



POD 2000

High Speed Polarimeter

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 the instantaneous state of polarization (SOP) and degree of polarization (DOP) of an input light beam.

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

POD 2000 comes with 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 analysis and monitoring polarization characterization.

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, extinction ratio Analysis

PERFORMANCE

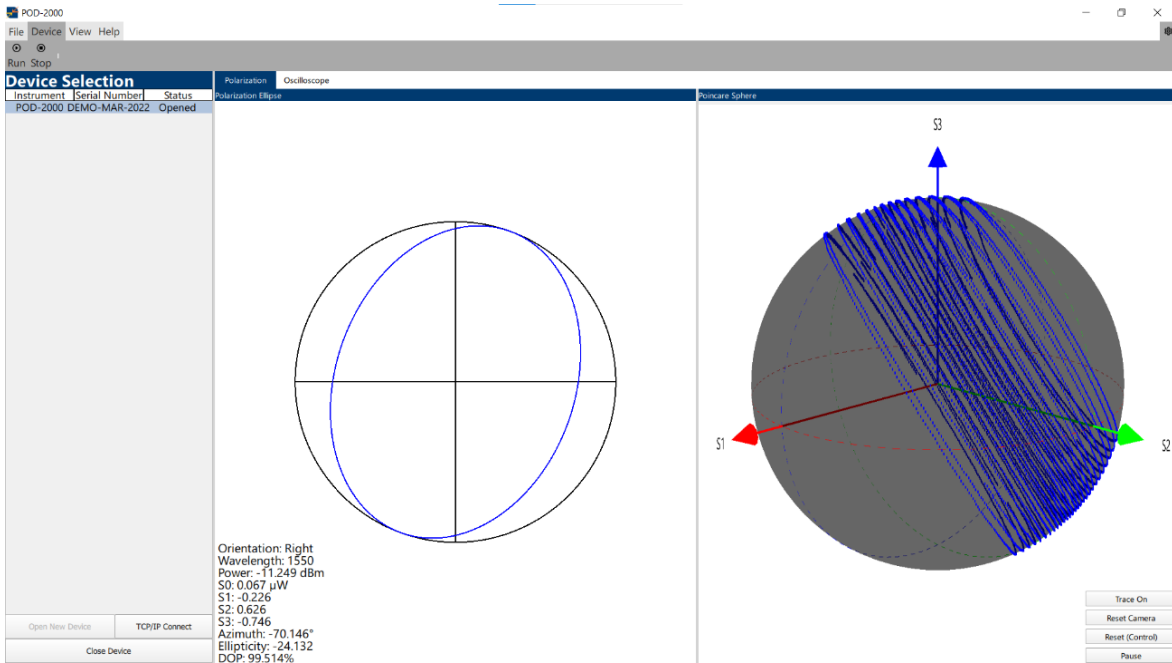
PARAMETER	SPECIFICATION			UNITS
Absolute Maximum Rating				
Optical input power ¹	300			mW
Operating Temperature	0 ~ 50			°C
Storage Temperature	-20 ~ 60			°C
Input power ⁶	100~240, 50~60Hz, 25			V, Hz, VA
Relative Humidity (non-condensing)	<80			%
Optical Characteristics				
Operation Wavelength ²	Min.	Typical	Max.	
S, C, L band version	1480	1550	1620	nm
O band version	1260	1310	1360	nm
1060 nm	1030	1060	1090	nm
Dynamic Rang ³	-45		5	dB
SOP Uncertainty (At calibration wavelength) ⁴		±1		Degree
Azimuth		±0.5		Degree
Ellipticity		±0.5		Degree
DOP Uncertainty (At calibration wavelength) ⁴		±2.5		%
Power measurement uncertainty ⁴		±0.15		dB
Measurement update Rate ⁵			100	KHz
Data streaming Rate (USB / Ethernet)			100	KHz
Measurable SOP	Entire Poincaré Sphere			
Weight	1.6			Kg

