

UP55N-150F-VR-D0

Thermal detector for laser power measurement up to 150 W.



PRODUCT FAMILY KEY FEATURES

THIS PRODUCT HAS BEEN SUPERSEDED. CHECK [THIS PAGE](#) FOR THE NEW PRODUCT.

MODULAR CONCEPT

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

HIGH PEAK POWER VOLUME ABSORBER

- Perfect for high density beams
- Average power density of 700 W/cm² prevents degradation caused by repetitive pulses

LARGE APERTURE

55 mm aperture to accommodate the largest beams

HIGH AVERAGE POWER

Up to 200 W of continuous power with the watercooled unit

ENERGY MODE

Measure single shot energy up to 500 J

SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND

[STAND-S-443](#)

SPECIFICATIONS

MEASUREMENT CAPABILITIES

| | |
|--|--------------|
| Maximum average power (continuous) | 150 W |
| Maximum average power (1 minute) | 150 W |
| Noise equivalent power ¹ | 15 mW |
| Spectral range ² | 0.3 - 2.5 μm |
| Typical rise time ³ | 4 s |
| Power calibration uncertainty ⁴ | ±2.5 % |
| Repeatability | ±0.5 % |

1. Nominal value, actual value depends on electrical noise in the measurement system.
2. This spectral range refers to the calibration traceability.
3. With anticipation.
4. Including linearity with power.

MEASUREMENT CAPABILITIES (ENERGY MODE)

| | |
|---|--------|
| Maximum measurable energy ¹ | 500 J |
| Noise equivalent energy ² | 0.25 J |
| Minimum repetition period | 11.1 s |
| Maximum pulse width | 433 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 | 700 W/cm ² |
| Maximum energy density ² | 6 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 |
| Aperture diameter | 55 mm |
| Absorber | VR |
| Dimensions | 92H x 92W x 117D mm |
| Weight | 1.41 kg |

ORDERING INFORMATION

| | |
|----------------------|---------|
| UP55N-150F-VR-D0 | 201854B |
| UP55N-150F-VR-IDR-D0 | 203383 |
| UP55N-150F-VR-BLU-D0 | 203700B |
| UP55N-150F-VR-INT-D0 | 203071B |

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