

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

UP16-QED

Specifications

CE NIST*
Traceable
*Also traceable to NRC-CNRC



	UP16K-15S-QED-DO	UP16K-30H-QED-DO	UP16K-100W-QED-DO
MAX AVERAGE POWER (CONTINUOUS/1 MINUTE)	15W / 20W	30W / 35W	100W / 100W
EFFECTIVE APERTURE	16mm ² /J	16mm ² /J	16mm ² /J
COOLING METHOD	Convection	Heatsink	Water-cooled

MEASUREMENT CAPABILITY			
Spectral range	0.266 - 25 μ m	0.266 - 25 μ m	0.266 - 25 μ m
Calibrated spectral range^a	0.532 - 21 μ m	0.532 - 21 μ m	0.532 - 21 μ m
Noise equivalent power^b	4mW	4mW	4mW
Rise time (nominal)^c	25 s	2.55	2.55
Calibration uncertainty^d	±2.5%	±2.5%	±2.5%
Repeatability	±0.5%	±0.5%	±0.5%
Energy mode			
Maximum measurable energy ^e	500J	500J	500J
Noise equivalent energy ^b	60mJ	60mJ	60mJ
Minimum repetition period	4 s	4s	4s
Maximum pulse width	61 ms	61ms	61ms
Accuracy with energy calibration option	±5%	±5%	±5%

DAMAGE THRESHOLDS			
Maximum average power density^f	100kW/cm ²	100kW/cm ²	100kW/cm ²
Maximum energy density			
1064 nm, 360 μ s, 5 Hz	300J/cm ²	300J/cm ²	300J/cm ²
1064 nm, 7 ns, 10 Hz	6J/cm ²	6J/cm ²	6J/cm ²
532 nm, 7 ns, 10 Hz	6J/cm ²	6J/cm ²	6J/cm ²
266 nm, 7 ns, 10 Hz	1J/cm ²	1J/cm ²	1J/cm ²

PHYSICAL CHARACTERISTICS			
Effective aperture	16mm ² /J	16mm ² /J	16mm ² /J
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)	0.16kg	0.21 kg	0.24kg

ORDERING INFORMATION			
Available output options	DBIS, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth
Compatible stand	STAND-5-233	STAND-5-233	STAND-5-233
Product page			

- a Calibration at 21 to 25 μ m 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 μ s pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
f At 1064 nm, 10 W CW.