

UP50-W


50 mm Ø, 5 mW - 85 W, 100 kW/cm²



KEY FEATURES

- > **MODULAR CONCEPT**
Increase the power capability of your detector:
3 different cooling modules
- > **VERY HIGH DAMAGE THRESHOLD**
100 kW/cm² in average power density
- > **VERY LARGE APERTURE**
50 mm Ø effective aperture, perfect for large beams
- > **HIGHEST ENERGY READINGS IN THE SERIES**
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)



Fiber adaptors and connectors
(FC, SC or SMA)



3-Port fiber cylinder with
adaptors and plug



12V power supply






Pelican carrying case

UP50-W

Specifications

CE NIST*
Traceable
*Also traceable to NRC-CNRC



	UP50N-40S-W9-D0	UP50N-50H-W9-D0	UP50N-50F-W9-D0
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	40 W / 80 W	50 W / 85 W	50 W / 85 W
EFFECTIVE APERTURE	50 mm ϕ	50 mm ϕ	50 mm ϕ
COOLING METHOD	Convection	Heatsink	Fan-cooled
MEASUREMENT CAPABILITY			
Spectral range	0.19 - 10.0 μm	0.19 - 10.0 μm	0.19 - 10.0 μm
Calibrated spectral range ^a	0.248 - 2.1 μm	0.248 - 2.1 μm	0.248 - 2.1 μm
Noise equivalent power ^b	5 mW	5 mW	5 mW
Rise time (nominal) ^c	3.5 s	3.5 s	3.5 s
Calibration uncertainty ^d	$\pm 2.5\%$	$\pm 2.5\%$	$\pm 2.5\%$
Repeatability	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Energy mode			
Maximum measurable energy ^e	500 J	500 J	500 J
Noise equivalent energy ^b	0.25 J	0.25 J	0.25 J
Minimum repetition period	11.1 s	11.1 s	11.1 s
Maximum pulse width	467 ms	467 ms	467 ms
Accuracy with energy calibration option	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$
DAMAGE THRESHOLDS			
Maximum average power density ^f	100 kW/cm ²	100 kW/cm ²	100 kW/cm ²
Maximum energy density			
1064 nm, 150 μs, 5 Hz	100 J/cm ²	100 J/cm ²	100 J/cm ²
1064 nm, 7 ns, 10 Hz	1.1 J/cm ²	1.1 J/cm ²	1.1 J/cm ²
532 nm, 7 ns, 10 Hz	1.1 J/cm ²	1.1 J/cm ²	1.1 J/cm ²
248 nm, 26 ns, 10 Hz	0.7 J/cm ²	0.7 J/cm ²	0.7 J/cm ²
PHYSICAL CHARACTERISTICS			
Effective aperture	50 mm ϕ	50 mm ϕ	50 mm ϕ
Absorber (high damage threshold)	W9	W9	W9
Dimensions	89H x 89W x 38D mm	89H x 89W x 109D mm	92H x 92W x 116D mm
Weight (head only)	0.62 kg	0.93 kg	1.38 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-443	STAND-S-443	STAND-S-443
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