

UP52-QED


52 mm Ø, 15 mW - 300 W, volume absorber



KEY FEATURES

- > **MODULAR CONCEPT**
Increase the power capability of your detector:
4 different cooling modules
- > **HIGH PEAK POWER VOLUME ABSORBER**
Perfect for pulsed beams with high energy density
- > **LARGE APERTURE**
52 mm Ø aperture accommodates large beams
- > **HIGH AVERAGE POWER**
Up to 300 W of continuous power with the
water-cooled unit
- > **ENERGY MODE**
Measure single shot energy up to 1000 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)



12V power supply







Pelican carrying case

UP52-QED

Specifications

CE NIST*
Traceable
*Also traceable to NRC-CNRC



	UP52N-50S-QED-D0	UP52N-100H-QED-D0	UP52N-150F-QED-D0	UP52M-300W-QED-D0
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	50 W / 50 W	100 W / 100 W	150 W / 150 W	300 W ¹ / 300 W ¹
EFFECTIVE APERTURE	52 mm ϕ	52 mm ϕ	52 mm ϕ	52 mm ϕ
COOLING METHOD	Convection	Heatsink	Fan-cooled	Water-cooled
MEASUREMENT CAPABILITY				
Spectral range	0.266 - 2.5 μ m	0.266 - 2.5 μ m	0.266 - 2.5 μ m	0.266 - 2.5 μ m
Calibrated spectral range^a	0.300 - 2.1 μ m	0.300 - 2.1 μ m	0.300 - 2.1 μ m	0.300 - 2.1 μ m
Noise equivalent power^b	15 mW	15 mW	15 mW	15 mW
Rise time (nominal)^c	4 s	4 s	4 s	4 s
Calibration uncertainty^d	\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%
Energy mode				
Maximum measurable energy^e	1000 J	1000 J	1000 J	1000 J
Noise equivalent energy^b	250 mJ	250 mJ	250 mJ	250 mJ
Minimum repetition period	9 s	9 s	9 s	9 s
Maximum pulse width	371 ms	371 ms	371 ms	371 ms
Accuracy with energy calibration option	\pm 5%	\pm 5%	\pm 5%	\pm 5%
DAMAGE THRESHOLDS				
Maximum average power density^g	100 kW/cm ²	100 kW/cm ²	100 kW/cm ²	100 kW/cm ²
Maximum energy density				
1064 nm, 360 μs, 5 Hz	300 J/cm ²	300 J/cm ²	300 J/cm ²	300 J/cm ²
1064 nm, 7 ns, 10 Hz	8 J/cm ²	8 J/cm ²	8 J/cm ²	6 J/cm ²
532 nm, 7 ns, 10 Hz	6 J/cm ²	6 J/cm ²	6 J/cm ²	6 J/cm ²
266 nm, 7 ns, 10 Hz	1 J/cm ²	1 J/cm ²	1 J/cm ²	1 J/cm ²
PHYSICAL CHARACTERISTICS				
Effective aperture	52 mm ϕ	52 mm ϕ	52 mm ϕ	52 mm ϕ
Absorber (volume absorber)	QED	QED	QED	QED
Dimensions	89H x 89W x 32D mm	89H x 89W x 106D mm	89H x 89W x 116D mm	89H x 89W x 43D mm
Weight (head only)	0.62 kg	0.93 kg	1.41 kg	0.84 kg
ORDERING INFORMATION				
Available output options	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth	DB15, USB, RS-232 or Bluetooth
Compatible stand	STAND-S-443	STAND-S-443	STAND-S-443	STAND-S-443
Product page				

- a. Calibrations at 21 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 1 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