# PM-1100

## **POWER METER**





Pinpoint accuracy, wide dynamic range, high resolution and excellent linearity.

### **KEY FEATURES**

Excellent linearity of  $\pm 0.015$  dB

Power measurement up to 20 dBm with 2 mm GeX detector

Easy-to-use menu-driven display

## **COMPLEMENTARY PRODUCTS**



Variable Attenuator FVA-3150



SPEC SHEET

## **ACCURATE, AUTOMATED MEASUREMENTS**

The PM-1100 Power Meter delivers accurate power measurements over a wide dynamic range along with high resolution and excellent linearity. Choose the PM-1100 to automatically measure discrete values such as insertion loss or, alternately, for continuous monitoring and data acquisition. This stand-alone power meter provides exceptional performance, flexibility, user-friendliness and extensive integration capabilities.

#### Ease of Use, Engineered

EXFO's PM-1100 was designed with the user in mind. A menu-driven interface guides you through the operation, displaying results clearly. Control your unit remotely with the GPIB and RS-232 interfaces and control codes from any compatible PC or test station.

#### **Excellent Specification**

The PM-1100 Power Meter offers ±0.015 dB linearity with a ±5 % absolute uncertainty and a 0.001 dB power resolution. Whether you are measuring absolute or relative power levels, count on efficient, highly accurate measurements.

## PM-1100: FLEXIBLE AND EASY TO USE

## **Key Applications**

The PM-1100 power meter is ideal for the following applications:

- > Absolute power measurement (dBm or W)
- > Insertion loss measurement (dB or W/W)
- > Linearity verification
- > System or subsystem monitoring
- > Source stability measurement



- Clear results
   Easy-to-read display, with power measurements and wavelength selection
- Direct access to set up parameters Perform nulling or adjust setup (power measurement units, reference, wavelength, gain, scale etc.) using the front panels
- Menu-driven interface
  Easy control of advanced functions menu
- 4 Interchangeable fiber-optic adapters (FOA)
  Different types of connectors may be used



SPECIFICATIONS <sup>a</sup>	
Model	PM-1102X
Number of detectors	1
Detector type	GeX
Detector size (mm)	2
Wavelength range (nm)	750 to 1700
Power range (dBm)	20 to -75 <sup>b</sup>
Uncertainty (%)	$\pm5^{\circ}$ (10 dBm to -35 dBm)
Linearity (dB) <sup>d</sup>	±0.015 (0 dBm to -35 dBm)
Noise (peak-to-peak)(pW) <sup>e</sup>	-
Power resolution (dB) °	0.001 (20 dBm to -35 dBm)
Wavelength resolution (nm)	1
Sampling rate (sample/s/channel) fast acquisition mode continuous mesurement mode	up to 40
Fiber type (µm)	5/125 to 62.5/125
Analog output bandwidth (Hz) (ranges 1 to 6) outpout voltage (V) outpout impedance (Ω)	N/A
External trigger	input voltage (V)
General Specifications	
Size (H x W x D)	117 mm x 222 mm x 333 mm (4 5/8 in x 8 3/4 in x 13 1/8 in)
Weight	2.0 kg (4.5 lb)
Temperature operating storage	0 °C to 40 °C (32 °F to 104 °F) -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	0 % to 80 % non-condensing

#### Notes

- At 1310 nm (unless otherwise specified) with an FC/non-angled connector and a warm-up time of 20 minutes (30 minutes for PM-16X3W), followed by an offset nulling.
- b. From 0 °C to 30 °C.
- c. At 23 °C ± 1 °C with an FOA-322 connector adapter, between 1000 nm and 1650 nm. Add 1 % to uncertainty below 1000 nm and 3 % over 1650 nm.
- d. Averaged measurement at constant temperature in 0 °C to 40 °C range.
- e. Averaging time 0.25 s, observation time 50 s at 23 °C  $\,\pm$  1 °C, from 1200 nm to 1640 nm.
- f. Bandwidth corresponds to each electrical scale from the lowest to the highest gain.



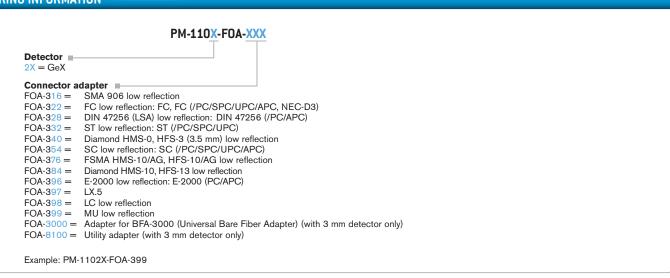
#### SPECIFICATIONS (CONTINUED)

Instrument drivers LabVIEW™ drivers and SCPI commands

Remote control GPIB (IEEE-488.1, IEEE-488.2) and RS-232

Standard accessories User guide, 1 or 2 connector adapters, Certificate of Calibration, Certificate of Compliance and AC power cord

#### **ORDERING INFORMATION**



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