

QE12-MT

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

New product



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






QE12 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, 10 Hz	0.70 J	0.70 J	0.70 J
266 nm, 7 ns, 10 Hz	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
Rise time width (typical 0-100%)	20 μs	20 μs	7 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.
- 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.