Have you seen our...

Handheld Fiber Optic Power Meter

For current pricing, please see our website.

Digital Handheld Power and Energy Meter (Page 1 of 2)

PM100D

Features
- Power and Energy Measurements
- Large, 4" Backlit Digital Display
- Rechargeable Battery Lasts up to 8 Hours
- USB2.0 Connectivity
- SD Card Slot for Recording Data
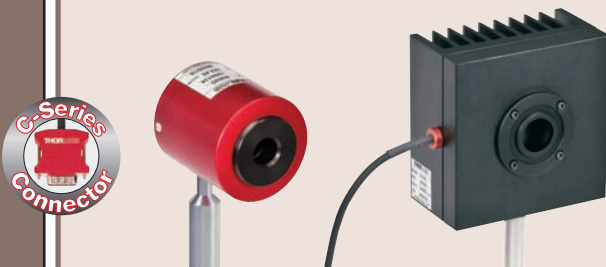- 16 Bit A/D Converter

C-Series Connector

Compatible Sensors
- S100C Series of Photodiode Sensors
- S300C Series of Thermal Sensors
- ES100C and ES200C Series of Pyroelectric Sensors
- Photodiodes: 5 mA (Max)
- Thermopiles: 1 V (Max)
- Pyroelectric Sensors (Max 100 V)

Our PM100D Console is capable of both power and energy measurements through compatibility with photodiode, thermal, and pyroelectric sensors. It also offers excellent accuracy and reliability. With a large, backlit 4" display and backlit buttons, it is a versatile meter that is ideal for everyday use.

The PM100D is compatible with all of the new C-Series sensors. The entire current C-Series offering is capable of detecting powers from 100 pW to 250 W and energies from 10 µJ to 15 J, with operating wavelengths between 185 nm and 25 µm. Included in this sensor range are compact fiber sensors, which are the size of a DB9 connector and attach directly to the console, turning the PM100D into an all-in-one fiber power meter. With the PM100D, you can wire your own unamplified photodiodes (anode ground), thermopiles, and pyroelectric sensors to a DB9 connector. Many of our previous A- and B-Series sensors can be updated for a nominal fee to be compatible with our C-Series line of power and energy meters. Please contact Tech Support for a quote.

The PM100D has a number of display options including numerical, graphical, simulated analog needle, and statistics. It can be used manually or remotely via the USB2.0 computer interface. When connected to a computer, it is easy to record data using the GUI and drivers that are included on a USB thumb drive. A bottom-located SD memory card slot can be used to save data when not tethered to a computer. An SD card is included with each unit. An SMA connector on the side provides a sensor output (0 – 2 V, 100 kHz), which is the amplified input signal (not wavelength corrected). This can be used to monitor the signal or to control external processes.

The PM100D has an internal battery, offering up to 8 hours of operation per charge. Charge the PM100D via USB or by using the included power adapter.

A 1/4"-20 hole is at the base of the meter for post mounting (see page 332 for threading adapters). In addition, the unit can be placed upright on the table using the kickstand on the back.

Photodiode Sensors

C-Series Connector

Thermal Sensors

C-Series Connector

Pyroelectric Sensors

C-Series Connector

Light Analysis

CHAPTERS ▼

Power Meters

Detectors

Beam Characterization

Polarimetry

Electronics Accessories

SECTIONS ▼

Power Meters

Touch Screen Meter

Digital Meter

Analog Meter

Compact Sensor Interface

Dual-Channel Meter

Photodiode Sensors

Thermal Sensors

Pyroelectric Sensors

Field Service

Digital Handheld Power and Energy Meter (Page 2 of 2)

PHOTODIODE SENSOR INPUT (CURRENT)	
Measurement Ranges	6 Decades; 50 nA – 5 mA
Units	W, dBm, W/cm², A
Accuracy	±0.2% of Full Scale (5 µA – 5 mA) ±0.5% of Full Scale (50 nA)
Bandwidth	DC to 100 kHz, Dependent on Sensor and Settings

THERMOPILE SENSOR INPUT (VOLTAGE)	
Measurement Ranges	4 Decades; 1 mV – 1 V
Units	W, dBm, W/cm², V
Accuracy	±0.5% of Full Scale (10 mV – 1 V) ±1% of Full Scale (1 mV)
Bandwidth	DC to 10 Hz, Dependent on Sensor and Settings
Time Constant Correction	1 – 30 s

ANALOG OUTPUT	
Connector	SMA
Voltage Range	0 – 2 V
Bandwidth	Up to 100 kHz, Dependent on Sensor and Settings
Accuracy	±3%

SENSOR TEMPERATURE MEASUREMENT	
Supported Temperature Sensor	Thermistor
Temperature Measurement Range	-10 to 80 °C

GENERAL	
Sensor Input	Female DB9 for C-Series Connectors
Display	81.4 mm x 61 mm (3.20" x 2.40"), 320 x 240 Pixels
Display Update Rate	20 Hz
Display Screens	Numerical, Bar Graph, Trend Graph, Statistics, Simulated Analog Needle
Memory Card	SD, 1 GB
A/D Converter	16 Bit
Computer Connectivity	USB2.0, Mini USB
Battery	Li-Polymer 3.7 V 1300 mAh; up to 8 hrs Operation
Dimensions	183 mm x 109 mm x 40 mm (7.2" x 4.3" x 1.6")
Operating Temperature	0 to 40 °C
Storage Temperature	-40 to 70 °C
Mounting Options	Kickstand, 1/4"-20 Mounting Hole

PM100D with S150C Sensor and Fiber

PM100D Includes

- PM100D Console
- Storage Case
- Power Adapter (US, UK, Europe, and Australia)
- 1 GB SD Card
- 1 GB USB Thumb Drive with Software, Drivers, and Detailed User Manual
- Calibration Certificate
- Quick-Start Manual
- USB Cable

ITEM #	$	£	€	RMB	DESCRIPTION
PM100D	$ 999.00	£ 719.28	€ 869,13	¥ 7,962.03	Digital Power and Energy Meter, Digital Display
CAL-PM	$ 75.00	£ 54.00	€ 65,25	¥ 597.75	Recalibration Service

Have you seen our...

Red HeNe Lasers

- ◆ New Design
- ◆ 632.8 nm Central Wavelength
- ◆ 15 Models with CW Output Powers Range from 0.8 mW to 22.5 mW
- ◆ Linear Polarized or Unpolarized Output
- ◆ Frequency-Stabilized Model Available

Thorlabs offers an extensive selection of CE-compliant 632.8 nm (red) Helium-Neon (HeNe) Lasers with powers ranging from 0.8 mW to 22.5 mW as stock items. These HeNe lasers come with a built-in interlock for safety and are ideal for use in educational applications and also as alignment tools due to their excellent beam quality and long-term stability.

NEW products