UP16-QED

16 mm Ø, 4 mW - 100 W, volume absorber

KEY FEATURES

- **MODULAR CONCEPT**
  Increase the power capability of your detector:
  3 different cooling modules
- **HIGH PEAK POWER VOLUME ABSORBER**
  Perfect for pulsed beams with high energy density
- **COMPACT DESIGN**
  Only 24 mm thick (15S model)
- **ENERGY MODE**
  Measure single shot energy up to 500 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)


Pelican carrying case

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LASER COMPONENTS®

UP16-QED
Specifications

CE NIST* Traceable

*Also traceable to NRC-CNRC



	UP16K-15S-QED-D0	UP16K-30H-QED-D0	UP16K-100W-QED-D0
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	15 W / 20 W	30 W / 35 W	100 W / 100 W
EFFECTIVE APERTURE	16 mm Ø	16 mm Ø	16 mm Ø
COOLING METHOD	Convection	Heatsink	Water-cooled
MEASUREMENT CAPABILITY			
Spectral range	0.266 - 2.5 µm	0.266 - 2.5 µm	0.266 - 2.5 µm
Calibrated spectral range [a]	0.532 - 2.1 µm	0.532 - 2.1 µm	0.532 - 2.1 µm
Noise equivalent power [b]	4 mW	4 mW	4 mW
Rise time (nominal) [c]	2.5 s	2.5 s	2.5 s
Calibration uncertainty [d]	± 2.5%	± 2.5%	± 2.5%
Repeatability	±0.5%	±0.5%	±0.5%
Energy mode			
Maximum measurable energy [e]	500 J	500J	500 J
Noise equivalent energy [b]	60 mJ	60 mJ	60 mJ
Minimum repetition period	4 s	4 s	4 s
Maximum pulse width	61 ms	61 ms	61 ms
Accuracy with energy calibration option	± 5%	± 5%	± 5%
DAMAGE THRESHOLDS			
Maximum average power density [f]	100 kW/cm²	100 kW/cm²	100 kW/cm²
Maximum energy density			
1064 nm, 360 µs, 5 Hz	300 J/cm²	300 J/cm²	300 J/cm²
1064 nm, 7 ns, 10 Hz	8 J/cm²	8 J/cm²	8 J/cm²
532 nm, 7 ns, 10 Hz	6 J/cm²	6 J/cm²	6 J/cm²
266 nm, 7 ns, 10 Hz	1 J/cm²	1 J/cm²	1 J/cm²
PHYSICAL CHARACTERISTICS			
Effective aperture	16 mm Ø	16 mm Ø	16 mm Ø
Absorber (volume absorber)	QED	QED	QED
Dimensions	50H x 50W x 23.6D mm	50H x 50W x 59.3D mm	50H x 50W x 36D
Weight (head only)	0.16 kg	0.21 kg	0.24 kg
ORDERING INFORMATION			
Available output options	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth
Compatible stand	STAND-S-233	STAND-S-233	STAND-S-233
Product page			

a. Calibration at 2.1 to 2.5 µm is 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 µs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
f. At 1064 nm, 10 W CW.

Specifications are subject to change without notice

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