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Handheld Fiber Optic Power Meters

The PM20 Series of Fiber Optic Power Meters are full-featured, handheld instruments, ideal for use in the field. Three models are available and together provide wavelength detection from 400 to 1700 nm and power detection

from -60 dBm (1 nW) to 23 dBm (200 mW). These power meters were designed for field use, and hence, they have a low-power consumption circuitry and an internal NiMH battery for over 50 hours of operation between each charge. When the battery is low, connect the meter to the included power supply, and the battery will be charged in only 3 hours.

A large, 8 character, alphanumeric LCD is easy to read and displays the power reading with measurement units. Power can be displayed in absolute values (dBm or W) or as a relative value (dB). The power meter's overlay has a simple, 5-button layout for power, display units, delta for setting relative measurements, and an up/down selection for setting the wavelength correction. The meter is housed in a rugged enclosure with a protective rubber jacket. For lab use, the meter has a kickstand on the back that, when extended, tilts the meter so that the display is easy to read.



PM20A

Each meter comes with an FC fiber adapter, but adapters for LC, SC, SMA, or ST connectors can also be ordered. These adapters are internally SM05 (0.535"-40) threaded, providing direct compatibility with the meter. A replacement power supply is also offered below.

Features

- Two Wavelength Ranges Spanning 400 – 1700 nm and -60 dBm (1 nW) to 23 dBm (200 mW) Power Range
- Interchangeable Fiber Adapters (FC Included)
- 50 hr Battery Operating Time
- Auto Shutoff
- Absolute and Relative Power Measurements
- NIST-Traceable Wavelength Calibration in 5 nm Steps

FC Adapter Included
(LC, SC, ST, and
SMA Adapters Sold
Separately)

PM20-SMA
Fiber Adapter

ITEM #	PM20A	PM20C	PM20CH
Sensor Specifications			
Wavelength Range	400 – 1100 nm	800 – 1700 nm	
Optical Power Range	-60 dBm to 16 dBm (1 nW – 40 mW)	-60 dBm to 13 dBm (1 nW – 20 mW)	-50 dBm to 23 dBm (10 nW – 200 mW)
Optical Damage Threshold	50 W/cm²		
Detector Type	Silicon	InGaAs	
Active Area	3.6 mm x 3.6 mm	Ø2 mm	
Measurement Uncertainty	±0.25 dB		
General Specifications			
Display Type	Alphanumeric 8 Character LCD		
Display Format	4-Digit Readout with Units and Symbols		
Power Units	dBm, dB, nW, µW, mW		
Resolution	14 Bit		
Sample Rate	10 Hz		
Dimensions (H x W x D)	4.9" x 3.1" x 1.5" (125 mm x 80 mm x 39 mm)		
Weight	0.2 kg (0.44 lbs)		
Operating Temperature	5 to 40 °C		
Storage Temperature	-20 to 70 °C		
Battery	Internal NiMH Battery Pack, 150 mAh, 6 V		
Operating Time	50+ Hours		
Charger	3 Hour Charger Included		
Charger Power Supply	Input: 100 – 240 VAC ±10%, 50 – 60 Hz; Output: 12 VDC, 0.85 A		

ITEM #	\$	£	€	RMB	DESCRIPTION
PM20A	\$ 510.00	£ 367.20	€ 443.70	¥ 4,064.70	Fiber Power Meter, 400 – 1100 nm, -60 to 16 dBm
PM20C	\$ 610.00	£ 439.20	€ 530.70	¥ 4,861.70	Fiber Power Meter, 800 – 1700 nm, -60 to 13 dBm
PM20CH	\$ 620.00	£ 446.40	€ 539.40	¥ 4,941.40	Fiber Power Meter, 800 – 1700 nm, -50 to 23 dBm
PM20-FC	\$ 31.00	£ 22.32	€ 26.97	¥ 247.07	FC Fiber Adapter, Internally SM05 (0.535"-40) Threaded
PM20-LC	\$ 43.00	£ 30.96	€ 37.41	¥ 342.71	LC Fiber Adapter, Internally SM05 (0.535"-40) Threaded
PM20-SC	\$ 43.00	£ 30.96	€ 37.41	¥ 342.71	SC Fiber Adapter, Internally SM05 (0.535"-40) Threaded
PM20-SMA	\$ 31.00	£ 22.32	€ 26.97	¥ 247.07	SMA Fiber Adapter, Internally SM05 (0.535"-40) Threaded
PM20-ST	\$ 43.00	£ 30.96	€ 37.41	¥ 342.71	ST Fiber Adapter, Internally SM05 (0.535"-40) Threaded
PMPS12	\$ 62.00	£ 44.64	€ 53.94	¥ 494.14	Replacement 12 VDC Power Supply for PM20 Series
CAL1	\$ 134.00	£ 96.48	€ 116.58	¥ 1,067.98	Recalibration Service for PM20A
CAL2	\$ 150.00	£ 108.00	€ 130.50	¥ 1,195.50	Recalibration Service for PM20C and PM20CH