# gentec-e

## QE50SP-S-MT-D0

Pyroelectric detector for laser energy measurement up to 13 J.



#### **KEY FEATURES**

#### MODULAR CONCEPT

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

LOW NOISE LEVEL

10 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

- 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 μm |
|---|---------------|
| Typical rise time                         | 20 µs         |
| Repeatability                             | <0.5%         |
| Maximum repetition frequency <sup>2</sup> | 4000 Hz       |
| Typical energy sensitivity                | 4 V/J         |
| Maximum measurable energy <sup>3</sup>    | 13 J          |
| Noise equivalent energy <sup>4</sup>      | 10 µJ         |
| Maximum pulse width                       | 10 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 <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         |

| 0.21 | kg |
|------|----|
|      |    |

| ORDERING INFOR     | MATION |      |      |        |
|--------------------|--------|------|------|--------|
| QE50SP-S-MT-D0     |        |      |      | 200484 |
| QE50SP-S-MT-INT-D0 |        |      |      | 202756 |
|                    |        | <br> | <br> |        |

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