

# PH-B

40 pW - 200  $\mu$ W, Our Lowest Power Measurements



## KEY FEATURES

- 1. VERY SENSITIVE PHOTO DETECTOR**  
Measure down to the pW level
- 2. PERFECT FOR INTEGRATION**  
The internal amplification gives a signal output directly in V/W, which you can measure with your own acquisition system
- 3. SENSORS AVAILABLE**
  - PH10B-Si: 10 mm  $\varnothing$ , UV-Silicon sensor for 0.21 to 1.08  $\mu$ m
  - PH5B-Ge: 5 mm  $\varnothing$ , Germanium sensor for 0.8 to 1.65  $\mu$ m
- 4. SMART INTERFACE**  
Containing all the calibration data

## AVAILABLE MODELS



PH10B-Si  
(10 mm - UV-Silicon)



PH5B-Ge  
(5 mm - Germanium)

## ACCESSORIES



Stand with Delrin Post  
(Model Number: 200428)



Fiber Adaptors & Connectors  
(FC, ST or SMA)



APM Analog Power Supply  
(Model Number: 201848)



Pelican Carrying Case

## SEE ALSO

TECHNICAL DRAWINGS	118
ABSORPTION CURVES	119
COMPATIBLE MONITORS	
MAESTRO	20
S-LINK	28
M-LINK	32
LIST OF ALL ACCESSORIES	186

## APPLICATION NOTE

CALIBRATION UNCERTAINTY  
OF PHOTO DETECTORS

[202174](#)

## PH-B



\*Also traceable to NRC-CNRC

## SPECIFICATIONS

	PH10B-Si	PH5B-Ge
<b>MAX AVERAGE POWER</b>	200 $\mu$ W	40 $\mu$ W
<b>EFFECTIVE APERTURE</b>	10 mm $\emptyset$	5 mm $\emptyset$
<b>MEASUREMENT CAPABILITY</b>		
Spectral Range	210 - 1080 nm	800 - 1650 nm
Maximum Measurable Power		
With M-LINK	200 $\mu$ W @ 633 nm	40 $\mu$ W @ 1310 nm
With S-LINK	175 $\mu$ W @ 633 nm	30 $\mu$ W @ 1310 nm
With MAESTRO	150 $\mu$ W @ 633 nm	25 $\mu$ W @ 1310 nm
Noise Equivalent Power <sup>a</sup>	50 pW @ 633 nm	40 pW @ 1310 nm
Rise Time (0-100%)	$\leq$ 0.2 s	$\leq$ 0.2 s
Peak Sensitivity	15 kV/W @ 633 nm	80 kV/W @ 1047 nm
Calibration Uncertainty <sup>b</sup>	$\pm$ 8 % (210 - 219 nm)	$\pm$ 3.5% (800 - 1650 nm)
	$\pm$ 6.5 % (220 - 399 nm)	
	$\pm$ 2.5 % (400 - 899 nm)	
	$\pm$ 3.5 % (900 - 999 nm)	
	$\pm$ 5 % (1000 - 1049 nm)	
	$\pm$ 7 % (1050 - 1080 nm)	
<b>DAMAGE THRESHOLDS</b>		
Maximum Average Power Density	100 W/cm <sup>2</sup>	100 W/cm <sup>2</sup>
<b>PHYSICAL CHARACTERISTICS</b>		
Effective Aperture	10 mm $\emptyset$	5 mm $\emptyset$
Distance to Sensor Face	13.7 mm	10.5 mm
Sensor	UV-Silicon	Germanium
Dimensions	38.1 $\emptyset$ x 27.4D mm	38.1 $\emptyset$ x 27.4D mm
Weight	91 g	91 g
<b>ORDERING INFORMATION</b>		
Product Name	PH10B-Si	PH5B-Ge
Product Number (Including stand)	202820	202821

Specifications are subject to change without notice

- a. Nominal value, depends on environmental electromagnetic interference and wavelength.  
 b. With a Gentec-E0 monitor.