

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









Key Features

- **Low Energy Pyroelectric** Low energy readings, without the need for a photodetector
- **High Sensitivity** 1100 V/J with a noise level of 150 nJ
- **Compact Design** Only 36 mm in diameter
 - **Metallic Absorber** High Repetition Rate (2000 Hz)

Noise Reduction Stand Delrin post to reduce noise from exterior vibrations

Smart Interface

Containing all the calibration data

See also

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

Accessories

XLE4





» Pelican Carrying Case

We offer a robust hard shell polymer carrying case.



XLE4

SPECIFICATIONS

Max Measurable Energy Max Repetition Frequency MEASUREMENT CAPABILITY XLE4 Spectral Range 0.35 - 2.5 μm Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz² 4 mJ Noise Equivalent Energy b 150 nJ Sensitivity c³ 1100 V/J Max Repetition Frequency 2000 Hz Maximum Pulse Width (Typical) 5 μs Rise Time (typical 0-100%) 10 μs Calibration Uncertainty c 4 ms Repetability 20.5 % DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm θ x 26.50 mm Weight 130 g ORDERING INFORMATION	Models	XLE4
Max Repetition Frequency 2000 Hz		
MEASUREMENT CAPABILITY Spectral Range Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz ^a Noise Equivalent Energy ^b 150 nJ Sensitivity ^a ^d 1100 V/J Max Repettion Frequency Maximum Pulse Width (typical) Rise Time (typical 0-100%) Calibration Uncertainty ^e Repeatability DAMAGE THRESHOLDS Maximum Average Power Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture A mm Ø Absorber Dimensions 36 mm Ø x 26.5D mm Weight Weight	Max Measurable Energy	4 mJ
Spectral Range Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz ^a Noise Equivalent Energy ^b Sensitivity ^{c, d} 1100 V/J Max Repetition Frequency Maximum Pulse Width (typical) Rise Time (typical 0-100%) Calibration Uncertainty ^e Repeatability DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions Metallic Dimensions 36 mm Ø x 26.5D mm Weight	Max Repetition Frequency	2000 Hz
Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz ³ Noise Equivalent Energy b 150 nJ Sensitivity c-d 11100 V/J Max Repetition Frequency 2000 Hz Maximum Pulse Width (typical) Rise Time (typical 0-100%) 10 μs Calibration Uncertainty e Repeatability 2-0.5 % DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions Meight 130 g	MEASUREMENT CAPABILITY	XLE4
1064 nm, 7 ns, 10 Hz ³ Noise Equivalent Energy b 150 nJ Sensitivity c d 1100 V/J Max Repetition Frequency 2000 Hz Maximum Pulse Width (typical) Rise Time (typical 0-100%) 10 μs Calibration Uncertainty e Repeatability	Spectral Range	0.35 – 2.5 μm
Noise Equivalent Energy b Sensitivity C-d 1100 V/J Max Repetition Frequency Maximum Pulse Width (typical) Rise Time (typical 0-100%) Calibration Uncertainty e Repeatability DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions Meight 130 g		
Sensitivity ^{c. d} Max Repetition Frequency Maximum Pulse Width (typical) Rise Time (typical 0-100%) Calibration Uncertainty ^e Repeatability DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions Meight 1100 V/J Abov 2000 Hz Abov 3 µs F µs History Abov 4 M Meight Metallic Metallic Dimensions Meight 1100 V/J Abov 4 1100 V/J Abov 4 1100 V/J Abov 4 Abov 5 µs He Metallic Metallic Dimensions Meight 1100 V/J Abov 4 Abov 5 µs History Abov 5 Abov 6 History Abov 7 Abo		4 mJ
Max Repetition Frequency Maximum Pulse Width (typical) Rise Time (typical 0-100%) Calibration Uncertainty ° ### ### ### ### ### ### ### ### ###	Noise Equivalent Energy ^b	
Maximum Pulse Width (typical) 5 μs Rise Time (typical 0-100%) 10 μs Calibration Uncertainty e ±4 % Repeatability <0.5 %		•
Rise Time (typical 0-100%) Calibration Uncertainty e 44 % Repeatability DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm ∅ x 26.5D mm Weight 130 g		2000 Hz
Calibration Uncertainty e Repeatability Author Separation Uncertainty e Repeatability Author Separation Uncertainty e Repeatability Author Separation S		5 μs
Repeatability DAMAGE THRESHOLDS Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	, ,	10 μs
Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	Calibration Uncertainty ^e	±4 %
Maximum Average Power Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	Repeatability	<0.5 %
Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	DAMAGE THRESHOLDS	
Maximum Energy Density 1064 nm, 7 ns, 10 Hz PHYSICAL CHARACTERISTICS Effective Aperture Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	Maximum Average Power	0.4 W
PHYSICAL CHARACTERISTICS Effective Aperture 4 mm Ø Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g		
Effective Aperture Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g		90 mJ/cm²
Absorber Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	PHYSICAL CHARACTERISTICS	
Metallic Dimensions 36 mm Ø x 26.5D mm Weight 130 g	Effective Aperture	4 mm Ø
Dimensions 36 mm Ø x 26.5D mm Weight 130 g	Absorber	
Weight 130 g		Metallic
ORDERING INFORMATION	Weight	130 g
	ORDERING INFORMATION	
Full Product Name XLE4		
Product Number (Including stand) 201057	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 $\text{M}\Omega$ and \leq 130 pF.

d. Maximum output voltage = sensitivity x maximum energy.

e. Not including linearity with power.

Gentec-EO Worldwide



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