



Product Overview

The Phoenix in-line fiber Polarimeter is part of the FireBird instrumentation range and provides for minimally invasive polarization analysis in fiber systems. Based on a miniature in-fiber Polarimeter, this compact module is designed with versatility in mind and can be inserted into a fiber system at any point to measure the specific State of Polarization (SOP). Fully controlled from a PC the Stokes parameters are obtained at a high rate (>1M Sample/s) and the data can be processed as required by the user through the PC user interface.

The versatility of the module enables continuous high speed Stokes parameter analysis to provide DOP and SOP. The unit can also be used to make accurate measurement of polarization for PMD and PDL measurement.

The on-board microprocessor links to the PC through a USB interface. Software provided with the Polarimeter gives Stokes parameter measurement, Poincare Sphere display, Polarization ellipse display and parameters such as DOP.

Features & Applications

FEATURES

- In-line measurement
- High speed Stokes parameter measurement
- Full Poincare Sphere coverage
- Low insertion loss
- High return loss
- High extinction ratio maintenance

APPLICATIONS

- Polarization monitoring
- Polarization analysis
- Component testing
- In-line polarization analysis
- Polarization control
- PMD, PDL emulation

SPECIFICATION	Units	Each fiber channel
Wavelength range	nm	C-band (1530 – 1570) extended range on request
Insertion Loss ¹	dB	<0.8
Return Loss ¹	dB	>55
PDL (max)	dB	0.15
Operating Temperature Range	°C	-5 to 50
Storage Temperature	°C	-40 to +85
SOP accuracy	%	<1
DOP accuracy	%	+/-1.5
Sampling rate	Samples/ s	>1,000,000
Communication interface		USB
PC control		Software for polarization analysis
Power		Mains adapter for 110V to 240V

Specification Notes

- Losses do not include connectors

Dimensions

All dimensions are approximate and may vary slightly. Front panel layout may vary according to connector type selection.

Width:	225mm
Height:	55mm
Depth:	105mm

Ordering Information

