

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



	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 Ø	50 mm Ø	50 mm Ø
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	± 2.5%	± 2.5%	± 2.5%
Repeatability	±0.5%	±0.5%	±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	± 5%	± 5%	± 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 Ø	50 mm Ø	50 mm Ø
Absorber (high damage threshold)	W9	W9	W9
Dimensions	89H x 89W x 32D mm	89H x 89W x 106D mm	89H x 89W x 116D mm
Weight (head only)	0.62 g	0.93 g	1.38 g
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.