

## QE50LP-S-MB-QED-D0

Pyroelectric detector for laser energy measurement up to 85 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.

78H x 80W x 20D mm

## 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 MR 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 µm |
|---|--------------|
| Typical rise time                                       | 900 μs       |
| Repeatability   | <0.5%        |
| Maximum repetition frequency                            | 200 Hz       |
| Maximum measurable energy <sup>2</sup>                  | 85 J         |
| Noise equivalent energy <sup>3</sup>                    | 20 µЛ        |
| Maximum pulse width                                     | 675 μs       |
| Energy calibration uncertainty                          | ±3 %         |
| 1 For the calibrated spectral range see the user manual |              |

- 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.

## PHYSICAL CHARACTERISTICS

Dimensions

| Cooling         | Convection |
|-----------------|------------|
| Aperture width  | 47 mm      |
| Aperture height | 47 mm      |
| Absorber        | QED        |

| 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?**



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