

## 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 (D) 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 (D) analog power supply



Pelican carrying case





Isolation tube

*This product cannot be used with DB15 extension cables*

## QE-B Specifications

CE NIST\*  
Traceable   
\*Also traceable to NRC-CNRC



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

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

Specifications are subject to change without notice