

Power Sensors

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Air-Cooled Thermopile Sensors (to 150W)*

These air-cooled thermopiles represent our core power sensors. The sensors are designed for use with low- to medium-powered CW and pulsed lasers from 10 mW to 150W average power output. These sensors are able to dissipate the incident laser energy via convection cooling, which makes them convenient to use and setup is fast.

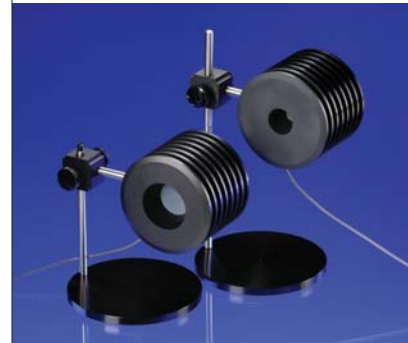
With in this family of sensors you can select between a broadband or DUV excimer detector coating. The first offers uniform spectral response from 190 nm to 11.0 μm , while the excimer coating is optimized for use from 157 nm to 351 nm.

SPECIFICATIONS	PM2	PM2X	PM10	PM10X	PM30	PM30X
Wavelength Range (μm)	0.19 - 11	0.15 - 1	0.19 - 11	0.15 - 1	0.19 - 11	0.15 - 1
Power Range	10 mW - 2W	10 mW - 2W	10 mW - 10W	10 mW - 10W	100 mW - 50W	100 mW - 50W
Max. Intermittent Power (<5 min.) (W)	3	3	30	30	50	50
Resolution (mW)	1	1	1	1	10	10
Max. Avg. Power Density (kW/cm^2)	26	26	26	26	26	26
Max. Pulse Energy Density (J/cm^2 , 10 ns pulse)	0.6	0.6	0.6	0.6	0.6	0.6
Response Time (sec.)	2	2	2	2	2	2
Detector Coating	Broadband	UV	Broadband	UV	Broadband	UV
Detector Diameter (mm)	19	19	19	19	19	19
Dimensions (mm)	46 x 51 x 10	46 x 51 x 10	\varnothing 63 x 36	\varnothing 63 x 36	\varnothing 101 x 56	\varnothing 101 x 56
Calibration Uncertainty	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Calibration Wavelength (nm)	514	514	514	514	514	514
Cooling Method	Air	Air	Air	Air	Air	Air
Connector Type	PM DB-25	PM DB-25	PM DB-25	PM DB-25	PM DB-25	PM DB-25
Cable Length (m)	2	2	2	2	2	2
Part Number	0012-1350	0012-2075	0012-0920	0012-1460	0012-1160	0012-1480

SPECIFICATIONS	PM100-19C	PM150	PM150-50	PM150X
Wavelength Range (μm)	0.19 - 11	0.19 - 11	0.19 - 11	0.15 - 1
Power Range	**	300 mW - 150W	300 mW - 150W	300 mW - 150W
Max. Intermittent Power (<5 min.) (W)	100	300	300	300
Resolution (mW)	30	30	30	30
Max. Avg. Power Density (kW/cm^2)	26	26	26	26
Max. Pulse Energy Density (J/cm^2 , 10 ns pulse)	0.6	0.6	0.6	0.6
Response Time (sec.)	2	2	5	5
Detector Coating	Broadband	Broadband	Broadband	UV
Detector Diameter (mm)	19	19	50	50
Dimensions (mm)	89 x 89 x 32	\varnothing 150 x 118	\varnothing 150 x 118	\varnothing 150 x 118
Calibration Uncertainty	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Cooling Method	Air	Air	Air	Air
Connector Type	PM DB-25	PM DB-25	PM DB-25	PM DB-25
Cable Length (m)	2	2	2	2
Calibration Wavelength (nm)	514	514	514	514
Part Number	0012-1405	0012-1020	0012-1190	0012-1330

* See the Power and Energy Sensor Compatibility Charts on page 11 for compatibility with meters.

**This sensor is designed for intermittent use only.



MODELS PM150, PM150X

- Broadband and excimer coatings
- 0.15 to 11 μm spectral range
- Convective air-cooled
- Range: 10 mW to 150W
- 19 mm and 50 mm diameters



Air-Cooled Thermopile Sensors (to 150W)

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* Aperture diameter is 50 mm.

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