

## 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

<b>Models</b>	XLE4
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<b>Max Measurable Energy</b>	4 mJ
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<b>Max Repetition Frequency</b>	2000 Hz
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<b>MEASUREMENT CAPABILITY</b>	XLE4
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Spectral Range	0.35 – 2.5 $\mu\text{m}$
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Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz <sup>a</sup>	4 mJ
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Noise Equivalent Energy <sup>b</sup>	150 nJ
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Sensitivity <sup>c, d</sup>	1100 V/J
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Max Repetition Frequency	2000 Hz
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Maximum Pulse Width (typical)	5 $\mu\text{s}$
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Rise Time (typical 0-100%)	10 $\mu\text{s}$
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Calibration Uncertainty <sup>e</sup>	$\pm 4\%$
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Repeatability	<0.5 %
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<b>DAMAGE THRESHOLDS</b>	
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Maximum Average Power	0.4 W
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Maximum Energy Density 1064 nm, 7 ns, 10 Hz	90 mJ/cm <sup>2</sup>
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<b>PHYSICAL CHARACTERISTICS</b>	
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Effective Aperture	4 mm $\emptyset$
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Absorber	
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Metallic

Dimensions	36 mm $\emptyset$ x 26.5D mm
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Weight	130 g
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<b>ORDERING INFORMATION</b>	
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Full Product Name	XLE4
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Product Number (Including stand)	201057
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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 $\Omega$  and  $\leq$  130 pF.

d. Maximum output voltage = sensitivity x maximum energy.

e. Not including linearity with power.

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### Calibration Centers

Quebec City, Canada  
Olching (Munich), Germany