

PHOTO DETECTORS

PH-B

40 pW - 200 µW, Amplified Si and Ge Sensors for Low-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 Ø, UV-Silicon sensor for 0.21 to 1.08 µm
 - PH5B-Ge: 5 mm Ø, Germanium sensor for 0.8 to 1.65 µm
- 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

This product cannot be used with DB-15 extension cables

SEE ALSO

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COMPATIBLE MONITORS	
MAESTRO	20
S-LINK	28
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APPLICATION NOTE

CALIBRATION UNCERTAINTY OF PHOTO DETECTORS	202174
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PH-B



SPECIFICATIONS

	PH10B-Si	PH5B-Ge
MAX AVERAGE POWER	200 μ W	40 μ W
EFFECTIVE APERTURE	10 mm \emptyset	5 mm \emptyset
MEASUREMENT CAPABILITY		
Spectral Range	210 - 1080 nm	800 - 1650 nm
Maximum Measurable Power		
With M-LINK	200 μ W @ 633 nm	40 μ W @ 1310 nm
With S-LINK	175 μ W @ 633 nm	30 μ W @ 1310 nm
With MAESTRO	150 μ W @ 633 nm	25 μ W @ 1310 nm
Noise Equivalent Power ^a	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 ^b	\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)	
DAMAGE THRESHOLDS		
Maximum Average Power Density	100 W/cm ²	100 W/cm ²
PHYSICAL CHARACTERISTICS		
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
ORDERING INFORMATION		
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.