

# QE4SP-S-MT-D0

Pyroelectric detector for laser energy measurement up to 0.043 J.



## PRODUCT FAMILY KEY FEATURES

## **OUR SMALLEST ENERGY DETECTOR**

Slightly larger than a BNC connector

## LOW NOISE LEVEL

Only 1 µJ noise (with the MT absorber)

#### FAST RESPONSE

Measure all pulses at up to 6000 Hz

#### **BNC-MOUNTED**

For direct reading with an oscilloscope

# **SPECIFICATIONS**

MEASUREMENT CAPABILITIES	
Spectral range <sup>1</sup>	0.193 - 20 μm
Typical rise time	20 μs
Repeatability	<0.5%
Maximum repetition frequency	6000 Hz
Typical energy sensitivity	200 V/J
Maximum measurable energy <sup>2</sup>	0.043 Ј
Noise equivalent energy <sup>3</sup>	1 μ3
Maximum pulse width	10 μs
Energy calibration uncertainty	±4 %
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>	10 W/cm²
Maximum energy density <sup>2</sup>	0.4 J/cm <sup>2</sup>
Maximum power	0.3 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 diameter	3.7 mm
Absorber	MT
Dimensions	20H x 17.5W x 30D mm
Weight	0.02 kg

## ORDERING INFORMATION

QE4SP-S-MT-D0

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