

EXFO

PM-1600

The EXFO PM-1600 is a high-speed benchtop optical power meter designed for high-performance testing of active and passive fiber-optic components. It delivers exceptional testing efficiency with a sampling rate of up to 4096 samples per second, extremely fast stabilization time, and a polarization-dependent response as low as 0.005 dB. It offers selectable wide-area detector options, programmable data acquisition buffering, and flexible analog outputs and external triggering for automated test setups.

SPECIFICATIONS

General

Interfaces	GPIB (IEEE-488.2), RS-232
Display	Backlit monochrome LCD
Warm-up Time	1 h

Physical

Power Supply	100 to 240 V AC, 50/60 Hz
Operating Temperature	0 to 40 °C °C
Dimensions (W×H×D)	222 mm x 117 mm x 333 mm mm
Weight	2.9 kg kg

Optical Specifications

Detector Type Options	InGaAs / Silicon (configuration dependent)
Detector Active Area (PM-1613)	1.0 mm
Detector Active Area (PM-1623)	3.0 mm
Wavelength Range (InGaAs)	800 nm to 1700 nm
Wavelength Range (Silicon)	450 nm to 1100 nm
Power Measurement Range (InGaAs)	+10 dBm to -80 dBm
Power Measurement Range (Silicon)	+10 dBm to -70 dBm
Uncertainty (Accuracy)	±5% at 1310 nm and 1550 nm (0 to -50 dBm)
Polarization Dependence Loss (PM-1613)	< ±0.015 dB (1310 nm and 1550 nm)
Polarization Dependence Loss (PM-1623)	< ±0.005 dB (1310 nm and 1550 nm)
Linearity	±0.015 dB (0 to -60 dBm), ±0.050 dB (+10 to 0 dBm and -60 to -70 dBm)
Display Resolution	0.001 dB
Calibrated Wavelengths	User-adjustable in 1 nm steps

Measurement & Acquisition Performance

Sampling Rate	Up to 4096 samples/s
Data Buffer Capacity	Up to 4096 samples
Trigger Modes	External trigger, internal software, free-run

Connectivity & Interfaces

Trigger Input Port	BNC (TTL compatible)
Trigger Output Port	BNC (TTL compatible)
Analog Output	BNC, 0 V to 5 V
Optical Interface Adapter Type	EXFO Universal Interface (FOA-XX) interchangeable adapters

Environmental & Calibration

Storage Temperature Range	-40 °C to 70 °C
Relative Humidity Range	0% to 95% non-condensing
Calibration Interval	3 years

Physical Characteristics

Form Factor	Benchtop / half-rack unit
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Performance & Measurement

Maximum Safe Input Power (PM-1613)	+16 dBm
Maximum Safe Input Power (PM-1623)	+18 dBm
Wavelength Setting Resolution	1 nm
Measurement Units	dB, dBm, W

Inputs & Outputs

Analog Output Voltage Range	0 to 5 V
Analog Output Connector	BNC
Trigger Input Level	TTL (0 to 5 V)
Trigger Output Level	TTL (0 to 5 V)

General & Compliance

Command Set	SCPI
Fiber Compatibility	Single-mode and multimode (up to 100/140 µm)

Triggering

External Trigger Delay	< 5 µs
Trigger Jitter	< 1 µs

Outputs

Analog Output Bandwidth	DC to 5 kHz (PM-1613), DC to 3.5 kHz (PM-1623)
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Optical

Maximum Fiber Core Diameter	100 µm
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TECHNOLOGY

Fiber Optic Testing

APPLICATIONS

Active and Passive Optical Component Characterization

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.