

## QE12HR-H-MB-QED-D0

Pyroelectric detector for laser energy measurement up to 1.5 J.



### PRODUCT FAMILY KEY FEATURES

#### MODULAR CONCEPT

Increase the power capability of your detector: 2 different cooling modules

#### LOW NOISE LEVEL

0.7  $\mu$ J for the MB coating

#### QED ATTENUATOR AVAILABLE

Measure higher energy levels. Available with optional calibration, all wavelengths between 532 and 1064 nm, or single wavelength. [Read more.](#)

#### HIGH REPETITION RATE OPTIONS

- QE12HR-MB: 1 000 Hz
- QE12HR-MT: 10 000 Hz

#### TEST TARGET INCLUDED

With the MB models

#### SMART INTERFACE

Containing all the calibration data

#### COMPATIBLE STAND

[STAND-D-233](#)

## SPECIFICATIONS

### MEASUREMENT CAPABILITIES

|                                           |                   |
|-------------------------------------------|-------------------|
| Spectral range <sup>1</sup>               | 0.3 - 2.1 $\mu$ m |
| Typical rise time                         | 70 $\mu$ s        |
| Repeatability                             | <0.5%             |
| Maximum repetition frequency <sup>2</sup> | 1000 Hz           |
| Maximum measurable energy <sup>3</sup>    | 1.5 J             |
| Noise equivalent energy <sup>4</sup>      | 2.8 $\mu$ J       |
| Maximum pulse width                       | 40 $\mu$ s        |
| Energy calibration uncertainty            | $\pm$ 3 %         |

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

2. May be limited by the display or PC interface. Please refer to the corresponding user manual.

3. At 1064 nm, 7 ns, 10 Hz. Increasing pulse width increases maximum measurable energy.

4. Nominal value. Actual value depends on electrical noise in the measurement system.

### DAMAGE THRESHOLDS

|                                            |                       |
|--------------------------------------------|-----------------------|
| Maximum average power density <sup>1</sup> | 600 W/cm <sup>2</sup> |
| Maximum energy density <sup>2</sup>        | 8 J/cm <sup>2</sup>   |
| Maximum power                              | 12.5 W                |

1. May vary with wavelength and average power.

2. At 1064 nm, 7 ns, 10 Hz. May vary with wavelength and pulse width.

### PHYSICAL CHARACTERISTICS

|                 |                       |
|-----------------|-----------------------|
| Cooling         | Convection (heatsink) |
| Aperture width  | 9 mm                  |
| Aperture height | 9 mm                  |
| Absorber        | QED                   |
| Dimensions      | 39H x 41W x 38D mm    |
| Weight          | 0.12 kg               |

ORDERING INFORMATION

|                        |        |
|------------------------|--------|
| QE12HR-H-MB-QED-D0     | 203897 |
| QE12HR-H-MB-QED-INT-D0 | 203905 |
| QE12HR-H-MB-QED-IDR-D0 | 205364 |
| QE12HR-H-MB-QED-INE-D0 |        |

Specifications are subject to change without notice. Refer to the user manual for complete specifications.

INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at [gentec-eo.com/contact-us](http://gentec-eo.com/contact-us)