



UP25N-40S-H9-D0

Thermal detector for laser power measurement up to 40 W.



PRODUCT FAMILY KEY FEATURES

NEW: IMPROVED DESIGN

It is now even simpler to install a UP25 detector into your optical system. All UP25 detectors now include an SM1-threaded aperture (1.035"-40 thread).

MODULAR CONCEPT

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

HIGH PERFORMANCE

- Fast rise time (1.3 sec)
- High damage threshold (45 kW/cm²)

ENERGY MODE

Measure single shot energy up to 40 ${
m J}$

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 ¹ | 3 mW |
| Spectral range ² | 0.193 - 20 μm |
| Typical rise time ³ | 1.3 s |
| Power calibration uncertainty ⁴ | ±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)

| Maximum measurable energy ¹ | 40 J |
|---|--------|
| Noise equivalent energy ² | 0.2 J |
| Minimum repetition period | 4.6 s |
| Maximum pulse width | 123 ms |
| Energy calibration uncertainty ³ | ±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 ^l | 45 kW/cm² |
|--|---------------------|
| Maximum energy density ² | 1 J/cm ² |

- 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

Convection Cooling





| Aperture diameter | 25 mm |
|----------------------|--------------------|
| Absorber | H9 |
| Dimensions | 89H x 89W x 35D mm |
| Weight | 0.68 kg |
| ORDERING INFORMATION | |
| UP25N-40S-H9-D0 | 200195 |
| UP25N-40S-H9-BLU-D0 | 203673 |
| UP25N-40S-H9-IDR-D0 | 203365 |
| UP25N-40S-H9-INT-D0 | 203057 |
| | |

 $Specifications\ are\ subject\ to\ change\ without\ notice.\ Refer\ to\ the\ user\ manual\ for\ complete\ specifications.$

INTERESTED IN THIS PRODUCT?

GET A QUOTE

Find your local sales representative at gentec-eo.com/contact-us