NOTES

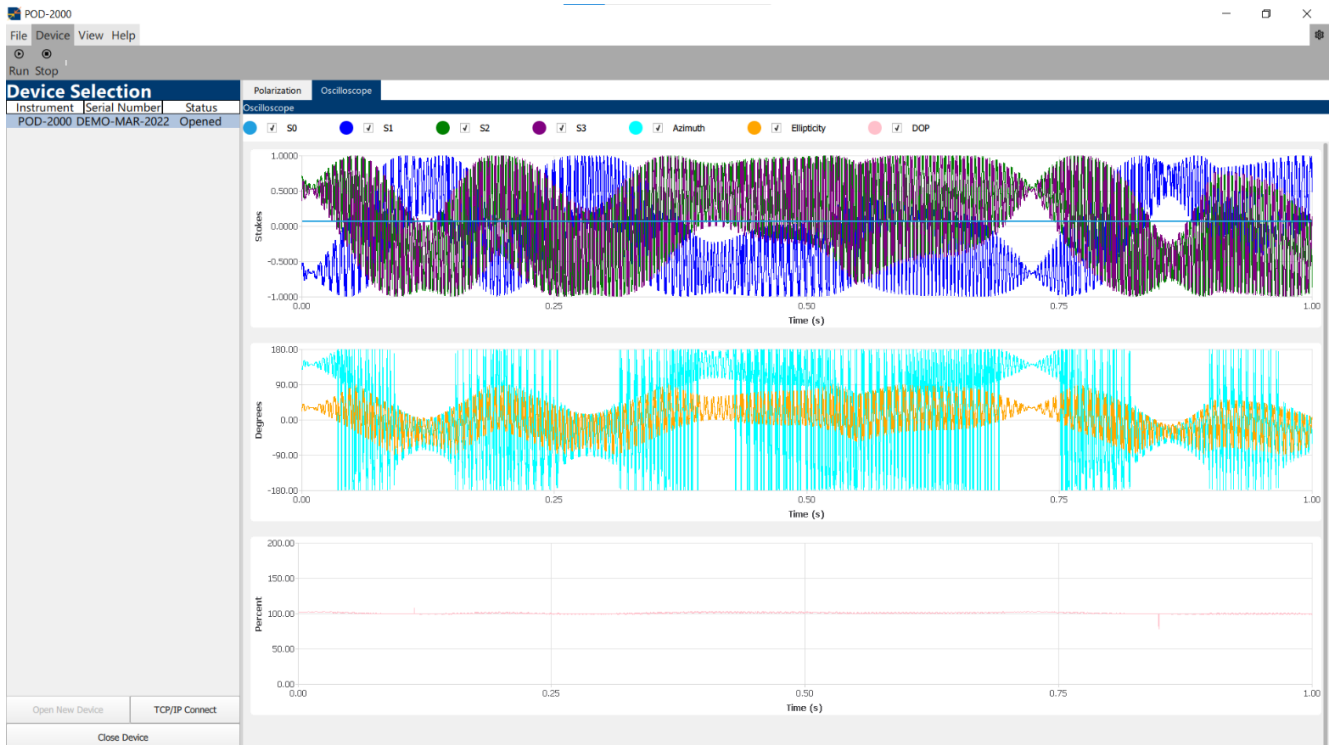
Specifications are based on the pigtail fiber SMF-28.

1. For CW signal
2. Range of the calibration data
3. SOP, DOP, and Power reading are calibrated in power range from -40 to 5 dB
4. Input power >-30dB.
5. It suggested to set the streaming speed to 1Khz/10Khz for lower input power, such as < -30dB or -40dB.
6. Indoor use

POD-2000 GUI



POD-2000 GUI oscilloscope mode



ORDERING

Catalog #	Description
POD 2000-15-FC/APC	POD 2000 1-port terminated high speed polarimeter, 1480 nm to 1620 nm, with POD-2000 user interface software, FC/APC connector
POD 2000-13-FC/APC	POD 2000 1-port terminated high-speed polarimeter, 1260 nm to 1360 nm, with POD-2000 user interface software, FC/APC connector
POD 2000-10-FC/APC	POD 2000 1-port terminated high speed polarimeter, 1030 nm to 1090 nm, with POD-2000 user interface software, FC/APC connector