

QE12-MT

12 x 12 mm, 0.7 μ J - 3.9 J, tuned for high repetition rates



KEY FEATURES

- > **MODULAR CONCEPT**
Increase the power capability of your detector:
2 different cooling modules
- > **LOW NOISE LEVEL**
- > **NEW MODELS FOR HIGH REPETITION RATES**
The QE12HR models are tuned for short pulses with
high repetition rates (up to 10 kHz)

OUTPUT OPTIONS

- > **SMART DB15 CONNECTOR**
Contains 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



	QE12SP-S-MT-D0	QE12SP-H-MT-D0	QE12HR-H-MT-D0
MAX MEASURABLE ENERGY ^a	0.70 J	0.70 J	0.70 J
MAX REPETITION FREQUENCY ^{b,c}	6 kHz	6 kHz	10 kHz
APERTURE	12 x 12 mm	12 x 12 mm	12 x 12 mm
MEASUREMENT CAPABILITY			
Spectral range	0.19 - 20 μm	0.19 - 20 μm	0.19 - 20 μm
Calibrated spectral range ^d	0.248 - 2.1 μm	0.248 - 2.1 μm	0.248 - 2.1 μm
Maximum measurable energy ^a			
1064 nm, 7 ns	0.70 J	0.70 J	0.70 J
266 nm, 7 ns	0.10 J	0.10 J	0.10 J
Noise equivalent energy ^e	0.8 μJ	0.8 μJ	1 μJ
Max repetition frequency ^{b,c}	6 kHz	6 kHz	10 kHz
Maximum pulse width (typical)	10 μs	10 μs	4 μs
Calibration uncertainty ^f	$\pm 3\%$	$\pm 3\%$	$\pm 3\%$
Repeatability	< 0.5%	< 0.5%	< 0.5%
DAMAGE THRESHOLDS			
Maximum average power	3 W	5 W	5 W
Maximum energy density			
1064 nm, 7 ns, single shot	0.50 J/cm ²	0.50 J/cm ²	0.50 J/cm ²
1064 nm, 7 ns, 10 Hz	0.50 J/cm ²	0.50 J/cm ²	0.50 J/cm ²
532 nm, 7 ns, 10 Hz	0.07 J/cm ²	0.07 J/cm ²	0.07 J/cm ²
266 nm, 7 ns, 10 Hz	0.07 J/cm ²	0.07 J/cm ²	0.07 J/cm ²
Maximum average power density ^g	10 W/cm ²	10 W/cm ²	10 W/cm ²
PHYSICAL CHARACTERISTICS			
Effective aperture	12 x 12 mm	12 x 12 mm	12 x 12 mm
Absorber	MT	MT	MT
Dimensions	36H x 36W x 14D mm	36H x 36W x 33D mm	36H x 36W x 33D mm
Weight	87 g	117 g	117 g
ORDERING INFORMATION			
Available output options	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
Product page			

- a. Not exceeding maximum average power. Increasing pulse width increases the maximum measurable energy. The maximum measurable energy depends on the display or PC interface used. If your laser is close to the maximum, contact us to check your specifications.
- b. With the IDR version, measured values are sampled when the repetition rate is > 200 Hz.
- c. Maximum 5.2 kHz with INT version.
- d. Calibration at 2.1 to 2.5 μm is available on special request.
- e. Nominal value, actual value depends on electrical noise in the measurement system.
- f. Excludes non-linearities.
- g. At maximum power.