



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 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 ¹	0.193 - 20 µm
Typical rise time	20 µs
Repeatability	<0.5%
Maximum repetition frequency ²	4000 Hz
Maximum measurable energy ³	13 J
Noise equivalent energy ⁴	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 ¹	10 W/cm²
Maximum energy density ²	0.5 J/cm²
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