

PH

10 pW to 750 mW, Si and Ge sensors



KEY FEATURES

- > **LARGE APERTURES**
10 mm Ø for the silicon sensors
- > **3 VERSIONS**
 - Silicon: 350 - 1080 nm, up to 750 mW
 - Silicon-UV: 210 - 1080 nm, up to 38 mW
 - Germanium: 800 - 1650 nm, up to 500 mW
- > **CHOICE OF ATTENUATORS**
 - OD0.3: 50 % transmission (for PH100-SIUV only)
 - OD1: 10 % transmission
 - OD2: 1 % transmission
- > **HIGH ACCURACY**
The PH100-SI-HA presents the lowest calibration uncertainty to date
- > **PRECISE CALIBRATION**
Wavelength selection in 1 nm steps

OD ATTENUATORS

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



PH series detector
with OD attenuator

OUTPUT OPTIONS

- > **SMART DB15 CONNECTOR**
Contains all the calibration data
- > **integra ALL-IN-ONE-METER**
Connects directly to a PC
Two models available:
 - USB output (-INT)
 - RS-232 output (-IDR)

COMPATIBLE DISPLAYS & PC INTERFACES



MIRO ALTITUDE



MAESTRO



TUNER



UNO



U-LINK and P-LINK



M-LINK

ACCESSORIES



Stand with delrin post



Extension cables
(4, 15, 20 or 25 m)



Fiber adaptors & connectors
(FC, SC, ST and SMA)



OD attenuators



Pelican carrying case



Isolation tube

PH

Specifications

CE NIST*
Traceable

*Also traceable to NRC-CNRC



	PH100-SI-HA-D0	PH100-SIU-D0	PH20-GE-D0
MAX AVERAGE POWER* (ALONE / WITH MAX ATTENUATION)	36 mW / 750 mW	4 mW / 38 mW	30 mW / 500 mW
EFFECTIVE APERTURE	10 mm Ø	10 mm Ø	5 mm Ø
MEASUREMENT CAPABILITY			
Calibrated spectral range	350 - 1080 nm	210 - 1080 nm	800 - 1650 nm
With OD0.3	---	210 - 1080 nm	---
With OD1	400 - 1080 nm	400 - 1080 nm	900 - 1650 nm
With OD2	630 - 1080 nm	---	950 - 1650 nm
Maximum measurable power*	36 mW at 1064 nm	4 mW at 532 nm	30 mW at 1064 nm
With OD0.3	---	16 mW at 300 nm	---
With OD1	300 mW at 1064 nm	38 mW at 532 nm	300 mW at 1064 nm
With OD2	750 mW at 1064 nm	---	500 mW at 1064 nm
Noise equivalent power ^a	10 pW at 980 nm	10 pW at 850 nm	60 pW at 1550 nm
Rise time (nominal)	0.2 s	0.2 s	0.2 s
Calibration uncertainty	± 5.0 % (350 - 399 nm)	± 18 % (210 - 229 nm)	± 5.0 % (800 - 1049 nm)
	± 2.0 % (400 - 449 nm)	± 8.0 % (230 - 254 nm)	± 3.5 % (1050 - 1559 nm)
	± 1.5 % (450 - 809 nm)	± 6.5 % (255 - 399 nm)	± 7.0 % (1560 - 1629 nm)
	± 2.0 % (810 - 899 nm)	± 2.5 % (400 - 899 nm)	± 10 % (1630 - 1650 nm)
	± 4.0 % (900 - 1009 nm)	± 4.0 % (900 - 1009 nm)	---
	± 7.5 % (1010 - 1080 nm)	± 7.5 % (1010 - 1080 nm)	---
Calibration uncertainty (with OD filters)	± 5.0 % (400 - 419 nm)	Same as without attenuator	± 5.0 % (900 - 1559 nm)
	± 4.0 % (420 - 899 nm)	---	± 7.0 % (1560 - 1629 nm)
	± 5.0 % (900 - 1009 nm)	---	± 10 % (1630 - 1650 nm)
	± 7.5 % (1010 - 1080 nm)	---	---
Minimum repetition rate	155 kHz	155 kHz	155 kHz
DAMAGE THRESHOLDS			
Maximum average power density	100 W/cm ²	100 W/cm ²	100 W/cm ²
PHYSICAL CHARACTERISTICS			
Effective aperture	10 mm Ø	10 mm Ø	5 mm Ø
Distance to sensor face	13.7 mm	13.7 mm	10.5 mm
Sensor	Silicon	UV-Silicon	Germanium
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
ORDERING INFORMATION			
Available output options	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232
Compatible stand	STAND-D-233 or STAND-D-233-M	STAND-D-233 or STAND-D-233-M	STAND-D-233 or STAND-D-233-M
Product page			

* See curves (p. 62-64) for maximum power at other wavelengths

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

Specifications are subject to change without notice