

UP55N-300F-H12-DO

Thermal detector for laser power measurement up to 300 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 J

SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND

[STAND-S-443](#)

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power (continuous)	300 W
Maximum average power (1 minute)	300 W
Noise equivalent power ¹	15 mW
Spectral range ²	0.193 - 20 µm
Typical rise time ³	2 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	200 J
Noise equivalent energy ²	0.25 J
Minimum repetition period	12 s
Maximum pulse width	430 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 ¹	45 kW/cm ²
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

Cooling	Fan
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Aperture diameter	55 mm
Absorber	H12
Dimensions	92H x 92W x 117D mm
Weight	1.41 kg
ORDERING INFORMATION	
UP55N-300F-H12-D0	201157B
UP55N-300F-H12-INT-D0	202631B
UP55N-300F-H12-BLU-D0	203703B
UP55N-300F-H12-IDR-D0	203384

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