



See page 36 for details

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

AVAILABLE MODELS



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



QE8SP-B-MT
(8 mm-Metallic)

ACCESSORIES



Stand with Delrin Post
(Model Number: 200428)



Removable IR Windows
(Various types available)



APM Analog Power Supply
(Model Number: 201848)



Pelican Carrying Case

SEE ALSO

TECHNICAL DRAWINGS	54
ABSORPTION CURVES	56
COMPATIBLE MONITORS	
MAESTRO	20
S-LINK	28
M-LINK	32
LIST OF ALL ACCESSORIES	190

APPLICATION NOTES

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

QE-B

SPECIFICATIONS



*Also traceable to NRC-CNRC

	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 (N/A)	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
Sensor	Pyroelectric	Pyroelectric
Absorber	BL	MT
Connector	DB-15	DB-15
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
INTEGRA Product Name	QE8SP-B-BL-INT	QE8SP-B-MT-INT

* 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.

Specifications are subject to change without notice

* For details, contact your Gentec-EO representative