



QE50SP-H-MT-D0

Pyroelectric detector for laser energy measurement up to 13 J.



PRODUCT FAMILY KEY FEATURES

MODULAR CONCEPT

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

LOW NOISE LEVEL

10 μ J 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

- QE-MB: 200 Hz (standard)
- QE-MB: 500 Hz (upon request)
- QE-MT: 4 000 Hz (standard)

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 | 0.193 - 20 μ m |
| Typical rise time | 20 μ s |
| Repeatability | <0.5% |
| Maximum repetition frequency ² | 4000 Hz |
| Maximum measurable energy ³ | 13 J |
| Noise equivalent energy ⁴ | 10 μ J |
| Maximum pulse width | 10 μ 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 ¹ | 10 W/cm ² |
| Maximum energy density ² | 0.5 J/cm ² |
| Maximum power | 20 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 | 50 mm |
| Aperture height | 50 mm |
| Absorber | MT |
| Dimensions | 75H x 75W x 44D mm |



Weight

0.34 kg

ORDERING INFORMATION

QE50SP-H-MT-D0

200485

QE50SP-H-MT-INT-D0

202754

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