

QE12HR-H-MB-QED-D0

Pyroelectric detector for laser energy measurement up to 3.9 J.



PRODUCT FAMILY KEY FEATURES

MODULAR CONCEPT

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

LOW NOISE LEVEL

0.7 µJ for the MB coating

QED ATTENUATOR AVAILABLE

Measure up to 5X higher energies. Available with optional calibration, all wavelengths between 532 & 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 ¹ | 0.3 - 2.1 µm |
|-------------------------------------------|--------------|
| Typical rise time | 70 µs |
| Repeatability | <0.5% |
| Maximum repetition frequency ² | 1000 Hz |
| Maximum measurable energy ³ | 3.9 J |
| Noise equivalent energy ⁴ | 2.8 µJ |
| Maximum pulse width | 40 µs |
| Energy calibration uncertainty | ±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 ¹ | 600 W/cm ² |
|--------------------------------------------|-----------------------|
| Maximum energy density ² | 8 J/cm² |
| 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

| 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