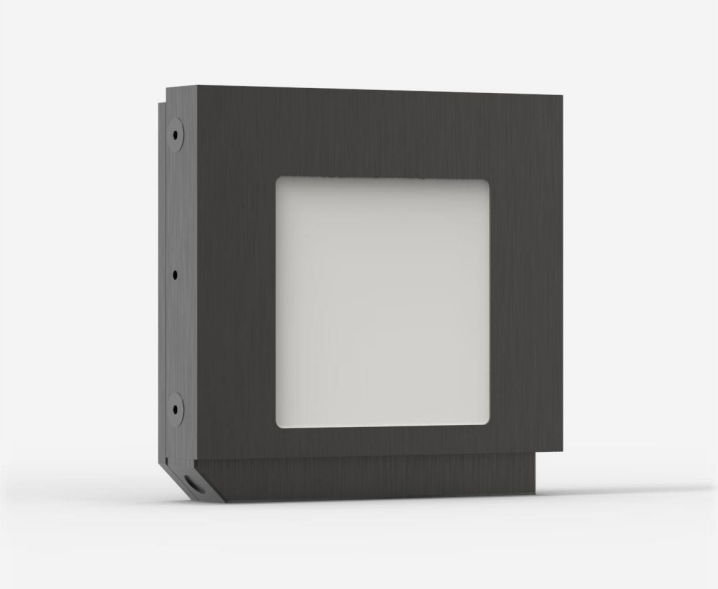
# QE50LP-S-MB-QED-D0

Pyroelectric detector for laser energy measurement up to 40 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 higher energy levels. Available with optional calibration, all wavelengths between 532 and 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] | 0.3 - 2.1 µm |
| Typical rise time | 900 µs |
| Repeatability | <0.5% |
| Maximum repetition frequency | 200 Hz |
| Maximum measurable energy[2] | 40 J |
| Noise equivalent energy[3] | 20 µJ |
| Maximum pulse width | 675 µs |
| Energy calibration uncertainty | ±3 % |

1. For the calibrated spectral range, see the user manual.
2. At 1064 nm, 7 ns, 10 Hz. Increasing pulse width increases maximum measurable energy.
3. Nominal value. Actual value depends on electrical noise in the measurement system.

## DAMAGE THRESHOLDS

| | |
|---|---|
| Maximum average power density[1] | 600 W/cm² |
| Maximum energy density[2] | 8 J/cm² |
| Maximum power | 25 W |

1. May vary with wavelength and average power.
2. At 1064 nm, 7 ns, 10 Hz. May vary with wavelength and pulse width. With QED diffuser, derate these values by 60 % for pulse energies greater than 0.5 J.

## PHYSICAL CHARACTERISTICS

| | |
|---|---|
| Cooling | Convection |
| Aperture width | 47 mm |
| Aperture height | 47 mm |
| Absorber | QED |
| Dimensions | 78H x 80W x 20D mm |

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

## ORDERING INFORMATION

| | |
|---|---|
| QE50LP-S-MB-QED-D0 | 202186 |
| QE50LP-S-MB-QED-INE-D0 | |
| QE50LP-S-MB-QED-INT-D0 | 202752 |
| QE50LP-S-MB-QED-IDR-D0 | 203282 |

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