

## QE50SP-S-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  $\mu$ 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 <sup>1</sup>               | 0.193 - 20 $\mu$ m |
| Typical rise time                         | 20 $\mu$ s         |
| Repeatability                             | <0.5%              |
| Maximum repetition frequency <sup>2</sup> | 4000 Hz            |
| Maximum measurable energy <sup>3</sup>    | 13 J               |
| Noise equivalent energy <sup>4</sup>      | 10 $\mu$ J         |
| Maximum pulse width                       | 10 $\mu$ 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> | 10 W/cm <sup>2</sup>  |
| Maximum energy density <sup>2</sup>        | 0.5 J/cm <sup>2</sup> |
| Maximum power                              | 10 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         |
| Aperture width  | 50 mm              |
| Aperture height | 50 mm              |
| Absorber        | MT                 |
| Dimensions      | 75H x 75W x 15D mm |

|                      |         |
|----------------------|---------|
| Weight               | 0.21 kg |
| ORDERING INFORMATION |         |
| QE50SP-S-MT-D0       | 200484  |
| QE50SP-S-MT-INT-D0   | 202756  |

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](https://gentec-eo.com/contact-us)