

# Polarization Extinction Ratio Meter

(all connector types and bare fiber input interface)

(Protected by pending US and China patents)

## Product Description

The PERM-800 optical power meter is an innovative solution to directly measure the output polarization extinction ratio from a fiber. It features unmatched low cost, large dynamic range, and high resolution. The design accepts all types of fiber connectors as well as free space laser beam. One attractive option is bare fiber can be conveniently insert into the meter, which matches our PM fusion splicer fiber holder. The PERM-800 is also an optical power meter.

The design adds a manual rotary polarizer to an optical power meter. As the polarizer rotates about 90 degree, maximum and minimum intensity readings are obtained and the ratio is ER. The rotation is continuous, providing high resolution and accuracy. For connector test, the polarizer rotary is pre-aligned to the key. The ease of operation has been proven in production and laboratory environments. The PERM-800 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.



## Performance Specification

PERM - 800	Min	Typical	Max	Unit
Wavelength Range	1800		2400	nm
	1290		1650	
	850		1290	
	400		1000	
Extinction Ratio Range		30		dB
Extinction Ratio Accuracy <sup>(1)</sup>		1dB		dB
Extinction Ratio Resolution		0.01dB		dB
Connector Angular Accuracy <sup>(2)</sup>		0.3		degree
Dynamic Range	-50		26	dBm
Input Optical Power	0.05		380	mW
Dimensions		65x90x190		mm
Weight		0.49		Kg
Operating Temperature	-10		50	°C
Storage Temperature	-40		60	°C
Storage Humidity		<90% RH non condensing		

[1] ER is sensitive to fiber bending, temperature, and light source RE

[2] For FC style connector with high tolerance keyway

## Features

- Low Cost
- Wide Wavelength
- Ease of Use
- Reliable
- Compact
- Bare Fiber Adaptor

## Applications

- Component Fabrication
- Quality Control
- Laboratory Use
- Connector Fabrication

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## Dimensions (mm)

5cm x10cm x 13 cm

\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

## Ordering Information

PERM-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Type	Wavelength	Power Supply	Package	Fiber Type	Bare Fiber Adaptor (additional)	Connector Adaptor
	800	1290-1610=1 1800-2400 = 2 840-1290 = 3 Special=0	None = 0	Standard =1 Special=0	125 um glass diameter Special=0	None = 0 Yes = 1	FC/PC=1 FC/APC=2 Special=0

“Special” – this category is to provide special performance beyond the parameters listed on the datasheet. NRE charge may be needed when this is selected.