

XLE4



4 mm Ø, 150 nJ - 4 mJ, eXtreme Low Energy



Key Features

- 1 **Low Energy Pyroelectric**
Low energy readings, without the need for a photodetector
- 2 **High Sensitivity**
1100 V/J with a noise level of 150 nJ
- 3 **Compact Design**
Only 36 mm in diameter
- 4 **Metallic Absorber**
High Repetition Rate (2000 Hz)
- 5 **Noise Reduction Stand**
Delrin post to reduce noise from exterior vibrations
- 6 **Smart Interface**
Containing all the calibration data



XLE4



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Accessories


- » **DB-15 to BNC Adaptor**
Make your QE Series detector compatible with your oscilloscope.



- » **Pelican Carrying Case**
We offer a robust hard shell polymer carrying case.



SPECIFICATIONS

Models	XLE4
	

Max Measurable Energy	4 mJ
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Max Repetition Frequency	2000 Hz
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MEASUREMENT CAPABILITY	XLE4
Spectral Range	0.35 – 2.5 μm
Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz ^a	4 mJ
Noise Equivalent Energy ^b	150 nJ
Sensitivity ^{c, d}	1100 V/J
Max Repetition Frequency	2000 Hz
Maximum Pulse Width (typical)	5 μs
Rise Time (typical 0-100%)	10 μs
Calibration Uncertainty ^e	$\pm 4\%$
Repeatability	$< 0.5\%$

DAMAGE THRESHOLDS

Maximum Average Power	0.4 W
Maximum Energy Density 1064 nm, 7 ns, 10 Hz	90 mJ/cm ²

PHYSICAL CHARACTERISTICS

Effective Aperture	4 mm \emptyset
Absorber	
	Metallic
Dimensions	36 mm \emptyset x 26.5D mm
Weight	130 g

ORDERING INFORMATION

Full Product Name	XLE4
Product Number (Including stand)	201057

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. Not including linearity with power.