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 accomodates 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 WEEE/RoHS COMPLIANT

*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 [f] / 300 W [f]
EFFECTIVE APERTURE	52 mm Ø	52 mm Ø	52 mm Ø	52 mm Ø
COOLING METHOD	Convection	Heatsink	Fan-cooled	Water-cooled
MEASUREMENT CAPABILITY				
Spectral range	0.266 - 2.5 µm	0.266 - 2.5 µm	0.266 - 2.5 µm	0.266 - 2.5 µm
Calibrated spectral range [a]	0.300 - 2.1 µm	0.300 - 2.1 µm	0.300 - 2.1 µm	0.300 - 2.1 µm
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]	± 2.5%	± 2.5%	± 2.5%	± 2.5%
Repeatability	±0.5%	±0.5%	±0.5%	±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	± 5%	± 5%	± 5%	± 5%
DAMAGE THRESHOLDS				
Maximum average power density [g]	100 kW/cm²	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	300 J/cm²
1064 nm, 7 ns, 10 Hz	8 J/cm²	8 J/cm²	8 J/cm²	6 J/cm²
532 nm, 7 ns, 10 Hz	6 J/cm²	6 J/cm²	6 J/cm²	6 J/cm²
266 nm, 7 ns, 10 Hz	1 J/cm²	1 J/cm²	1 J/cm²	1 J/cm²
PHYSICAL CHARACTERISTICS				
Effective aperture	52 mm Ø	52 mm Ø	52 mm Ø	52 mm Ø
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 40D 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 2.1 to 2.5 µm and 10.6 µm 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 µs pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
f. Minimum cooling flow 1 liters/min, water temperature ≤ 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
T 418.651.8003 | info@gentec-eo.com