

PM-1100

POWER METER



40G
100G

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

KEY FEATURES

Excellent linearity of ± 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

EXFO

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



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

SPECIFICATIONS ^a

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 ^b
Uncertainty (%)	±5 ^c (10 dBm to -35 dBm)
Linearity (dB) ^d	±0.015 (0 dBm to -35 dBm)
Noise (peak-to-peak)(pW) ^e	–
Power resolution (dB) ^e	0.001 (20 dBm to -35 dBm)
Wavelength resolution (nm)	1
Sampling rate (sample/s/channel) fast acquisition mode continuous measurement mode	up to 40
Fiber type (µm)	5/125 to 62.5/125
Analog output bandwidth ^f (Hz) (ranges 1 to 6) output voltage (V) output 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

- a. 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 ± 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

PM-110X-FOA-XXX

Detector

2X = GeX

Connector adapter

- FOA-316 = SMA 906 low reflection
- FOA-322 = FC low reflection: FC, FC (/PC/SPC/UPC/APC, NEC-D3)
- FOA-328 = DIN 47256 (LSA) low reflection: DIN 47256 (/PC/APC)
- FOA-332 = ST low reflection: ST (/PC/SPC/UPC)
- FOA-340 = Diamond HMS-0, HFS-3 (3.5 mm) low reflection
- FOA-354 = SC low reflection: SC (/PC/SPC/UPC/APC)
- FOA-376 = FSMA HMS-10/AG, HFS-10/AG low reflection
- FOA-384 = Diamond HMS-10, HFS-13 low reflection
- FOA-396 = E-2000 low reflection: E-2000 (PC/APC)
- FOA-397 = LX.5
- FOA-398 = LC low reflection
- FOA-399 = MU low reflection
- FOA-3000 = Adapter for BFA-3000 (Universal Bare Fiber Adapter) (with 3 mm detector only)
- FOA-8100 = Utility adapter (with 3 mm detector only)

Example: PM-1102X-FOA-399

EXFO Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | www.EXFO.com

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