



OPM-110

USB Optical Power Meter



Product Overview

The OPM-110 is a standalone USB optical power meter that is operated and powered via USB.

Absolute power and insertion loss (IL) can be accurately measured with the OPM-110. It is ideal for measuring fibers terminated with simplex connectors such as LC, SC or FC. When outfitted with a large area detector, the OPM-110 can also be used to test high density connectors such as MPO. Adapters with a quick-change magnetic interface are available for all standard connector options.

Use Santec's SDK to control the OPM-110 or use our software to integrate into the test and measurement process.

Features

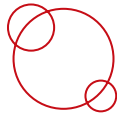
- Different detector types (Si or InGaAs) and sizes (1, 3, 5 or 10 mm)
- 50 ms sampling time
- Small form factor
- USB powered and communication



Applications

- Optical alignment
- Silicon photonics
- Optical signal monitoring
- Transceiver testing
- Lab and R&D
- Freespace optics





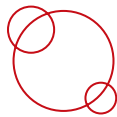
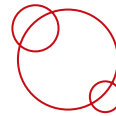
Variety of Detector Types and Sizes

Detector types include Si or InGaAs.

Available in 1, 3, 5, or 10 mm.

50 ms Sampling Time

With a 50 ms sampling time one can monitor power in realtime and perform responsive alignment adjustments for automation.

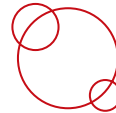


Small Form Factor

The small form factor system allows for it to be used in some of the most constrained spaces.

USB Power and Communication

No need for an external power supply. A single connection to the computer enables optical power readings.



Ordering Scheme & Instructions

1. Configure OPM USB Optical Power Meter

OPM-110-01-



DETECTOR	
IN1	1 mm InGaAs
IN3	3 mm InGaAs
SI3	3 mm Silicon
IN5	5 mm InGaAs
IN10	10 mm InGaAs
S10	10 mm Silicon
HPIN2	High Power 2 mm InGaAs
INE1	1 mm Extended InGaAs

OPM-110 Optical / Electrical Specifications

Parameter	Specification					
	1 mm InGaAs	2 mm InGaAs HP	3 mm InGaAs	5 mm InGaAs	10 mm InGaAs	3 mm Silicon
Wavelength Range (nm)	850 to 1650					400 to 1100
Power Range (dBm)	6 to -72	27 to -45	3 to -72	0 to -65	0 to -55	0 to -65
Total Uncertainty ¹	± 0.25 dB					
Power Resolution (dB)	0.001					
Linearity (dB) ^{2,3}	± 0.02 (< 10 dB)					
	± 0.05 (> 10 dB)					
Sampling Time	50 ms					
Remote Interface	USB					
Input Voltage	5 V DC					
Power Consumption (VA)	0.5 maximum					

Notes:

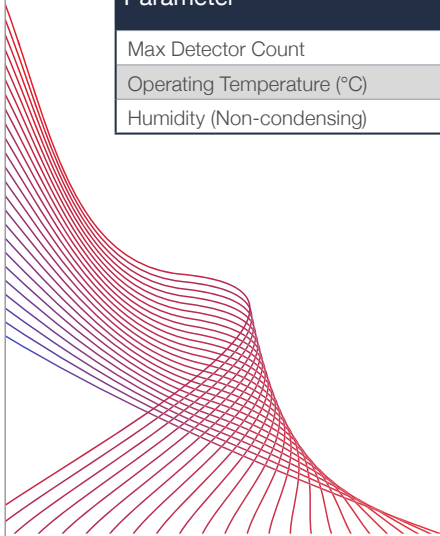
¹ At calibration conditions for all NIST traceable wavelengths

² Measured for InGaAs at 1490 nm, between 3 to -65 for 1 mm, 17 to -35 for 2 mm HP, 0 to -65 for 3 mm, 0 to -55 for 5 mm, 0 to -45 for 10 mm

³ Measured for Si at 980 nm, between 0 to -55 for 3 mm

Mechanical / Environmental Specifications

Parameter	Specification
	OPM-110
Max Detector Count	1
Operating Temperature (°C)	5 to 40
Humidity (Non-condensing)	Maximum 95% RH from 5 to 40 °C





In the Box

OPM-110 - USB Optical Power Meter

• OPM-110



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