

QE4



3.7 mm Ø, 1 µJ - 43 mJ

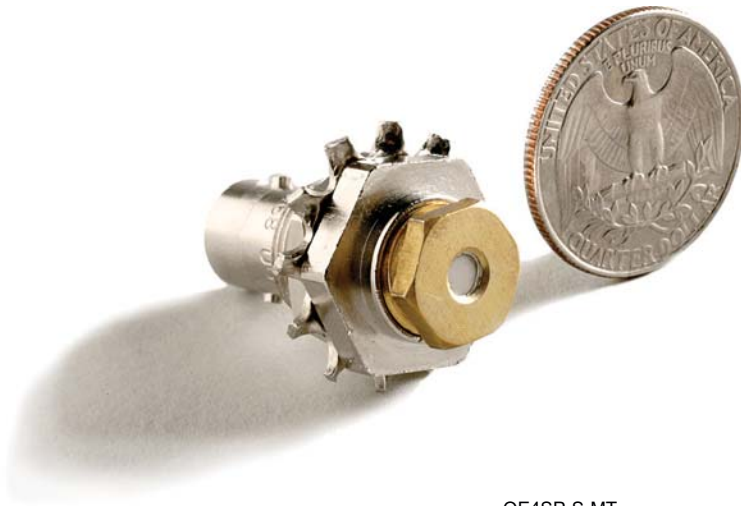
NIST
Traceable

Key Features

- 1 **Our Smallest Energy Detector**
Complete pyroelectric detector,
the size of a quarter
- 2 **Low Noise Level**
Only 1 µJ 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

See also

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- . Compatible monitors
 - SOLO 2 20
 - S-LINK-2 24



QE4SP-S-MT



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.

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