



# POD 2000

## High-Speed Polarimeter

Luna's POD 2000 is a DSP-powered polarimeter designed for high-speed polarization characterization, analysis, and monitoring. This instrument uses four channels to simultaneously obtain the four Stokes parameters and measure an input light beam's instantaneous state of polarization (SOP) and degree of polarization (DOP).

A USB 2.0 interface enables data to be transferred directly to a computer and this polarimeter can easily monitor and analyzes fast polarization changes with a sampling rate of up to 100 KS/s. Standard 100BASE-TX Ethernet is also available for measurement and control.

The POD 2000 comes with a user interface for real-time graphic display of polarization state either on a Poincaré Sphere window, for viewing SOP traces, or on an oscilloscope window, for monitoring polarization changes over time.

**High speed polarimeter for analyzing and monitoring the state of the polarization.**

### KEY FEATURES

- High speed, SOP/DOP measurement with 100KHz data update rate
- High accuracy
- Dynamic range -45 to 5 dBm
- None Stop or Continuous measurement as high as 100KHz update rate.
- USB 2.0, Ethernet 100BASE-TX
- SCIP command, C/C++ API, PC GUI
- Trigger in/out

### APPLICATIONS

- SOP/DOP monitoring
- Polarization analysis
- Scrambler DOP characterization
- SOP statistics
- PM fiber alignment to light sources
- Polarization extinction ratio Analysis

## PERFORMANCE

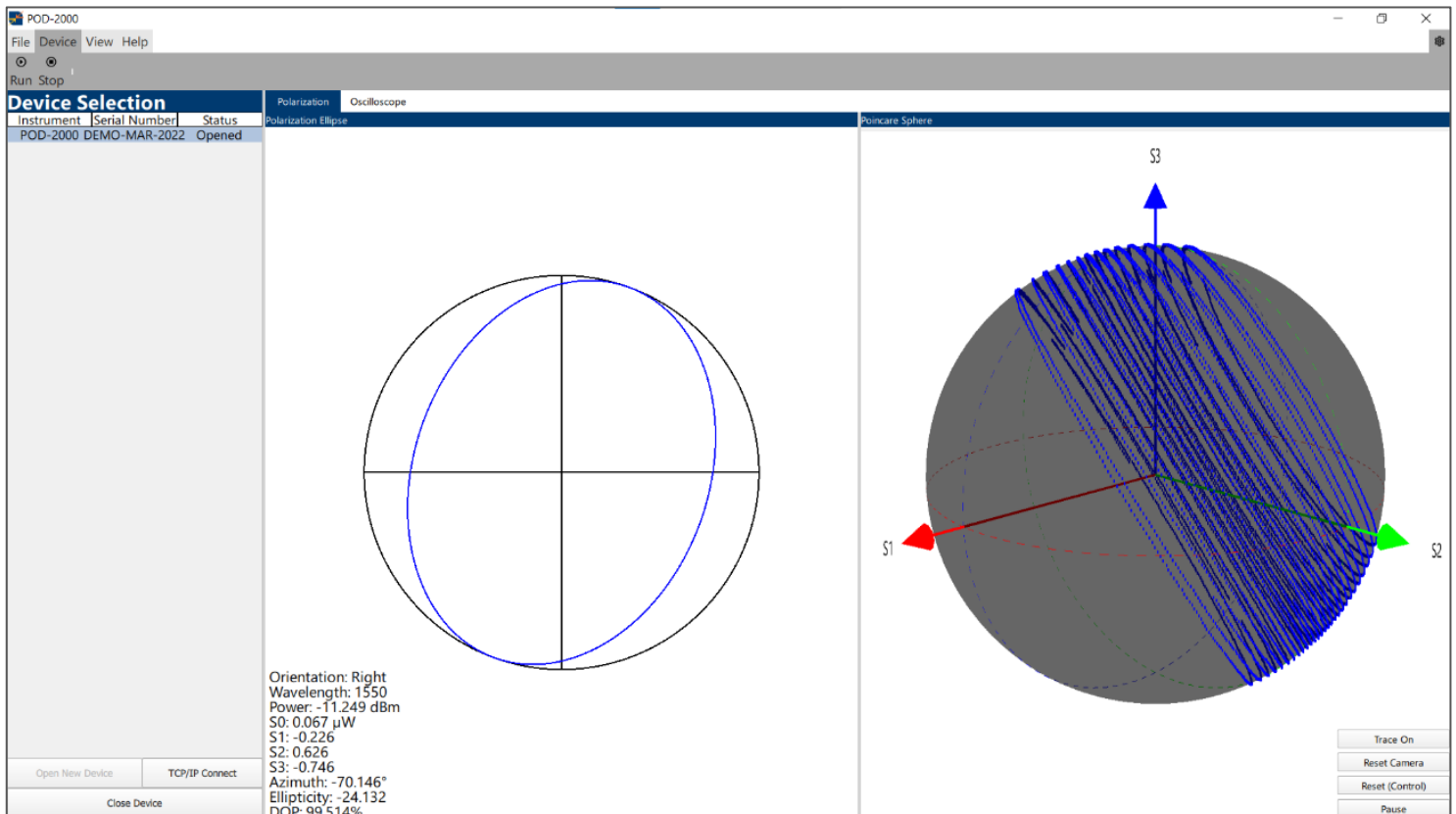
PARAMETER	SPECIFICATION			UNITS
Absolute Maximum Rating				
Optical input power <sup>1</sup>	300			mW
Operating Temperature	0 ~ 50			°C
Storage Temperature	-20 ~ 60			°C
Optical Characteristics				
Operation Wavelength	Min.	Typical	Max.	
C band version	1500	1550	1600	nm
O band version	1260	1310	1360	nm
Dynamic Rang	-45		5	dB
SOP Uncertainty (At calibration wavelength)		1.5		Degree
Azimuth		1		Degree
Ellipticity		1		Degree
DOP Uncertainty (At calibration wavelength)	-1.5		1.5	%
Measurement update Rate			100	KHz
Measurable SOP	Entire Poincaré Sphere			

