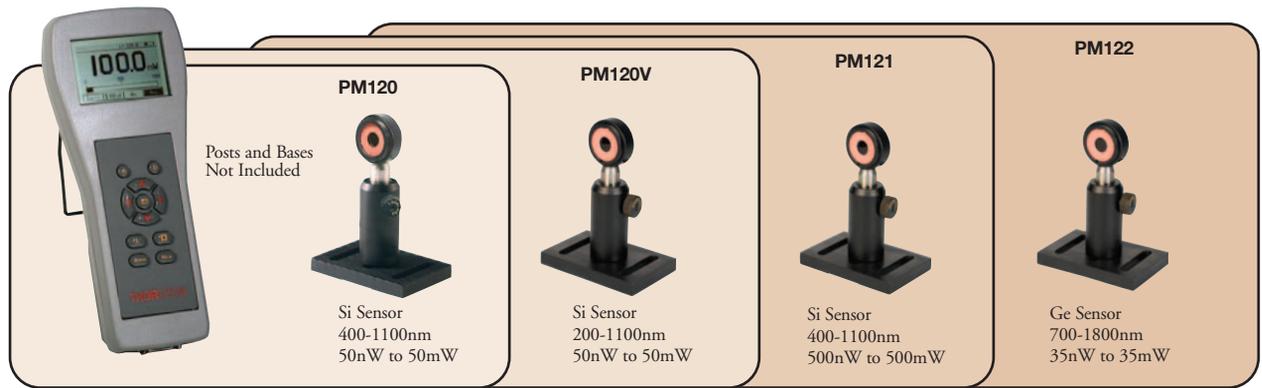


# PM120 Series High-Sensitivity Digital Optical Power Meters

- Detectors
- Power Meters**
- CCD Cameras
- Optical Chopper
- Beam Profilers & Extensions Sets
- Spectrometers
- Temperature Controller & Shutter
- Filter Wheels



The PM120 Series High-Sensitivity Optical Power Meters are multifunctional, handheld systems for precision optical power measurements. All PM120 series systems utilize the same handheld console, which has a wide 70dB dynamic range, an extensive set of features, and numerous display options (see page 951). The console is compatible with all photodiode-based S100 and S200 series sensors (see page 958) and is a complete, extendable, and flexible solution for optical power measurements over a broad set of wavelength and power ranges.

The PM100 Power Meter Series covers a variety of photodiode sensor types: conventional Si and Ge sensors, slim sensors, and integrating sphere sensors covering a combined spectral range of 200 to 1800nm and a power range of 5nW to 1W (see our PM200 series). Each sensor head is individually calibrated and the data is stored in non-volatile memory inside the sensor connector.

The console has a built-in RS-232 interface that immediately

recognizes the sensor and downloads the appropriate information. The application software enables remote control of the unit and allows the user to view, acquire, and store the measurement data on a PC.

Sensor heads are available separately, allowing the system to grow with your needs. The console is backward compatible with all of the S100 and S200 Series optical heads as well as our extensive selection of new sensor heads that are detailed starting on page 958.

**All photodiode sensors are equipped with an IR target disk for easy sensor alignment in the IR spectral range.**

**NIST TRACEABLE CALIBRATION SERVICES AVAILABLE!**  
**Annual Recalibration is Recommended**

### General Console Specifications

- **Display:** 240 x 160 Pixel (55 x 38mm) LCD With Backlight
- **Display Format:** Digit, Analog Needle, Line Plot, Bar Graph, Statistics, and Menu Screens
- **PC Communication:** RS-232, DB9 Male Connector
- **Baud Rate:** 2400-115,200bps
- **Dimensions:** 230 x 95 x 55mm

### Data Acquisition

- **Accuracy:** ±1% (Console)
- **Resolution:** 16 to 24-Bit (0.01% Full Scale)
- **Sample Rates:** Digital 3Hz, Analog 6Hz
- **Power Units:** nW, µW, mW, W, dBm, dB

### Analog Output

- **Voltage Range:** 0 – 4.095V
- **Resolution:** 12-Bit (1mV)
- **Sample Rate:** 6Hz
- **Power Range:** Software Adjustable
- **Connector:** SMA

### Power Management

- **Battery Pack:** NiMH, 1500mAh, 3.6V
- **Charger:** 2 Hour Battery Charger Included
- **Charger Power Supply:**
  - Input: 85–265 VAC, 50–60 Hz
  - Output: 9VDC @ 1.1A

See page 958 for sensor specifications.

ITEM#	\$	£	€	RMB	DESCRIPTION
PM120	\$ 998.00	£ 628.70	€ 928.10	¥ 9,530.90	Digital Power Meter, 400-1100nm, 50nW to 50mW
PM120V	\$ 1,123.00	£ 707.50	€ 1,044.40	¥ 10,724.70	Digital Power Meter, 200-1100nm, 50nW to 50mW
PM121	\$ 1,024.00	£ 645.10	€ 952.30	¥ 9,779.20	Digital Power Meter, 400-1100nm, 500nW to 500mW
PM122	\$ 1,270.00	£ 800.10	€ 1,181.10	¥ 12,128.50	Digital Power Meter, 700-1800nm, 35nW to 35mW
CAL1	\$ 135.00	£ 85.10	€ 125.60	¥ 1,289.30	Calibration Service for S120B, S121B, and S120UV
CAL2	\$ 150.00	£ 94.50	€ 139.50	¥ 1,432.50	Calibration Service for S122B

\* Thorlabs recommends recalibrating power meter sensors once a year. For more detail, call Thorlabs customer service and reference the CAL1 or CAL2 service. Universal design, imperial and metric compatible.