

UP19-H


19 mm Ø, 1 mW - 200 W



KEY FEATURES

- **MODULAR CONCEPT**
Increase the power capability of your detector: 5 different cooling modules
- **HIGH PERFORMANCE**
Fast Rise Time (0.6 s)
High damage threshold (45 kW/cm²)
- **COMPACT DESIGN**
Only 20.6 mm thick (15S model)
- **ENERGY MODE**
Measure single shot energy up to 25 J

OUTPUT OPTIONS

- **SMART DB15 CONNECTOR**
Contains all the calibration data
- **integra ALL-IN-ONE-METER**
Connects directly to a PC
Two models available:
 - USB output (-INT)
 - RS-232 output (-IDR)
- **BLU WIRELESS METER** 
Connects via Bluetooth® to a smartphone, tablet or PC

COMPATIBLE DISPLAYS & PC INTERFACES



MIRO ALTITUDE



MAESTRO



TUNER



UNO



U-LINK and P-LINK



S-LINK and M-LINK

ACCESSORIES



Stand with steel post



Extension cables
(4, 15, 20 or 25 m)



Isolation tube



Fiber adaptors and connectors
(FC, SC or SMA)



12V power supply








Pelican carrying case

UP19-H

Specifications

CE NIST*
Traceable
*Also traceable to NRC-CNRC



	UP19K-15S-H5-DO	UP19K-30H-H5-DO	UP19K-50L-H5-DO	UP19K-110F-H9-DO	UP19K-200W-H9-DO
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	15 W / 30 W	30 W / 60 W	50 W / 90 W	110 W / 150 W	200 W / 200 W ^f
EFFECTIVE APERTURE	19 mm ϕ	19 mm ϕ	19 mm ϕ	19 mm ϕ	19 mm ϕ
COOLING METHOD	Convection	Heatsink	Large heatsink	Fan-cooled	Water-cooled
MEASUREMENT CAPABILITY					
Spectral range	0.19 - 20 μ m	0.19 - 20 μ m	0.19 - 20 μ m	0.19 - 20 μ m	0.19 - 20 μ m
Calibrated spectral range^a	0.248 - 2.1 μ m	0.248 - 2.1 μ m	0.248 - 2.1 μ m	0.248 - 2.1 μ m	0.248 - 2.1 μ m
Noise equivalent power^b	1 mW	1 mW	1 mW	3 mW	3 mW
Rise time (nominal)^c	0.6 s	0.6 s	0.6 s	1.5 s	1.5 s
Calibration uncertainty^d	\pm 2.5%	\pm 2.5%	\pm 2.5%	\pm 2.5%	\pm 2.5%
Repeatability	\pm 0.5%	\pm 0.5%	\pm 0.5%	\pm 0.5%	\pm 0.5%
Energy mode					
Maximum measurable energy^e	15 J	15 J	15 J	25 J	25 J
Noise equivalent energy^b	0.02 J	0.02 J	0.02 J	0.06 J	0.06 J
Minimum repetition period	4 s	4 s	4 s	4 s	4 s
Maximum pulse width	88 ms	88 ms	88 ms	88 ms	88 ms
Accuracy with energy calibration option^f	\pm 5%	\pm 5%	\pm 5%	\pm 5%	\pm 5%
DAMAGE THRESHOLDS					
Maximum average power density^g	36 kW/cm ²	36 kW/cm ²	36 kW/cm ²	45 kW/cm ²	45 kW/cm ²
Maximum energy density					
1064 nm, 360 μs, 5 Hz	5 J/cm ²	5 J/cm ²	5 J/cm ²	5 J/cm ²	5 J/cm ²
1064 nm, 7 ns, 10 Hz	1 J/cm ²	1 J/cm ²	1 J/cm ²	1 J/cm ²	1 J/cm ²
532 nm, 7 ns, 10 Hz	0.6 J/cm ²	0.6 J/cm ²	0.6 J/cm ²	0.6 J/cm ²	0.6 J/cm ²
266 nm, 7 ns, 10 Hz	0.3 J/cm ²	0.3 J/cm ²	0.3 J/cm ²	0.3 J/cm ²	0.3 J/cm ²
PHYSICAL CHARACTERISTICS					
Effective aperture	19 mm ϕ	19 mm ϕ	19 mm ϕ	19 mm ϕ	19 mm ϕ
Absorber (high damage threshold)	H5	H5	H5	H9	H9
Dimensions	50H x 50W x 20.6D mm	50H x 50W x 56.3D mm	76.2H x 76.2W x 73.6D mm	50H x 50W x 63D mm	50H x 50W x 33D mm
Weight (head only)	0.16 kg	0.21 kg	0.48 kg	0.25 kg	0.24 kg
ORDERING INFORMATION					
Available output options	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth	DB15, USB or RS-232	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth
Compatible stand	STAND-S-233	STAND-S-233	STAND-S-233	STAND-S-233	STAND-S-233
Product page					

- a. Calibrations at 2.1 to 2.5 μ m and 10.6 μ m are available on special request.
 b. Nominal value, actual value depends on electrical noise in the measurement system.
 c. With anticipation.
 d. Including linearity with power.
 e. For 360 μ s pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
 f. Minimum cooling flow 0.5 liters/min, water temperature \leq 22 °C, 1/8 NPT compression fittings for 1/4 inch semi-rigid tube. Contact Gentec-EO for clean deionized water cooling module option.
 g. At 1064 nm, 10 W CW.

Specifications are subject to change without notice