

## 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  $\mu$ 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>	0.3 - 2.1 $\mu$ m
Typical rise time	900 $\mu$ s
Repeatability	<0.5%
Maximum repetition frequency	200 Hz
Maximum measurable energy <sup>2</sup>	40 J
Noise equivalent energy <sup>3</sup>	20 $\mu$ J
Maximum pulse width	675 $\mu$ s
Energy calibration uncertainty	$\pm$ 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 <sup>1</sup>	600 W/cm <sup>2</sup>
Maximum energy density <sup>2</sup>	8 J/cm <sup>2</sup>
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

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