PE

8 fJ - 150 nJ, our lowest energy measurements

KEY FEATURES

VERY LOW NOISE LEVEL
Take measurements with a noise level as low as 8 fJ (model PE3B-Si only) with the M-LINK, MAESTRO and S-LINK

3 SENSORS AVAILABLE

- PE-B-SI family: 3 and 10 mm Ø silicon sensors for 0.21 to 1.08 µm
- PE5B-GE: 5 mm Ø, germanium sensor for 0.8 to 1.65 µm
- PE3B-IN: 3 mm Ø, InGaAs sensor for 0.9 to 1.7 µm

OUTPUT OPTIONS

SMART INTERFACE
Containing all the calibration data

ANALOG OUTPUT
When used with APM analog power supply

integra ALL-IN-ONE-METER
Connects directly to a PC
Three models available:

- USB output (-INT)
- RS-232 output (-IDR)
- USB with external trigger (-INE)

COMPATIBLE DISPLAYS & PC INTERFACES


MIRO ALTITUDE


MAESTRO


U-LINK


M-LINK


S-LINK

ACCESSORIES


Stand with delrin post


Fiber adaptors & connectors (FC, ST or SMA)


APM analog power supply


Pelican carrying case

This product cannot be used with DB15 extension cables

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LASER COMPONENTS®

PE
Specifications

CE NIST* Traceable

*Also traceable to NRC-CNRC




	PE3B-SI-D0	PE10B-SI-D0	PE5B-GE-D0	PE3B-IN-D0
MAX MEASURABLE ENERGY*	24 pJ	81 nJ	2.4 nJ	245 pJ
EFFECTIVE APERTURE	3 mm Ø	10 mm Ø	5 mm Ø	3 mm Ø
MEASUREMENT CAPABILITY				
Calibrated spectral range	210 - 1080 nm	210 - 1080 nm	800 - 1650 nm	900 - 1700 nm
Maximum measurable energy*				
With M-LINK	22 pJ at 634 nm	75 nJ at 634 nm	2.2 nJ at 1310 nm	223 pJ at 1310 nm
With S-LINK	24 pJ at 634 nm	81 nJ at 634 nm	2.4 nJ at 1310 nm	245 pJ at 1310 nm
With MAESTRO	20 pJ at 634 nm	69 nJ at 634 nm	2.0 nJ at 1310 nm	200 pJ at 1310 nm
With INTEGRA	24 pJ at 634 nm	81 nJ at 634 nm	2.4 nJ at 1310 nm	245 pJ at 1310 nm
Noise equivalent energy [a]	8 fJ at 634 nm	1.5 pJ at 634 nm	1 pJ at 1310 nm	30 fJ at 1310 nm
Rise time (0-100%)	15 µs	30 µs	25 µs	12 µs
Max repetition rate	1000 Hz	1000 Hz	1000 Hz	1000 Hz
Max pulse width	10 µs	10 µs	10 µs	10 µs
Calibration uncertainty [b]	± 4% [c]	± 18% (210 - 229 nm) ± 8.0% (230 - 254 nm) ± 6.5% (255 - 399 nm) ± 2.5% (400 - 899 nm) ± 4.0% (900 - 1009 nm) ± 7.5% (1010 - 1080 nm)	± 5% (800 - 1049 nm) ± 3.5% (1050 - 1559 nm) ± 7% (1560 - 1629 nm) ± 10% (1630 - 1650 nm)	± 4% [d]
DAMAGE THRESHOLDS				
Max energy density	N/A	5 µJ/cm²	5 µJ/cm²	N/A
Max average power density	N/A	65 mW/cm² at 532 nm	320 mW/cm² at 1064 nm	N/A
PHYSICAL CHARACTERISTICS				
Effective aperture	3 mm Ø	10 mm Ø	5 mm Ø	3 mm Ø
Distance to sensor face	13.7 mm	13.7 mm	10.5 mm	N/A
Sensor	UV-silicon	UV-silicon	Germanium	InGaAs
Dimensions	38.1Ø x 27.4D mm	38.1Ø x 27.4D mm	38.1Ø x 27.4D mm	38.1Ø x 27.4D mm
Weight	91 g	91 g	91 g	91 g
ORDERING INFORMATION				
Available output options	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232
Compatible stand	STAND-D-233	STAND-D-233	STAND-D-233	STAND-D-233
Product page				

** See curves (p. 102-103) for maximum energy at other wavelengths*

a. Nominal value. Depends on environmental electromagnetic interference and wavelength.
b. With Gentec-EO display or PC interface.
c. This detector is NIST Traceable at the calibration wavelength of 634 nm. Typical values are used at other wavelengths.
d. This detector is NIST Traceable at the calibration wavelength of 1310 nm. Typical values are used at other wavelengths.

Specifications are subject to change without notice

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