

UP19K-15S-VR-D0

Thermal detector for laser power measurement up to 15 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THIS PRODUCT HAS BEEN SUPERSEDED.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: 2 different cooling modules

HIGH PEAK POWER VOLUME ABSORBER

Perfect for high density beams

COMPACT DESIGN

Only 21 mm thick (15S model)

ENERGY MODE

Measure single shot energy up to 40 J

SMART INTERFACE

Containing all the calibration data

COMPATIBLE STAND

[STAND-S-233](#)

SPECIFICATIONS

MEASUREMENT CAPABILITIES

| | |
|--|-------------------------|
| Maximum average power (continuous) | 15 W |
| Maximum average power (1 minute) | 20 W |
| Noise equivalent power ¹ | 2 mW |
| Spectral range ² | 0.3 - 2.5 μm |
| Typical rise time ³ | 2.5 s |
| Power calibration uncertainty ⁴ | $\pm 2.5\%$ |
| Repeatability | $\pm 0.5\%$ |

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 | 40 J |
| Noise equivalent energy ² | 0.02 J |
| Minimum repetition period | 4.5 s |
| Maximum pulse width | 90 ms |
| Energy calibration uncertainty ³ | $\pm 5\%$ |

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 | Convection |
|---------|------------|

| | |
|-------------------|----------------------|
| Aperture diameter | 18 mm |
| Absorber | VR |
| Dimensions | 50H x 50W x 20.6D mm |
| Weight | 0.16 kg |

ORDERING INFORMATION

| | |
|---------------------|--------|
| UP19K-15S-VR-D0 | 201147 |
| UP19K-15S-VR-IDR-D0 | 203339 |
| UP19K-15S-VR-BLU-D0 | 203637 |
| UP19K-15S-VR-INT-D0 | 202639 |

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