

## Laser Lab Instruments

# PM30 Series Optical Power Meter, Analog & Digital Display



The PM30 Power Meter Series is designed for easy and fast laser tuning. These power meters feature a combined analog and digital display. The analog meter is large and easy to read, and the fine analog needle provides enhanced sensitivity when aligning systems for maximum efficiency. The digital display offers better absolute accuracy than can be achieved with a purely analog meter.

This economic, portable and robust unit has an analog output and a built in RS232 interface.

### System Includes Console & Sensor Heads

The PM30 series is compatible with all S100 Series photodiode sensor heads, covering an overall wavelength range of 400 to 1800nm and power range of 5nW to 50mW. The applicable range for the measurement depends on the wavelength

and power range of the connected sensor head. The PM30 Series Power Meter is offered as a complete set including one S120 Series photodiode sensor head. All sensor heads are also available separately allowing the system to grow with your needs (see page 792). The console is backward compatible with all of the S100 series optical heads allowing a quick and economical upgrade.

### Available as Complete Set with Sensor Head

<b>PM30-120</b>	PM30 Console with S120B Si Sensor, 400 to 1100nm, 50nW-50mW
<b>PM30-121</b>	PM30 Console with S121B Si Sensor, 400 to 1100nm, 500nW-500mW
<b>PM30-122</b>	PM30 Console with S122B Ge Sensor, 700 to 1800nm, 35nW-35mW

### PM30 Series Features

- Large Mirrored Analog Needle Display
- Accurate 4 Digit Power Read Out
- Fast Response
- Front Panel Function Selector
- Analog Output
- NIST-Traceable Calibration
- Rechargeable Battery
- Compatible with Multiple Sensors

### Power Meter Console Specifications:

- Detector Compatibility:** S120, S130 and 140 Series Optical Sensors (Si, Ge & InGaAs) (see page 792)
- Power Scales:** 13 Scales: (Sensor dependent) 1μW, 3μW, 10μW, 30μW, 100μW, 1mW, 3mW, 10mW, 30mW, 100mW, 0.3W, 1W
- Analog Display:** 42 mm (3.54" x 1.65") Mirrored Scales: 0 to 3 (30 Divisions), 0 to 10 (50 Divisions)
- Digital Display:** 12 Digits Dot Matrix Display with LED Backlight
- Display Format:** 4 Digit Power Read Out
- Power Units:** nW, μW, mW, W
- Accuracy:** Analog Meter: ± 3%, Digital Display: ± 1%, Analog Out: ±1%
- Resolution:** 1nW (14 bit)

### Data Acquisition:

- Sample Rate:** Analog Display: 12Hz  
Digital Display: 3Hz
- Connector:** DB9 Sensor Female Connector

### Digital Output:

- PC Communication:** RS232, DB9 Male Connector
- Baud Rate:** 9600bps

### Analog Output:

- Voltage Range:** 0 - 1V Full Scale
- Resolution:** 0.1% Full Scale
- Sample Rate:** 12Hz
- Power Range:** Range dependent
- Connector:** SMA Analog Out

### Power Management:

- Battery Operation:** 6V, 150mAh Internal Chargeable NiMH Battery
- Operating Time:** up to 50 hours (w/o Backlight)
- Shutdown:** Manual / Auto, Time Settable
- Charger:** 3 hours Battery Charger Included
- Charger Power Supply:** Input: 85 - 265VAC, 50 - 60Hz; Output: 12VDC @ 1.1A

### General Specifications:

- Dimensions (H x W x D):** 125 x 145 x 46 mm (with Stand)
- Weight:** 0.6kg
- Operating Temperature:** 5°C - 40°C
- Storage Temperature:** -20°C - 70°C

ITEM#	\$	£	€	¥	DESCRIPTION
PM30-120	\$ 825.00	£ 577.00	€ 866.00	¥ 138,560	PM30 Analog/Digital w/S120B Si Sensor, 400 to 1100nm
PM30-121	\$ 847.50	£ 593.25	€ 890.00	¥ 142,380	High Power PM30 Analog/Digital w/S121B Si Sensor, 400 to 1100nm
PM30-122	\$ 1,090.00	£ 763.00	€ 1,144.50	¥ 183,120	PM30 Analog/Digital w/S122B Ge Sensor, 700 to 1800nm