

# UP55N-40S-H9-D0

Thermal detector for laser power measurement up to 40 W.



## PRODUCT FAMILY KEY FEATURES

## MODULAR CONCEPT

Increase the power capability of your detector: 4 different cooling modules

# HIGH PERFORMANCE

- Fast Rise Time (2 sec)
- High Damage Threshold (45 kW/cm²)

#### COMPACT DESIGN

Only 32 mm thick (40S model)

#### **ENERGY MODE**

Measure single shot energy up to 200  ${\tt J}$ 

## SMART INTERFACE

Containing all the calibration data

#### **COMPATIBLE STAND**

STAND-S-443

# **SPECIFICATIONS**

MEASUREMENT CAPABILITIES	
Maximum average power (continuous)	40 W
Maximum average power (1 minute)	80 W
Noise equivalent power <sup>1</sup>	5 mW
Spectral range <sup>2</sup>	0.193 - 20 μm
Typical rise time <sup>3</sup>	2 s
Power calibration uncertainty <sup>4</sup>	±2.5 %
Repeatability	±0.5 %
1. Nominal value, actual value depends on electrical noise in the measurement system.	

- 2. For the calibrated spectral range, see the user manual.
- 3. With anticipation.
- 4. Including linearity with power.

# MEASUREMENT CAPABILITIES (ENERGY MODE)

MEASOREMENT CAPABILITIES (ENERGY MODE)	
Maximum measurable energy <sup>1</sup>	200 J
Noise equivalent energy $^2$	0.25 J
Minimum repetition period	11.1 s
Maximum pulse width	433 ms
Energy calibration uncertainty <sup>3</sup>	±5 %

- 1. For 360 µs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
- 2. Nominal value, actual value depends on electrical noise in the measurement system.
- 3. When single-shot energy calibration is purchased

#### DAMAGE THRESHOLDS

Maximum average power density <sup>1</sup>	45 kW/cm <sup>2</sup>
Maximum energy density <sup>2</sup>	1J/cm²

- 1. At 1064 nm, 10 W CW. 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	55 mm
Absorber	Н9
Dimensions	89H x 89W x 35D mm
Weight	0.62 kg
ORDERING INFORMATION	
UP55N-40S-H9-D0	200215
UP55N-40S-H9-IDR-D0	203387
UP55N-40S-H9-INT-D0	202627
UP55N-40S-H9-BLU-D0	203432

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