

QE12-MB

12 x 12 mm, 0.7 μ J - 3.9 J

New product



KEY FEATURES

- > **MODULAR CONCEPT**
Increase the power capability of your detector:
2 different cooling modules
- > **LOW NOISE LEVEL**
- > **QED ATTENUATOR AVAILABLE**
 - Measure up to 5X higher energies
 - Available with optional calibration, all wavelengths between 532 & 1064 nm, or single wavelength
- > **HIGH REPETITION RATE OPTIONS**
 - QE12LP: 300 Hz
 - QE12HR: 1000 Hz
- > **TEST TARGET INCLUDED**

OUTPUT OPTIONS

- > **SMART INTERFACE**
Containing all the calibration data
- > **integra ALL-IN-ONE-METER**
Connects directly to a PC
Three models available:
 - USB output (-INT)
 - RS-232 output (-IDR)
 - USB with external trigger (-INE)

COMPATIBLE DISPLAYS & PC INTERFACES



MIRO ALTITUDE



MAESTRO



U-LINK



M-LINK



S-LINK

ACCESSORIES



Stand with delrin post



DB15 to BNC adaptor



QED-12 attenuator



Pelican carrying case

QE12-MB

Specifications

CE NIST*
Traceable
*Also traceable to NRC-CNRC



	QE12LP-S-MB	QE12LP-S-MB-QED	QE12LP-H-MB	QE12LP-H-MB-QED	QE12HR-H-MB	QE12HR-H-MB-QED
MAX MEASURABLE ENERGY ^a	3.9 J	3.9J	3.9J	3.9J	0.85J	3.9J
MAX REPETITION FREQUENCY ^b	300 Hz	300Hz	300Hz	300 Hz	1 kHz	1 kHz
EFFECTIVE APERTURE	12x12mm	9x9mm	12x12mm	9x9mm	12x12mm	9x9mm

MEASUREMENT CAPABILITY

Spectral range	0.19-20 μm	0.3-2.1 μm	0.19-20 μm	0.3-2.1 μm	0.19-20 μm	0.3-2.1 μm
Calibrated spectral range ^c	0.248-2.1 μm	0.532 - 21 μm	0.248 - 21 μm	0.532 - 21 μm	0.248 - 21 μm	0.532 - 21 μm
Maximum measurable energy ^d						
1064 nm, 7 ns, 10 Hz	0.85J	3.9J	0.85J	3.9J	0.85J	3.9J
266 nm, 7 ns, 10 Hz	0.70J	0.81J	0.70J	0.81J	0.70J	0.81J
Noise equivalent energy ^e	0.7 μJ	14 μJ	0.7 μJ	14 μJ	14 μJ	28 μJ
Max repetition frequency ^f	300 Hz	300Hz	300Hz	300 Hz	1 kHz	1 kHz
Maximum pulse width (typical) ^g	400 μs	400 μs	400 μs	400 μs	40 μs	40 μs
Rise time (typical 0-100%)	550 μs	550 μs	550 μs	550 μs	70 μs	70 μs
Calibration uncertainty ^h	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$
Repeatability	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%

PARAMETER SPECIFICATIONS

Maximum average power	3W	7.5W	5W	12.5W	5W	12.5W
Maximum energy density						
1064 nm, 7 ns, single shot	0.6J/cm ²	16J/cm ²	0.6J/cm ²	16J/cm ²	0.6J/cm ²	16J/cm ²
1064 nm, 7 ns, 10 Hz	0.6J/cm ²	5J/cm ²	0.6J/cm ²	8J/cm ²	0.6J/cm ²	5J/cm ²
532 nm, 7 ns, 10 Hz	0.6J/cm ²	6J/cm ²	0.6J/cm ²	6J/cm ²	0.6J/cm ²	6J/cm ²
266 nm, 7 ns, 10 Hz	0.5J/cm ²	1J/cm ²	0.5J/cm ²	1J/cm ²	0.5J/cm ²	1J/cm ²
Maximum average power density ^g	10 W/cm ²	600W/cm ²	10W/cm ²	600W/cm ²	10W/cm ²	600W/cm ²

PHYSICAL CHARACTERISTICS

Effective aperture (with attenuator)	12 x 12 mm	9x9mm	12x12mm	9x9mm	12x12mm	9x9mm
Absorber	MB	QED	MB	QED	MB	QED
Dimensions	36H x 36W x 14D mm	39H x 41W x 19D mm	36H x 36W x 33D mm	39H x 41W x 38D mm	36H x 36W x 33D mm	39H x 41W x 38D mm
Weight	87g	87g	117g	117g	117g	117g

ORDERING INFORMATION

Available output options	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232
Compatible stand	STAND-D-233	STAND-D-233	STAND-D-233	STAND-D-233	STAND-D-233	STAND-D-233
Product page						

- a Not exceeding maximum average power. Increasing pulse width increases the maximum measurable energy.
b With the IDR version, measured values are sampled when the repetition rate is > 200 Hz.
c Calibration at 21 to 25 μm is available on special request.
d Nominal value, actual value depends on electrical noise in the measurement system.
e Also available on special order: ELP (extra-long pulse) version.
f Excludes non-linearities.
g At maximum power.