UP19K-V

18 mm Ø, 2 mW - 35 W, Volume Absorber

CE NIST Traceable WEEE/RoHS COMPLIANT

UP19K-30H-VR

UP19K-15S-VR

NEW

Key Features

1 Modular Concept
Increase the power capability of your detector : 2 different cooling modules

2 High Peak Power Volume Absorber
- Fast Rise Time (2.5 sec)
- High Damage Threshold (100 GW/cm²)

3 Compact Design
Only 21 mm thick (15S model)

4 Energy Mode
Measure single shot energy up to 40 J

5 New High Durability Absober
Average power density of 700 W/cm² prevents degradation caused by repetitive pulses

6 Smart Interface
Containing all the calibration data

See also

Accessories

» **Fiber Optic Adapters (FC, SMA, SC)**
Variety of fiber adapter options to give you the most flexibility in using our power detectors with your fiber coupled lasers.

» **Extension Cables (4, 15, 20 and 25 m)**
For some OEM, manufacturing and laboratory applications.

» **Pelican Carrying Case**
We offer a robust hard shell polymer carrying case.

UP19K-V

SPECIFICATIONS

Models	UP19K-15S-VR	UP19K-30H-VR
		
Max Average Power (continuous)	15 W	30 W
Max Average Power (1 minute)	20 W	35 W

MEASUREMENT CAPABILITY	15S-VR	30H-VR
Spectral Range	0.19 – 2.5 µm	0.19 – 2.5 µm
Noise Equivalent Power [a]	2 mW	2 mW
Rise Time (nominal) [b]	2.5 sec	2.5 sec
Sensitivity (typ into 100 kΩ load) [c]	0.34 mV/W	0.34 mV/W
Calibration Uncertainty [d]	±2.5 %	±2.5 %
Repeatability	±0.5 %	±0.5 %
Energy Mode		
Sensitivity	0.1 mV/J	0.1 mV/J
Maximum Measurable Energy [e]	40 J	40 J
Noise Equivalent Energy [a]	0.02 J	0.02 J
Minimum Repetition Period	4.5 sec	4.5 sec
Maximum Pulse Width	90 ms	90 ms
Accuracy with energy calibration option	±5 %	±5 %

DAMAGE THRESHOLDS		
Maximum Average Power Density [f]	700 W/cm²	700 W/cm²
Pulsed Laser Damage Thresholds	Max Energy Density	Peak Power Density
1064 nm, 360 µs, 5 Hz	40 J/cm²	111 kW/cm²
1064 nm, 7 ns, 10 Hz	6 J/cm²	860 MW/cm²
532 nm, 7 ns, 10 Hz	4 J/cm²	570 MW/cm²
266 nm, 7 ns, 10 Hz	1 J/cm²	143 MW/cm²
Max Peak Power Density	100 GW/cm²	100 GW/cm²

PHYSICAL CHARACTERISTICS		
Effective Aperture Diameter	18 mm Ø	18 mm Ø
Absorber (High Damage Threshold)	VR	VR
Dimensions	50H x 50W	50H x 50W
	x 20.6D mm	x 56.3D mm
Weight (head only)	0.16 kg	0.21 kg

ORDERING INFORMATION		
Full Product Name	UP19K-15S-VR	UP19K-30H-VR
Product Number (including stand)	201149	201150

a. Nominal value, actual value depends on electrical noise in the measurement system.
b. With Gentec-EO SOLO, UNO, P-LINK and S-LINK-2 monitors.
c. Maximum output voltage = sensitivity x maximum power.
d. Including linearity with power.
e. For 360 µs pulses. Higher pulse energy possible when customized for long pulses (ms), less for short pulses (ns).
f. At 1064 nm, 10 W CW.

Specifications are subject to change without notice