

# QE-B

50 nJ - 3.6 mJ, ultra-low energy measurements



## KEY FEATURES

- > **VERY LOW NOISE LEVELS**  
Noise levels of a photodetector, but with the high energies of a pyroelectric:
  - 50 nJ with the MT coating
  - 100 nJ with the BL coating
- > **2 COATINGS AVAILABLE**
  - BL: Black coating, sensitivity of 900 V/J, readings up to 400 Hz
  - MT: Metallic coating, sensitivity of 2400 V/J, readings up to 1000 Hz

## 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*



	QE8SP-B-BL	QE8SP-B-MT
<b>MAX MEASURABLE ENERGY</b>	3.6 mJ	1.3 mJ
<b>MAX REPETITION FREQUENCY</b>	400 Hz	1000 Hz
<b>EFFECTIVE APERTURE</b>	7.8 X 7.8 mm	7.8 X 7.8 mm
<b>MEASUREMENT CAPABILITY</b>		
Spectral range	0.19 - 20 $\mu\text{m}$	0.19 - 20 $\mu\text{m}$
Calibrated spectral range <sup>a</sup>	0.248 - 2.1 $\mu\text{m}$	0.248 - 2.1 $\mu\text{m}$
Max measurable energy		
With U-LINK	3.6 mJ	1.3 mJ
With S-LINK	2.9 mJ	1.1 mJ
With MAESTRO	2.5 mJ	0.93 mJ
Noise equivalent energy		
With U-LINK	150 nJ	80 nJ
With S-LINK	100 nJ	50 nJ
With MAESTRO	150 nJ	80 nJ
Max repetition frequency	400 Hz	1000 Hz
Max pulse width	10 $\mu\text{s}$	10 $\mu\text{s}$
Risetime (0-100%)	30 $\mu\text{s}$	30 $\mu\text{s}$
Calibration uncertainty	$\pm 4.0\%$	$\pm 4.0\%$
Repeatability	< 0.5%	< 0.5%
<b>DAMAGE THRESHOLDS</b>		
Maximum average power	0.5 W	0.5 W
Maximum average power density		
1064 nm, 7 ns, 10 Hz	1 W/cm <sup>2</sup>	1 W/cm <sup>2</sup>
Maximum energy density		
1064 nm, 7 ns, 10 Hz	50 mJ/cm <sup>2</sup>	50 mJ/cm <sup>2</sup>
<b>PHYSICAL CHARACTERISTICS</b>		
Effective aperture	7.8 x 7.8 mm	7.8 x 7.8 mm
Absorber	Organic black	Metallic
Dimensions	38.1 $\varnothing$ X 27.4D mm	38.1 $\varnothing$ X 27.4D mm
Weight	91 g	91 g
<b>ORDERING INFORMATION</b>		
Available output options	DB15, USB or RS-232	DB15, USB or RS-232
Compatible stand	STAND-D-233	STAND-D-233
Product page		

a. Calibration at 2.1 to 2.5  $\mu\text{m}$  is available on special request.