

QE4

3.7 mm Ø, 1 μ J - 27 J

Key Features

- 1 **Our Smallest Energy Detector**
Complete pyroelectric detector,
the size of a quarter
- 2 **Low Noise Level**
Only 1 μ J noise (MT coating)
- 3 **High Sensitivity**
200 V/J (MT coating)
- 4 **Available with Metallic Absorber**
High Repetition Rate (6000 Hz)
- 5 **BNC Mounted**
For direct reading with an oscilloscope



QE4SP-S-MT



See also

. How it works	12
. Calibration	6
. Detailed dimensions	42
. Spectral absorption	106
. Compatible monitors	
SOLO 2	20
S-LINK-2	24

Accessories

» Pelican Carrying Case

We offer a robust hard shell polymer carrying case.





SPECIFICATIONS



Models	QE4-SP-S-BL	QE4-SP-S-MT
Max Measurable Energy	16 mJ	43 mJ
Max Repetition Frequency	1200 Hz	6000 Hz

MEASUREMENT CAPABILITY	BL	MT
Spectral Range	0.19 – 20 μm	0.19 – 20 μm
Maximum Measurable Energy		
1064 nm, 7 ns, 10 Hz ^a	16 mJ	43 mJ
266 nm, 7 ns, 10 Hz	0.7 mJ	7.6 mJ
Noise Equivalent Energy ^b	15 μJ	1 μJ
Sensitivity ^{c, d}	150 V/J	200 V/J
Max Repetition Frequency	1200 Hz	6000 Hz
Maximum Pulse Width (typical)	100 μs	10 μs
Rise Time (typical 0-100%)	200 μs	20 μs
Calibration Uncertainty ^e	$\pm 4\%$	$\pm 4\%$
Repeatability	<0.5 %	<0.5 %

DAMAGE THRESHOLDS

		
Maximum Average Power	0.3 W	0.3 W
Maximum Energy Density		
1064 nm, 7 ns, 10 Hz	150 mJ/cm ²	400 mJ/cm ²
266 nm, 7 ns, 10 Hz	6 mJ/cm ²	70 mJ/cm ²

PHYSICAL CHARACTERISTICS

Effective Aperture	3.7 mm \emptyset	
Absorber		
	Black	Metallic
Dimensions	20H x 17.5W x 30D mm	
Weight	20 g	

ORDERING INFORMATION

Full Product Name	QE4SP-S-BL	QE4SP-S-MT
Product Number	200636	200638

a. Increasing pulse width increases the maximum measurable energy.

b. Nominal value, actual value depends on electrical noise in the measurement system.

c. Load: 1 M Ω and \leq 130 pF.

d. Maximum output voltage = sensitivity x maximum energy.

e. Excludes non-linearities.

America

Canada
United States
South America

Europe

Austria
Belgium
France
Germany
Ireland
Italy
Poland
Russia
Spain
Sweden
Scandinavia
Switzerland
The Netherlands
Turkey
United Kingdom

Asia Pacific

China
India
Indonesia
Israel
Japan
Korea
Malaysia
Philippines
Singapore
Taiwan
Thailand
Vietnam

Oceania

Australia
New Zealand



Leader in Laser Beam Measurement Since 1972

Headquarters

445 St-Jean-Baptiste, Suite 160
Québec, QC, G2E 5N7, CANADA

T (418) 651-8003
F (418) 651-1174
1.888.5Gentec (543.6832)

info@gentec-eo.com

Calibration Centers

Quebec City, Canada
Olching (Munich), Germany