AVAILABLE WITH integra

See page 36 for détails

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. **QED ATTENUATOR AVAILABLE**
   - Measure up to 5X higher energies
   - Available with optional calibration, all wavelengths between 532 & 1064 nm, or single wavelength

4. **AVAILABLE WITH METALLIC ABSORBER**
   High Repetition Rate (6000 Hz)

5. **TEST TARGET INCLUDED**
   With the MB models

6. **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
(Model Number: 200428)

DB-15 to BNC Adaptor
(Model Number: 200036)

QED-25 Attenuator
(Model Number: 201199)

Pelican Carrying Case

SEE ALSO

QE25
SPECIFICATIONS

	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
EFFECTIVE APERTURE	25 x 25 mm	25 x 25 mm	25 x 25 mm	25 x 25 mm
MEASUREMENT CAPABILITY				
Spectral Range *	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator
	0.19 – 20 µm / 0.19 - 2.1 µm [a]	0.19 – 20 µm / 0.19 - 2.1 µm [a]	0.19 – 20 µm [b] / 0.19 - 2.1 µm [a]	0.19 – 20 µm [b] / 0.19 - 2.1 µm [a]
Maximum Measurable Energy [c]	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator
1064 nm, 7 ns, 10 Hz [d]	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 / 1.45 J	0.44 J / 1.45 J
Noise Equivalent Energy [e]	4 µJ	4 µJ	2 µJ	2 µJ
Sensitivity [f,g]	10 V/J	10 V/J	20 V/J	20 V/J
Max Repetition Frequency	300 Hz	300 Hz	6000 Hz [h]	6000 Hz [h]
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 [i]	±3 %	±3 %	±3 %	±3 %
Repeatability	<0.5 %	<0.5 %	<0.5 %	<0.5 %
DAMAGE THRESHOLDS				
Maximum Average Power	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator
All Wavelengths	5 W / 15 W	10 W / 30 W	5 W / 15 W	10 W / 30 W
Maximum Energy Density	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator	Alone / Attenuator
1064 nm, 7 ns, single shot	0.6 J/cm² / 16 J/cm²	0.6 J/cm² / 16 J/cm²	0.50 J/cm² / 4 J/cm²	0.50 J/cm² / 4 J/cm²
1064 nm, 7 ns, 10 Hz	0.6 J/cm² / 8 J/cm²	0.6 J/cm² / 8 J/cm²	0.50 J/cm² / 2 J/cm²	0.50 J/cm² / 2 J/cm²
532 nm, 7 ns, 10 Hz	0.6 J/cm² / 6 J/cm²	0.6 J/cm² / 6 J/cm²	0.07 J/cm² / 0.35 J/cm²	0.07 J/cm² / 0.35 J/cm²
266 nm, 7 ns, 10 Hz	0.5 J/cm² / 1 J/cm²	0.5 J/cm² / 1 J/cm²	0.07 J/cm² / 0.30 J/cm²	0.07 J/cm² / 0.30 J/cm²
Maximum Average Power Density	10 W/cm² / 600 W/cm²	10 W/cm² [j] / 600 W/cm²	10 W/cm² / 600 W/cm²	10 W/cm² [j] / 600 W/cm²
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	Standard	With Attenuator [k]	Standard	With Attenuator [k]	Standard	With Attenuator [k]	Standard	With Attenuator [k]
Product Name	QE25LP-S-MB	QE25LP-S-MB-QED	QE25LP-H-MB	QE25LP-H-MB-QED	QE25SP-S-MT	Call	QE25SP-H-MT	Call
Product Number (Including stand)	200312	202184	200313	202185	200310		200311	
Add Extension for INTEGRA	-INT	-INT	-INT	-INT	-INT	Call	-INT	Call
Product Number (Including stand)	202380	202739	202382	202733	202384		202386	

** *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.*

* *For the calibrated spectral range, see the user manual.*

a. 0.19 - 0.3 µm with QEAS Attenuator, 0.3 - 2.1 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. Not exceeding Maximum Average Power.
d. Increasing pulse width increases the maximum measurable energy.
e. Nominal value, actual value depends on electrical noise in the measurement system.
f. Load: 1 MΩ and ≤ 30 pF.
g. Maximum output voltage = sensitivity x maximum energy.
h. 5700 Hz with Integra version.
i. Excludes non-linearities.
j. At 5 W. Maximum Average Power Density is 10 W/cm² @ 10 W for -H versions.
k. When -QED extension is added, the QE + QED come as one unit with a combined calibration only. See the "QED Attenuator" page for more options on the calibration.

Specifications are subject to change without notice