

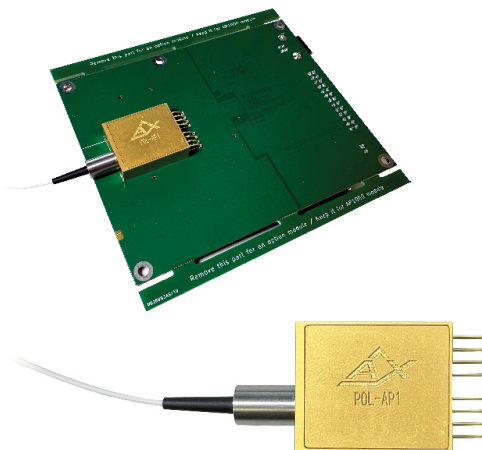
## Fiber-coupled Polarimeters

### POL-APx Series



#### Benchtop Polarimeter

Enables accurate real-time monitoring of SOP, DOP, and power for a wide range of optical signals



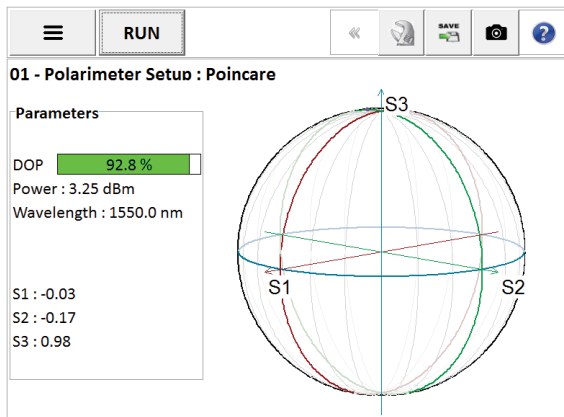
#### Card & Component Polarimeter

The same performance in an electronic card assembly or component-only, for direct integration into a proprietary design

## POL-APx Series Advantages

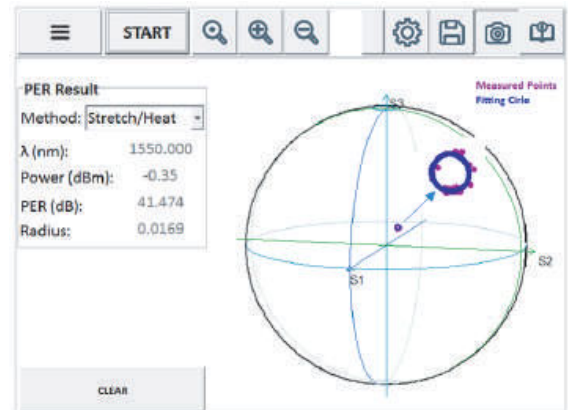
Advantages	Benefits	Features
High Accuracy	Reliable results	Four output measurements
High Dynamic Range	Work with a variety of weak and strong optical signals, in real time	Input power from -60 dBm to +10 dBm Fast sampling rate
Versatility	Cost-effective multi-analysis tool	SOP, DOP, and PER analysis Poincaré sphere, Jones diagram or virtual oscilloscope
Ease of use	Time-saving efficiency	User-friendly interface & Remote control capabilities

### SOP & DOP Measurements



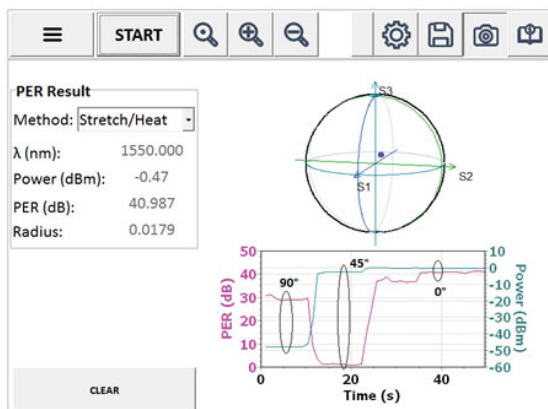
Measure the state of linear polarization input signal by varying the linear polarizer angle between 0 and 360°, with a DOP accuracy of  $\pm 0.5^\circ$ .

### PER Measurements



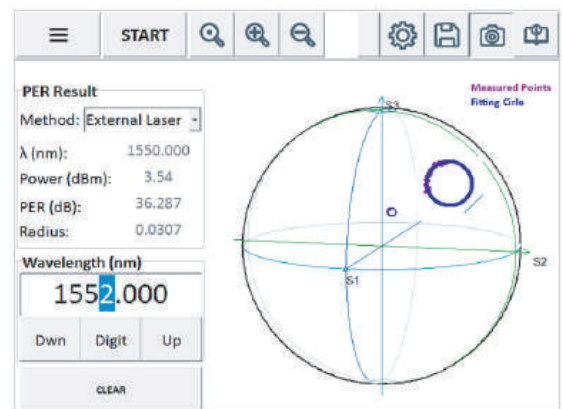
Measure the polarization extinction ratio from the impact of mechanical stress on the point distribution of the Poincaré sphere.

### PM Fiber Alignment



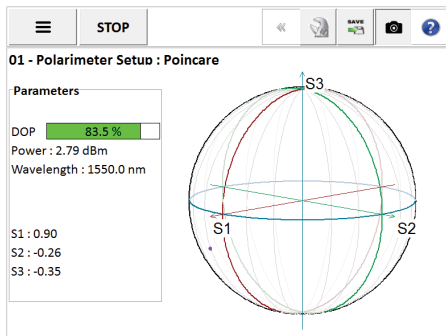
Align the polarization axis of PM fibers and optimize fiber splicing in real time.

