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Power Meters

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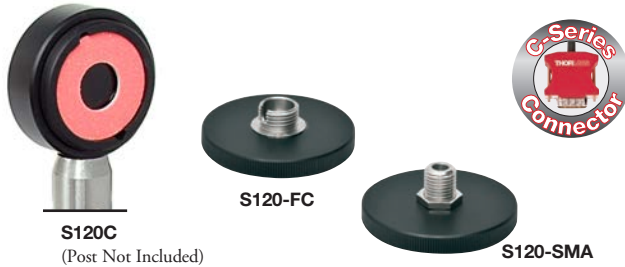
Photodiode Sensors

Thermal Sensors

Pyroelectric Sensors

Field Service

# C-Series of Standard Photodiode Optical Power Sensors



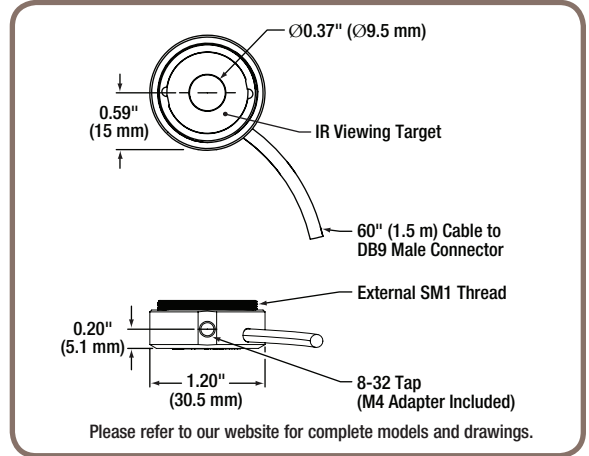
## Features

- Calibration for Wavelengths from as Low as 200 nm up to 1800 nm
- Power Measurements from 50 nW to 500 mW
- Fluorescing Target for Viewing IR or UV Beams
- Externally SM1 Threaded
- Fiber Adapters Available
- Compatible with all C-Series Power Meters
- NIST-Traceable Data Stored in Sensor Connector

These general-purpose, free-space and fiber photodiode sensors offer fast response for precise low-power measurements. When using these photodiode sensors, the wavelength of light must be entered on the console to obtain accurate power measurements. Each sensor has an external SM1 (1.035"-40) thread, which allows it to be incorporated into a variety of applications including SM1 lens tubes and 30 mm cage systems. Compatible fiber adapters for FC, LC, SC, SMA, and ST connectors are available separately. For accurate measurements, we recommend recalibrating these sensors annually; see the price box below for details.

## C-Series Connectors

Thorlabs' C-Series sensors use our new red DB9 connectors, which provide better data transmission (via internal chip) to our meters than our previous sensors. These connectors, which are compatible with our complete line of C-Series power meters presented on pages XXX – XXX, firmly connect to a meter without threading screws, thereby allowing for quick sensor exchanges.



## Have you seen our...

### Compatible Power Meters



See pages XXX – XXX

ITEM #	S120C	S120VC	S121C	S122C
Wavelength Range	400 – 1100 nm	200 – 1100 nm	400 – 1100 nm	700 – 1800 nm
Optical Power Range	50 nW – 50 mW		500 nW – 500 mW	50 nW – 40 mW
Average Power Density	20 W/cm <sup>2</sup> (Max)			10 W/cm <sup>2</sup> (Max)
Detector Type	Si Photodiode			Ge Photodiode
Recalibration Service	CAL1			CAL2
Target Sensitivity	VIS/IR	UV	VIS/IR	
Resolution*	1 nW		10 nW	2 nW
Measurement Uncertainty	±3% (451 – 1000 nm) ±5% (Over Rest of Range)			±5%
Response Time	<1 μs			
Aperture	Ø9.5 mm			
Cable Length	1.5 m			
Mounting	8-32 and M4 Taps			
Lens Tube Compatibility	External SM1 Threads			
Cage Compatibility	SM1 Cage Plates (Available Separately)			
Console Compatibility***	PM200, PM100D, PM100A, PM100USB, PM320E, and Future C-Series Power Meters			

\*Measured with PM100D console in low bandwidth setting. \*\*Not backwards compatible. \*\*\*S120C, S120VC, and S121C devices with serial numbers before 1203xxx had an 8-32 tap and came with an M4 Adapter

ITEM #	\$	£	€	RMB	DESCRIPTION
S120C	\$ 285.00	£ 205.20	€ 247.95	¥ 2,271.45	C-Series Power Sensor, 400 – 1100 nm, 50 nW – 50 mW
S120VC	\$ 395.00	£ 284.40	€ 343.65	¥ 3,148.15	C-Series Power Sensor, 200 – 1100 nm, 50 nW – 50 mW
S121C	\$ 310.00	£ 223.20	€ 269.70	¥ 2,470.70	C-Series Power Sensor, 400 – 1100 nm, 500 nW – 500 mW
S122C	\$ 570.00	£ 410.40	€ 495.90	¥ 4,542.90	C-Series Power Sensor, 700 – 1800 nm, 50 nW – 40 mW
S120-FC	\$ 38.00	£ 27.36	€ 33.06	¥ 302.86	Internally SM1-Threaded FC Fiber Adapter
S120-LC	\$ 48.00	£ 34.56	€ 41.76	¥ 382.56	Internally SM1-Threaded LC Fiber Adapter
S120-SC	\$ 48.00	£ 34.56	€ 41.76	¥ 382.56	Internally SM1-Threaded SC Fiber Adapter
S120-SMA	\$ 38.00	£ 27.36	€ 33.06	¥ 302.86	Internally SM1-Threaded SMA Fiber Adapter
S120-ST	\$ 38.00	£ 27.36	€ 33.06	¥ 302.86	Internally SM1-Threaded ST Fiber Adapter
CAL1	\$ 134.00	£ 96.48	€ 116.58	¥ 1,067.98	Si Recalibration Service (S120C, S120VC, and S121C)
CAL2	\$ 150.00	£ 108.00	€ 130.50	¥ 1,195.50	Ge Recalibration Service (S122C)