## NOTES

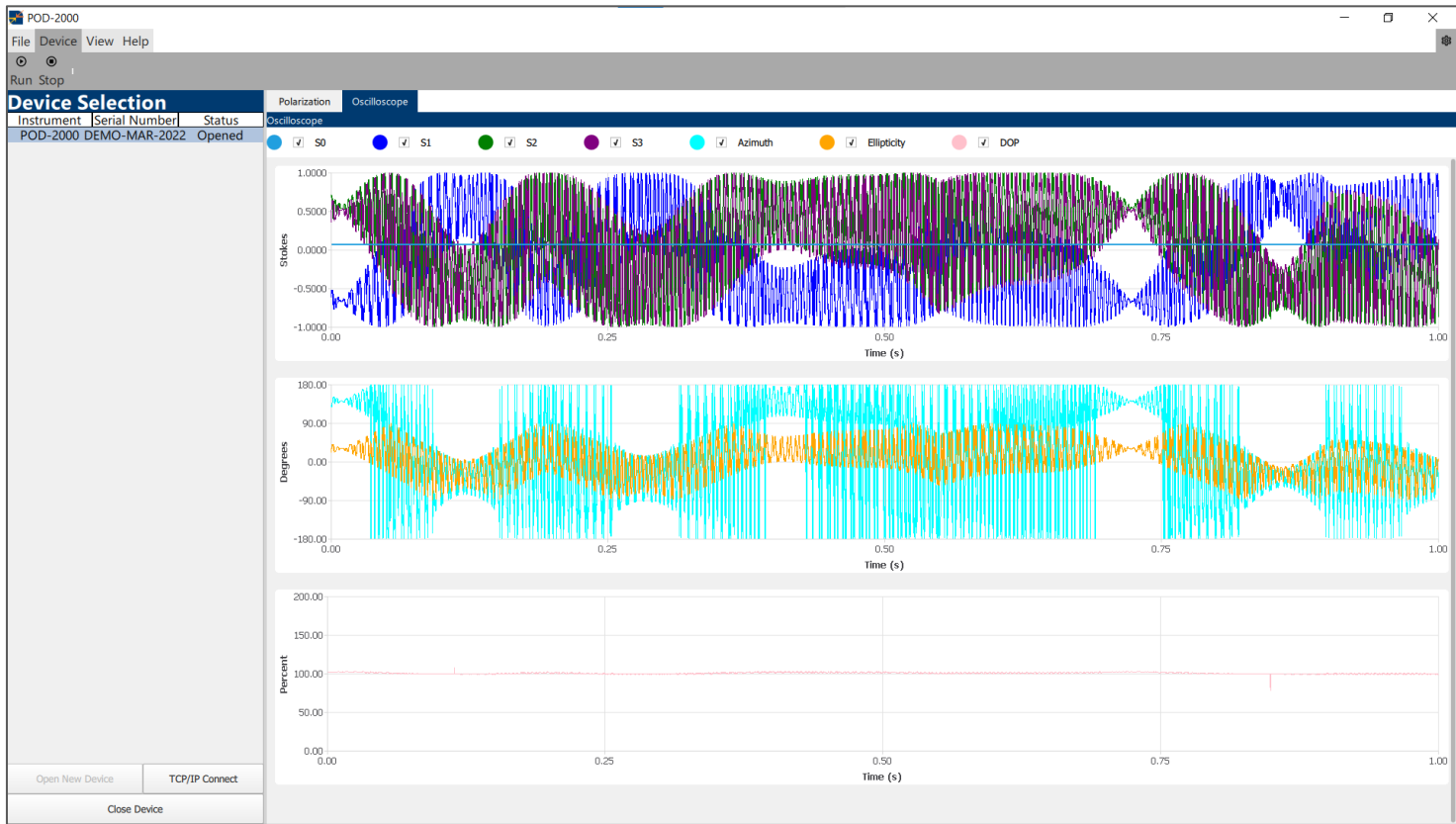
Specifications are based on the pigtail fiber SMF-28.

1. For CW signal

## POD-2000 GUI Polarization Mode



POD-2000 GUI Oscilloscope Mode



ORDERING

Catalog #	Description	Includes
POD 2000-15-FC/APC	POD 2000 High speed polarimeter, 1500nm to 1600nm	POD 2000 main frame for C and L band. Power cable, USB 2.0 A to B cable, USB drive for GUI and documents.
POD 2000-13-FC/APC	POD 2000 High speed polarimeter, 1260nm to 1360nm	POD 2000 main frame for O band. Power cable, USB 2.0 A to B cable, USB drive for GUI and documents.



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\*Specifications subject to change without notice.