### External Laser Mode

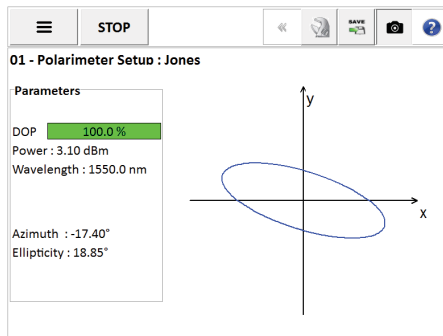


Characterize external lasers and or measure PER of components using an external tunable laser source.

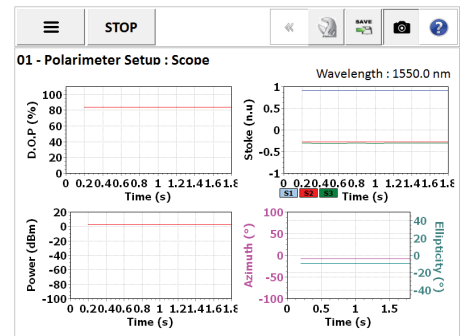
## Poincaré Sphere



## Jones Graph



## Stokes Parameters



## Specifications

Parameters	Values
Wavelength Range	1260 – 1610 nm
Input Power Range	-60 dBm to +10 dBm
Maximum Sampling Rate <sup>1</sup>	1000 S/s
SOP Accuracy	+/- 0.25° (-30 to +2 dBm) < 2° (-60 to -30 dBm & 2 to 10 dBm)
Measurable SOP States	Full Poincaré sphere
Azimuth Accuracy	+/-0.25° (-30 to +2 dBm)
Ellipticity Accuracy	+/-0.25° (-30 to +2 dBm)
DOP Accuracy	+/-1 % (-35 to +5 dBm)
Relative Power Measurement Accuracy	+/-0.2 dB (-35 to +5 dBm)
Absolute Power Measurement Accuracy	+/-1 dB (-35 to +5 dBm)

(1) Applies to benchtop and OEM module; photodiodes are sampled at 4kHz. Polarimeter component's bandwidth (photodiodes) is 500 MHz.

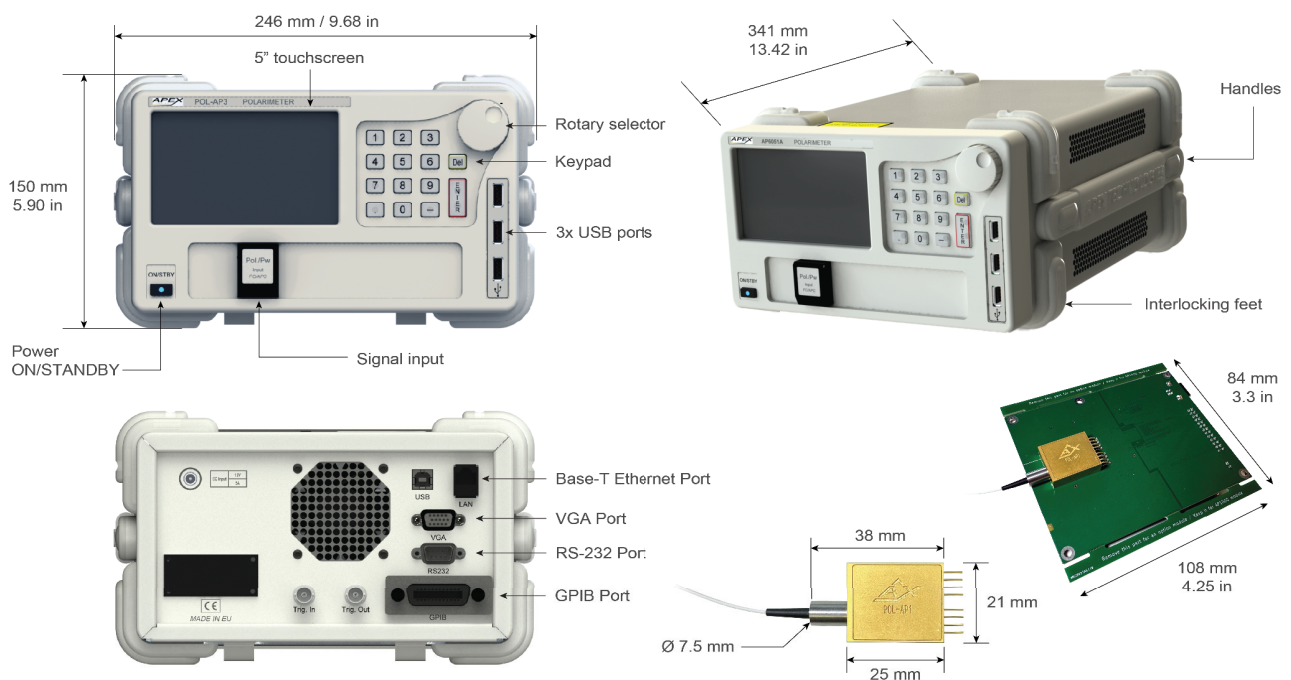
## General Specifications<sup>1</sup>

Parameters	Values
Optical Connectors	FC/APC
Remote Control	Ethernet, GPIB (optional)
USB Connectors	3 USB-A 2.0 ports (enables keyboard, mouse and USB stick)
Internal Memory	64 GB
Power	115/230 VAC, 50/60 Hz, 60 W
Operating Temperature	+5 to 35 °C
Storage Temperature	-10 to +50 °C
Humidity	20 – 80% RH (non-condensing)
Dimensions (W x H x D)	246 x 150 x 341 mm 9.7 x 5.9 x 13.4 in
Weight	4.5 kg (9.9 lbs)

(1) Benchtop unit (see next page for card & component dimensions)

# Bring your Lab to the Top

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