

QE25

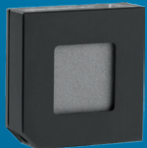
25 x 25 mm, 2 μJ - 23 J



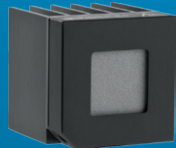
KEY FEATURES

- 1 Modular Concept**
Increase the power capability of your detector:
2 different cooling modules
- 2 Low Noise Level**
2 μJ for the MT coating
- 3 Test Target Included**
With the MB models
- 4 Available with Metallic Absorber**
High Repetition Rate (6000 Hz)
- 5 Smart Interface**
Containing all the calibration data

AVAILABLE MODELS



QE25LP-S-MB
(Broadband-Convection)



QE25LP-H-MB
(Broadband-Heatsink)



QE25SP-S-MT
(Metallic-Convection)



QE25SP-H-MT
(Metallic-Heatsink)

ACCESSORIES



Stand with Delrin Post



DB-15 to BNC Adaptor



QED-25 Attenuator



Pelican Carrying Case

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QE25

SPECIFICATIONS



*Also traceable to NRC-CNRC

MODELS	QE25LP-S-MB	QE25LP-H-MB	QE25SP-S-MT	QE25SP-H-MT
MAX MEASURABLE ENERGY (WITH ATTENUATOR)	23 J	23 J	10 J	10 J
MAX REPETITION FREQUENCY	300 Hz	300 Hz	6000 Hz	6000 Hz
APERTURE	25 x 25 mm	25 x 25 mm	25 x 25 mm	25 x 25 mm

MEASUREMENT CAPABILITY

Spectral Range ^a	0.19 – 20 μm		0.19 – 20 μm		0.19 – 20 μm ^b		0.19 – 20 μm ^b	
	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
Maximum Measurable Energy 1064 nm, 7 ns, 10 Hz ^c	3.8 J	23 J	3.8 J	23 J	3.0 J	10 J	3.0 J	10 J
266 nm, 7 ns, 10 Hz	3.1 J	4.8 J	3.1 J	4.8 J	0.44 J	1.5 J	0.44 J	1.5 J
Noise Equivalent Energy ^d	4 μJ		4 μJ		2 μJ		2 μJ	
Sensitivity ^{e,f}	10 V/J		10 V/J		20 V/J		20 V/J	
Max Repetition Frequency	300 Hz		300 Hz		6000 Hz		6000 Hz	
Maximum Pulse Width (typical)	400 μs [*]		400 μs [*]		10 μs		10 μs	
Rise Time (typical 0-100 %)	550 μs		550 μs		20 μs		20 μs	
Calibration Uncertainty ^g	$\pm 3\%$		$\pm 3\%$		$\pm 3\%$		$\pm 3\%$	
Repeatability	<0.5 %		<0.5 %		<0.5 %		<0.5 %	

DAMAGE THRESHOLDS

Maximum Average Power All Wavelengths	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
		5 W	15 W	10 W	30 W	5 W	15 W	10 W
Maximum Energy Density 1064 nm, 7 ns, single shot	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator	Alone	Attenuator
	0.6 J/cm ²	16 J/cm ²	0.6 J/cm ²	16 J/cm ²	0.50 J/cm ²	4 J/cm ²	0.50 J/cm ²	4 J/cm ²
1064 nm, 7 ns, 10 Hz	0.6 J/cm ²	8 J/cm ²	0.6 J/cm ²	8 J/cm ²	0.50 J/cm ²	2 J/cm ²	0.50 J/cm ²	2 J/cm ²
532 nm, 7 ns, 10 Hz	0.6 J/cm ²	6 J/cm ²	0.6 J/cm ²	6 J/cm ²	0.07 J/cm ²	0.35 J/cm ²	0.07 J/cm ²	0.35 J/cm ²
266 nm, 7 ns, 10 Hz	0.5 J/cm ²	1 J/cm ²	0.5 J/cm ²	1 J/cm ²	0.07 J/cm ²	0.30 J/cm ²	0.07 J/cm ²	0.30 J/cm ²
Maximum Average Power Density	10 W/cm ²	600 W/cm ²	10 W/cm ² ^h	600 W/cm ²	10 W/cm ²	600 W/cm ²	10 W/cm ² ^h	600 W/cm ²

PHYSICAL CHARACTERISTICS

Effective Aperture (with Attenuator)	25 X 25 mm (22 X 22 mm)							
Absorber	Multi-Band		Multi-Band		Metallic		Metallic	
Dimensions	50H x 50W x 14D mm		50H x 50W x 52.5D mm		50H x 50W x 14D mm		50H x 50W x 52.5D mm	
Weight	120 g		187 g		120 g		187 g	

ORDERING INFORMATION

Full Product Name	QE25LP-S-MB	QE25LP-H-MB	QE25SP-S-MT	QE25SP-H-MT
Product Number (Including stand)	200312	200313	200310	200311

*Also available on special order: The Extra Long Pulse Series QE25ELP-MB for pulse widths up to 4 msec, custom-tuned for rep. rate, sensitivity, and pulse width.

a. 0.19 - 2.5 μm with QED Attenuator.b. Detectors with the MT coating can be used within the range 0.19 to 20 μm , however the absorption in the IR wavelengths decreases significantly. This, in turn, reduces the sensitivity and increases the noise level. Nevertheless, each detector is individually scanned and the wavelength correction factor (PWC) is NIST traceable in the range of 248 nm to 2.5 μm .

c. Increasing pulse width increases the maximum measurable energy.

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

e. Load: 1 M Ω and ≤ 30 pF.

f. Maximum output voltage = sensitivity x maximum energy.

g. Excludes non-linearities.

h. At 5 W. Maximum Average Power Density is 10 W/cm² @ 10 W for -H versions.

Specifications are subject to change without notice