

Polarization Extinction Ratio Meter

ERM-101

The ERM-101 is a high performance polarization extinction ratio (PER) meter designed specifically for both production and laboratory environments. With a PER dynamic range larger than 50 dB and an angular resolution of 0.06° , the instrument outperforms any competitors in its class. One attractive option is a separate measuring head that can be detached from the main instrument enclosure for user convenience in applications such as pigtailling of laser diodes. The instrument has 5 measurement speeds ranging from 0.1 to 10 seconds/cycle, with the high speed for live alignment and the low speed for accuracy. The measurement data can also be stored and recalled with the press of a button for comparison purposes. In automatic measurement mode, PER, axis angle, and optical power are automatically measured and displayed in the LCD window. In manual measurement mode, the user can manually rotate the internal polarizer using the arrow keys on the front panel to search for the maximum transmission. The instantaneous power and polarizer rotation angle are simultaneously displayed. The ERM-101 is ideal for PM fiber pigtailling of laser diodes, PM fiber patch cord manufacturing, PM fiber connectorization, PM fiber fusion splicing, PM fiber coil production and quality assurance for fiber gyros.



Preliminary Specifications

Operating Wavelength Range	1260 to 1650 nm
PER Dynamic Range	50 dB
PER Ranges	0 - 50 dB for input power of -5 to 10 dBm 0 - 30 dB for input power of > -25 dBm
PER Resolution	0.3 dB
Angular Resolution	0.06°
Angular Accuracy	$\pm 0.5^\circ$
Power measurement accuracy	± 0.25 dB
Power resolution	0.02 dBm (PER < 30) 0.2 dBm (PER > 30)
Input Optical Power Range	-30 dBm to 10 dBm
Measurement speeds	0.1, 0.2, 0.4, 1, 10 seconds/cycle
Connector Type	Universal Adapter: FC/PC, FC/APC, SC/PC, SC/APC
Optical Power Damage Threshold	300 mW
Operating Temperature	0°C to 40°C
Storage Temperature	-20°C to 60°C
Communication Interface	USB, RS-232, Ethernet
Electrical Power supply	100-120 VAC, 50-60 Hz or 200-240 VAC, 50-60 Hz
Dimensions	2U 19" half rack width 14" (L) x 8.5" (W) x 3.5" (H)

Note: Please specify power supply and connector type when ordering.

Applications:

- PM fiber pigtailling of laser diodes
- PM fiber connectorization
- PM fiber patch cord production
- PM fiber fusion splicing QA
- PM fiber coil QA
- Fiber gyro QA

Unique Features:

- High polarization extinction ratio range
- High angular resolution
- Detached optical head option
- Variable speed
- Store and recall functions
- Manual alignment function

Ordering Information:

ERM - 101 - X



Optical Head option:
D = detachable *
I = integrated



* Coming soon

Making Light Work Lighter
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