

# PH

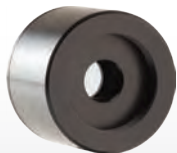
10 pW to 750 mW, Si and Ge Sensors



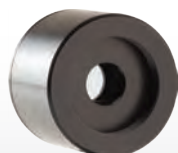
## KEY FEATURES

1. **LARGE APERTURES**  
10 mm Ø for the Silicon sensors
2. **3 VERSIONS**
  - Silicon: 350 - 1080 nm, up to 750 mW
  - Silicon-UV: 210 - 1080 nm, up to 25 mW
  - Germanium: 800 - 1650 nm, up to 500 mW
3. **CHOICE OF ATTENUATORS**
  - OD0.3: 50 % Transmission (for PH100-si<sup>uv</sup> only)
  - OD1: 10 % Transmission
  - OD2: 1 % Transmission
4. **HIGH ACCURACY**  
The new PH100-Si-HA presents the lowest calibration uncertainty to date
5. **PRECISE CALIBRATION**  
Wavelength selection in 1 nm steps
6. **SMART INTERFACE**  
Containing all the calibration data

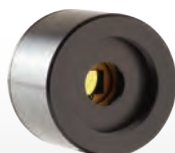
## AVAILABLE MODELS



PH100-Si-HA  
(10 mm - Silicon)



PH100-Si<sup>uv</sup>  
(10 mm - UV-Silicon)



PH20-Ge  
(5 mm - Germanium)

## OD ATTENUATORS



PH Series Detector  
With OD Attenuator

OD Attenuators sold in option.  
When bought together, the detector is calibrated with and without the attenuator.

## ACCESSORIES



Stand with Delrin Post  
(Model Number: 200428)



Fiber Adaptors & Connectors  
(FC, SC, ST and SMA)



OD Attenuators



Pelican Carrying Case

## SEE ALSO

CALIBRATION	<a href="#">6</a>
TECHNICAL DRAWINGS	<a href="#">112</a>
COMPATIBLE MONITORS	
MAESTRO	<a href="#">20</a>
TUNER	<a href="#">24</a>
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M-LINK	<a href="#">32</a>
LIST OF ALL ACCESSORIES	<a href="#">190</a>
APPLICATION NOTE	
CALIBRATION UNCERTAINTY OF PHOTO DETECTORS	<a href="#">202174</a>

PH

## SPECIFICATIONS



\*Also traceable to NRC-CNRC

	<b>NEW</b> PH100-Si-HA	<b>NEW</b> PH100-Si <sup>UV</sup>	PH20-Ge
<b>MAX AVERAGE POWER (ALONE / WITH OD2)</b>	36 mW / 750 mW	4 mW / 30 mW	30 mW / 500 mW
<b>EFFECTIVE APERTURE</b>	10 mm Ø	10 mm Ø	5 mm Ø
<b>MEASUREMENT CAPABILITY</b>			
Spectral Range	350 – 1080 nm	210 – 1080 nm	800 – 1650 nm
With OD0.3	---	210 – 1080 nm	---
With OD1	420 – 1080 nm	400 – 1080 nm	900 – 1650 nm
With OD2	630 – 1080 nm	---	950 – 1650 nm
Maximum Measurable Power <sup>a</sup>	36 mW @ 1064 nm	4 mW @ 532 nm	30 mW @ 1064 nm
With OD0.3	---	11 mW @ 300 nm	---
With OD1	300 mW @ 1064 nm	25 mW @ 532 nm	300 mW @ 1064 nm
With OD2	750 mW @ 1064 nm	---	500 mW @ 1064 nm
Noise Equivalent Power <sup>b</sup>	10 pW @ 980 nm	10 pW @ 850 nm	60 pW @ 1550 nm
Rise Time (nominal)	0.2 sec	0.2 sec	0.2 sec
Peak Sensitivity	0.5 A/W @ 980 nm	0.45 A/W @ 850 nm	0.98 A/W @ 1550 nm
Calibration Uncertainty	±6.0 % (350 - 399 nm) ±2.0 % (400 - 449 nm) ±1.5 % (450 - 940 nm) ±2.0 % (941 - 980 nm) ±5.0 % (981 - 1049 nm) ±7.0 % (1050 - 1080 nm)	±8 % (200 - 219 nm) ±6.5 % (220 - 399 nm) ±2.5 % (400 - 899 nm) ±3.5 % (900 - 999 nm) ±5 % (1000 - 1049 nm) ±7 % (1050 - 1080 nm)	±3.5 % (800 - 1650 nm) --- --- --- ---
Calibration Uncertainty (with OD filters)	±4.0 % (420 - 980 nm) ±5.0 % (981 - 1049 nm) ±7.0 % (1050 - 1080 nm)	±6.5 % (210 - 399 nm) ±5 % (400 - 1049 nm) ±7 % (1050 - 1080 nm)	±5 %
<b>DAMAGE THRESHOLDS</b>			
Maximum Average Power Density	100 W/cm <sup>2</sup>	100 W/cm <sup>2</sup>	100 W/cm <sup>2</sup>
<b>PHYSICAL CHARACTERISTICS</b>			
Effective Aperture	10 mm Ø	10 mm Ø	5 mm Ø
Dimensions	38.1Ø x 27.4D mm	38.1Ø x 27.4D mm	38.1Ø x 27.4D mm
Weight (head only)	130 g	130 g	130 g
<b>ORDERING INFORMATION</b>			
Product Name	PH100-Si-HA	PH100-Si <sup>UV</sup>	PH20-Ge
Product Number	---	200879	200866
Product Name (with OD0.3)	---	PH100-Si <sup>UV</sup> -OD0.3	---
Product Number	---	---	---
Product Name (with OD1)	PH100-Si-HA-OD1	PH100-Si <sup>UV</sup> -OD1	PH20-Ge-OD1
Product Number	---	200881	200874
Product Name (with OD2)	PH100-Si-HA-OD2	---	PH20-Ge-OD2
Product Number	---	---	200875

a. Maximum value depends on the monitor.

b. Nominal value. Depends on environmental electromagnetic interference and wavelength.

Specifications are subject to change without notice