

## Polarization Extinction Ratio Meter **PEM-330**

The PEM-330, polarization extinction ratio (PER) meter enables rapid and accurate polarization axis alignment of optical components to a PMF (Polarization Maintaining Fiber). The PEM-330 incorporates a powerful GPIB interface enabling full system integration and production line automation. In addition, to facilitate automatic alignment of diode lasers to optical fibers, an analog power monitor with 1kHz response time is available. With this addition, both translational and rotational fiber alignment can be controlled automatically.



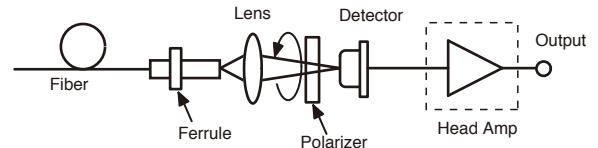
### Features

- ▶ Full band 1260-1630nm
- ▶ Simultaneous display of extinction ratio, optical power, and polarization angle
- ▶ 50 dB dynamic range for PER measurement
- ▶ Wide dynamic range for input power (-40 to +10 dBm)
- ▶ Direct PD analog output
- ▶ Real-time (up to 10Hz) measurement
- ▶ Option utility software (for controlling instrument and acquiring/storing data)

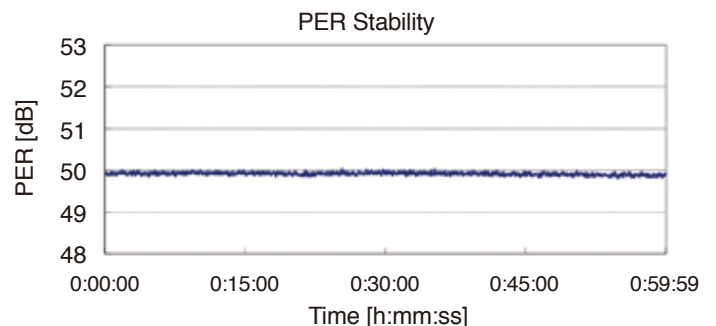
### Applications

- ▶ Alignment of polarization axis of optical devices
- ▶ Connectorized PMF patch cord evaluation
- ▶ PMF pigtailed laser diodes evaluation
- ▶ PM fiber fusion splicing

### Principle of Operation



### Measurement Data



## ■ Specifications

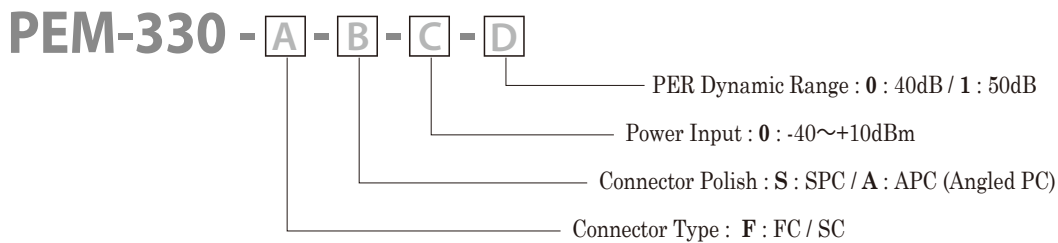
Parameter	Unit	Specification	Notes
Wavelength Range	nm	1260-1630	
PER Dynamic Range	dB	40      50	
PER Range	dB	-      0 to 50	Input power -5~+10dBm
		0 to 40      0 to 40	Input power -15~+10dBm
		0 to 30      0 to 30	Input power -25~+10dBm
		0 to 20      0 to 20	Input power -35~+10dBm
PER Resolution	dB	0.1	
PER Accuracy	dB	<±0.3 *1	
Input Power	dBm	-40~+10	
Power Resolution	dB	0.01	
Power Accuracy	dB	<±0.3 *2	
Polarization Angle Resolution	deg	0.12 *3	
Polarization Angle Accuracy	deg	<±0.45	
Measurement Speed	sec	0.1/ 0.2/ 0.4	
Interface	-	GP-IB, RS-232C	
Operating Temperature	°C	0-40	
Size (w) x (D) x (H)	mm	210x300x80	
Weight	kg	3	
Supply Voltage	V	AC100-240	
Max. Power consumption	W	35VA	

\* 1 : Temperature:20-30°C, PER<30dB, Measurement Speed:2.5Hz

\* 2 : Calibrated wavelength:1310nm / 1550nm

\* 3 : Measurement Speed:2.5Hz

## ■ Ordering Code



[www.santec.com](http://www.santec.com) E-Mail : [sales@santec.com](mailto:sales@santec.com)

2014 © SANTEC CORPORATION Santec reserves the right to make changes in equipment design, components or specifications without notices.



**SANTEC CORPORATION**  
5823 Ohkusa-Nenjoyozaka, Komaki, Aichi 485-0802, Japan Tel. +81-568-79-3536 Fax +81-568-79-1718

**SANTEC U.S.A. CORPORATION**  
433 Hackensack Ave., Hackensack, NJ, 07601, U.S.A. Toll Free +1-800-726-8321 (santec-1) Tel. +1-201-488-5505 Fax +1-201-488-7702

**SANTEC EUROPE LIMITED**  
1 Lyric Square, London, W6 0NB, U.K. Tel. +44-20-3542-7851

**SANTEC (SHANGHAI) Co., Ltd**  
No.800 Zhangyang Road Changhang Tower, Pudong District, Shanghai 200122 China Tel: +86-21-58361261, +86-21-58361262 Fax: +86-21-58361263