

## Laser Power Heads

### FEATURES

- Absolute power sensing of laser beams up to 100 W
- Highly sensitive thermopile sensor
- Sensitive to all wavelengths from UV to MIR
- 300 ms rise time
- Compact and robust design for system integration



gRAY C05-HC

gRAY C10-HC

gRAY C50-HW

gRAY C100-HW

Product Name	gRAY C05-HC	gRAY C10-HC	gRAY C50-HW	gRAY C100-HW
Article Number	A-072305	A-072310	A-072350	A-072400
Detector Type	Thermopile	Thermopile	Thermopile	Thermopile
Spectral Range [ $\mu\text{m}$ ]	0.19 - 15	0.19 - 15	0.19 - 15	0.19 - 15
Aperture [mm]	25	25	25	25
Max. Power [W]	5	10	50	100
Minimum Detectable Power [mW]	5	10	50	100
Max. Average Power Density [ $\text{kW}/\text{cm}^2$ ]	1.5	1.5	1.5	1.5
Sensitivity (Z) [V/W]	2	1	0.2	0.1
Sensitivity Uncertainty [%]	$\pm 5$	$\pm 5$	$\pm 5$	$\pm 5$
Rise Time (0-95%) [ms]	300	300	300	300
Linearity with Power [ $\pm\%$ ]	0.5	0.5	0.5	0.5
Operating Temperature Range Min/Max [ $^{\circ}\text{C}$ ]	-40 / 85	-40 / 85	-40 / 85	-40 / 85
Cooling Method	Convection/ Conduction	Convection/ Conduction (heat sink)	Water cooling (1.5 l/min, 20-25 $^{\circ}\text{C}$ )	Water cooling (1.5 l/min, 20-25 $^{\circ}\text{C}$ )
Water Fitting Thread	-	-	G 1/8 thread, 8.2 mm deep	G 1/8 thread, 8.2 mm deep
Voltage Input [V]	12-27	12-27	12-27	12-27
Voltage Output [V]	0 - 10	0 - 10	0 - 10	0 - 10
Electrical Connection	3 wired cable	3 wired cable	3 wired cable	3 wired cable
Outer Dimensions Housing [mm x mm x mm]	62.4 x 62.4 x 38.1	62.4 x 62.4 x 38.1	62.4 x 62.4 x 38.1	62.4 x 62.4 x 38.1
Fixture	4x M4 screws	4x M4 screws	4x M4 screws	4x M4 screws