

# PH SERIES



600 pW to 750 mW, Si and Ge Photo Detectors



Monitors

Energy Detectors

Power Detectors

OEM Detectors

Calorimeters

Diffraction Optics

Beam Diagnostics



PH100-Si



## Key Features

- 1 **Large Apertures**  
11.28 mm Ø for the Silicon versions
- 2 **3 Versions**
  - . Silicon  
300 - 1100 nm, up to 750 mW
  - . Silicon-UV  
200 - 900 nm, up to 30 mW
  - . Germanium  
800 - 1650 nm, up to 500 mW
- 3 **Choice of Attenuators**

OD-1	OD-2
10% Transmission	1% Transmission
- 4 **Precise Calibration**  
Wavelength selection in 1 nm steps
- 5 **Smart Interface**  
Containing all the calibration data

### See also

. Calibration .....	6
. Compatible monitors	
SOLO 2 .....	20
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## Accessories

### » Pelican Carrying Case

We offer a robust hard shell polymer carrying case.



## SPECIFICATIONS

Models	PH100-Si	PH-100Si <sup>UV</sup>	PH20-Ge
			
Max Measurable Power	30 mW	28 mW	30 mW
Max Measurable Power (with OD-2)	750 mW	50 mW	500 mW

MEASUREMENT CAPABILITY	PH100-Si	PH-100Si <sup>UV</sup>	PH20-Ge
Spectral Range	300 – 1100 nm	200 – 900 nm	800 – 1650 nm
With OD-1	400 – 1100 nm	400 – 900 nm	900 – 1650 nm
With OD-2	630 – 1100 nm	630 – 900 nm	950 – 1650 nm
Maximum Measurable Power	30 mW @ 1064 nm	2.8 mW @ 532 nm	30 mW @ 1064 nm
With OD-1	300 mW @ 1064 nm	25 mW @ 532 nm	300 mW @ 1064 nm
With OD-2	750 mW @ 1064 nm	30 mW @ 850 nm	500 mW @ 1064 nm
Minimum Measurable Power <sup>a</sup>	600 pW @ 980 nm	600 pW @ 850 nm	2 nW @ 1550 nm
With OD-1	6 nW @ 980 nm	6 nW @ 850 nm	20 nW @ 1550 nm
With OD-2	60 nW @ 980 nm	60 nW @ 850 nm	200 nW @ 1550 nm
Rise Time (nominal)	0.2 sec	0.2 sec	0.2 sec
Peak Sensitivity	0.5 A/W	0.45 A/W	0.98 A/W
Calibration Uncertainty	±6.5 % 300 - 399 nm ±2.5 % 400 - 999 nm ±5 % 1000 - 1049 nm ±7 % 1050 - 1100 nm	±8 % 200 - 219 nm ±6.5 % 220 - 399 nm ±2.5 % 400 - 900 nm	±3.5 % 800 - 1650 nm
Accuracy (with OD filters)	±5 %	±5 %	±5 %

## DAMAGE THRESHOLDS

Maximum Average Power Density	100 W/cm <sup>2</sup>	100 W/cm <sup>2</sup>	100 W/cm <sup>2</sup>
Saturation Level	30 mW/cm <sup>2</sup> @ 1064 nm	55 mW/cm <sup>2</sup> @ 532 nm	320 mW/cm <sup>2</sup> @ 1064 nm

## PHYSICAL CHARACTERISTICS

Effective Aperture Diameter	11.28 mm Ø	11.28 mm Ø	5 mm Ø
Dimensions	36 mm Ø x 26.5D mm	36 mm Ø x 26.5D mm	36 mm Ø x 26.5D mm
Weight (head only)	130 g	130 g	130 g

## ORDERING INFORMATION

Full Product Name	PH100-Si	PH100-Si <sup>UV</sup>	PH20-Ge
Product Number	200878	200879	200866
Full Product Name	PH100-Si-OD1	PH100-Si <sup>UV</sup> -OD1	PH20-Ge-OD2
Product Number	200880	200881	200874
Full Product Name	PH100-Si-OD2	PH100-Si <sup>UV</sup> -OD2	PH20-Ge-OD2
Product Number	200882	200883	200875

a. Half hour warm-up before offset nulling. Offset nulling on the lowest scale after each new power supply. Temperature ± 0.5 °.

Specifications are subject to change without notice