

Degree of Polarization Meter (DOP-201)



Using a patented maximum & minimum search technique (ref. "Automatic Maximum-Minimum Search Method for Accurate PDL and DOP Characterization"), the DOP-201 measures and displays the Degree of Polarization (DOP) of a light source in real time with high accuracy and wide dynamic range. While polarimeter-based systems are expensive and can be inaccurate for low-DOP sources, and polarization scrambler-based instruments are less accurate for high DOP sources, the DOP-201 accurately measures both low and high DOP. It is ideal for characterizing the performances of depolarizers and depolarized light sources, such as ASE and SLED sources and the pumps for Raman amplifiers. It can also be used to monitor the OSNR and PMD of optical signals, and to measure the noise figure of optical amplifiers. The instrument can cover a wide operating wavelength range, including the S, C and L bands, without calibration. Its simultaneous measurement of DOP and optical power level of the light source under test can be used to obtain DOP power dependence and to ensure low insertion loss during depolarizer manufacturing. The DOP-201 features fast measurement, high accuracy and resolution, a wide operating power range, a bright OLED display, and an analog output port for easy integration in automated depolarizer manufacturing stations.

Specifications:

Operating Wavelength Range	1260 to 1620 nm standard
DOP Resolution	0.01%
DOP Accuracy ¹	±0.5% (single sample) ±0.2% (10 sample average)
Repeatability	±0.2% (10 sample average)
DOP Range	0 – 100%
Measurement Speed	30 ms/measurement for input > -30 dBm
Operating Power Range	-40 to 6 dBm
Optical Power Accuracy	±0.25 dB
Wavelength Calibration for Power Measurement	1260 to 1360 nm and 1440 to 1620 nm
Operating Temperature	0 to 50 °C
Storage Temperature	-20 to 70 °C
Front Panel Display	OLED graphic display
Analog Output	0 to 5 V max range, user configurable Monitor voltage for DOP
Power Supply	100 – 240 VAC, 50 – 60 Hz
Communication Interfaces	USB, Ethernet, RS-232, and GPIB
Dimensions	2U 19" half rack width 14" (L) x 8.5" (W) x 3.5" (H)
<small>Note:</small> 1. At 23 ± 5°C.	

Features:

- Rapid measurement
- DOP is wavelength independent
- High accuracy
- Front panel real time display
- Analog output

Applications:

- Depolarizer manufacturing and QC
- Fiber gyro coil characterization
- ASE & SLED source characterization
- Raman amplifier block manufacturing
- ROADM manufacturing
- Amplifier noise figure measurement

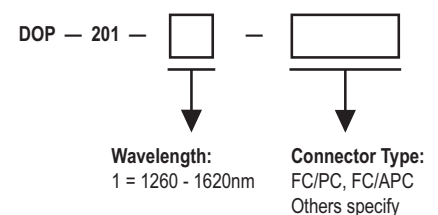
Related Products:

- Polarization Scramblers (PCD-104, PSM-002)
- Polarimeter (PSY-201, POD-201)
- PDL Meter (PDL-201)
- ER Meter (ERM-202)
- Rack Mount Kit (RCK-001)
- Components

Tech Info:

- What is Polarization?
- Automatic Maximum-Minimum Search Method for Accurate PDL and DOP Characterization
- Accurate DOP Characterization with Less Effort

Ordering Information:



Distribution in the UK & Ireland



**Characterisation,
Measurement &
Analysis**

Lambda Photometrics Limited
 Lambda House Batford Mill
 Harpenden Herts AL5 5BZ
 United Kingdom

E: info@lambdaphoto.co.uk
W: www.lambdaphoto.co.uk
T: +44 (0)1582 764334
F: +44 (0)1582 712084