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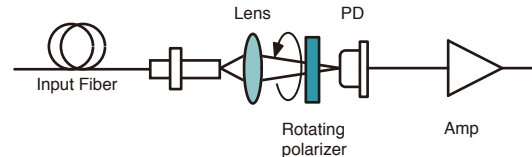
# Polarization Extinction Ratio Meter PEM-340

The PEM-340 polarization extinction ratio (PER) meter enables rapid and accurate polarization axis alignment of optical components to a PMF (Polarization Maintaining Fiber). The PEM-340 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.

The PEM-340 has two separate versions: the Normal Power version with 50 dB of PER dynamic range is ideal for PM fiber connectorization and alignment of polarization axis of optical devices. The High Power version has a high input power range of up to +20dBm and is best suited for PMF pigtailed laser diodes evaluation.



## Principle of Operation



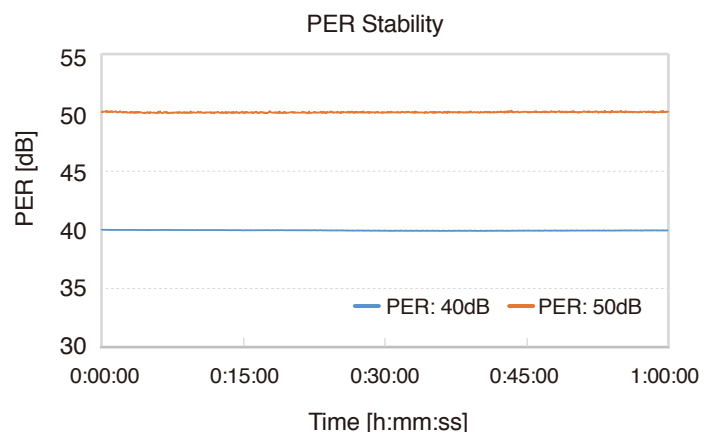
## Features

- ▶ Full band 1260-1630nm
- ▶ Simultaneous display of extinction ratio, optical power, and polarization angle
- ▶ 50 dB dynamic range for PER measurement
- ▶ Wide dynamic input power range (-40 to +10 dBm/Normal power), (-25 to +20dBm/High power)
- ▶ Direct PD analog output
- ▶ Real-time (up to 10Hz) measurement
- ▶ Interchangeable connectors: FC, SC or LC

## Applications

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

## Measurement Data



## Specifications

Category		Unit	Normal power		High power	
Wavelength Range		nm	1260-1630			
PER Dynamic Range		dB	50		40	
PER Range		dB	0 to 50	-5~+10dBm	-	-
			0 to 40	-15~+10dBm	0 to 40	-5~+20dBm
			0 to 30	-25~+10dBm	0 to 30	-15~+20dBm
			0 to 20	-35~+10dBm	0 to 20	-25~+20dBm
PER Resolution		dB	0.01			
PER Accuracy *1	PER < 30dB	dB	<±0.3			
Input Power Range		dBm	-40~+10		-25~+20	
Power Resolution		dB	0.01			
Power Accuracy *2		dB	<±0.3			
Polarization Angle Resolution *3		deg	0.12			
Polarization Angle Accuracy		deg	<±0.45			
Measurement Speed		sec	0.1/ 0.2/ 0.4			
Interface		-	GP-IB, RS-232C			
Optical Connector		-	FC, SC or LC			
Connector Polish		-	SPC or APC *4			
Operating Temperature		degC	0-40			
Size (w) x (D) x (H)		mm	210x300x80			
Weight		kg	3			
Supply Voltage		V	AC100-240			
Maximum Power Consumption		W	35			

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

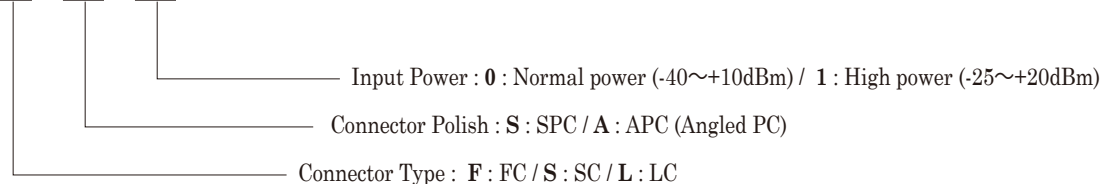
\* 2 : Calibrated wavelength: 1310nm / 1550nm

\* 3 : Measurement Speed: 2.5Hz

\* 4 : SPC: Super Physical Contact, APC: Angled PC

## Ordering Code

**PEM-340 - A - B - C - 00**



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