requirement	\pm 12 volts/100 mA (DC)
Max. Power	100 mW
Size	95mm(L) x 71mm(W) x 22mm(H)

Applications:

- *Simplify and speed up polarization stabilization and PMD compensation algorithms.*

Unique Features:

- *High speed*
- *Low loss*
- *Compact size*
- *No moving parts*



PMD Compensation Module