



QE-B

50 nJ - 3.6 mJ, Ultra-Low Energy Measurements



KEY FEATURES

1. VERY LOW NOISE LEVELS

- Noise levels of a photo detector, but with the high energies of a pyroelectric:
- 50 nJ with the MT coating
 - 100 nJ with the BL coating

2. 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

3. SMART INTERFACE

Containing all the calibration data

4. *integra* OPTIONS

- Standard: USB Output (-INT)
- In Option: RS-232 Output (-IDR) and External Trigger (-INE)

AVAILABLE MODELS



QE8SP-B-BL
(8 mm-Organic Black)



QE8SP-B-MT
(8 mm-Metallic)

ACCESSORIES



Stand with Delrin Post
(Model Number: 200428)



APM Analog Power Supply
(Model Number: 201848)



Pelican Carrying Case

SEE ALSO

TECHNICAL DRAWINGS	58
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COMPATIBLE MONITORS	
MAESTRO	20
S-LINK	28
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LIST OF ALL ACCESSORIES	196




APPLICATION NOTES

MEASUREMENT LIMITS USING JOULEMETERS	201932
LONG PULSE JOULEMETER IN BURST MODE	202153

This product cannot be used with DB-15 extension cables

QE-B

SPECIFICATIONS

	QE8SP-B-BL	QE8SP-B-MT
MAX MEASURABLE ENERGY	3.6 mJ	1.3 mJ
MAX REPETITION FREQUENCY	400 Hz	1 000 Hz
EFFECTIVE APERTURE	7.8 X 7.8 mm	7.8 X 7.8 mm
MEASUREMENT CAPABILITY		
Spectral Range *	0.19 - 20 μ m	0.19 - 20 μ m
Max Measurable Energy		
With M-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 M-LINK (with noise suppression) ^a	100 nJ	50 nJ (3 nJ)
With S-LINK	100 nJ	50 nJ
With MAESTRO	150 nJ	80 nJ
Sensitivity	900 V/J	2400 V/J
Max Repetition Frequency	400 Hz	1000 Hz
Max Pulse Width	10 μ s	10 μ s
Rise Time (0-100%)	30 μ s	30 μ s
Calibration Uncertainty	\pm 4.0%	\pm 4.0%
Repeatability	<0.5 %	<0.5 %
DAMAGE THRESHOLDS		
Maximum Average Power	0.5 W	0.5 W
Maximum Average Power Density		
1064 nm, 7 ns, 10 Hz	1 W/cm ²	1 W/cm ²
Maximum Energy Density		
1064 nm, 7 ns, 10 Hz	50 mJ/cm ²	50 mJ/cm ²
PHYSICAL CHARACTERISTICS		
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
ORDERING INFORMATION		
Product Name	QE8SP-B-BL	QE8SP-B-MT
Product Number (Including stand)	202104	202101
 Add Extension for INTEGRA (USB)	-INT	-INT
Product Number (Including stand)	202388	202390
 Add Extension for INTEGRA (RS-232)	-IDR	-IDR
 Add Extension for INTEGRA (Ext Trig)	-INE	-INE

Specifications are subject to change without notice

* For the calibrated spectral range, see the user manual.

a. Obtain a lower noise level using the Noise Suppression function in the PC M-LINK application. Setting the sampling size at 128 will get the lowest noise level possible.

* For details, contact your Gentec-EO representative