

# UP50-W


50 mm Ø, 5 mW - 85 W, 100 kW/cm<sup>2</sup>



## KEY FEATURES

- > **MODULAR CONCEPT**  
Increase the power capability of your detector:  
3 different cooling modules
- > **VERY HIGH DAMAGE THRESHOLD**  
100 kW/cm<sup>2</sup> 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



\*Also traceable to NRC-CNRC



	UPSON-40S-W9-DO	UPSON-SOH-W9-DO	UPSON-SOF-W9-DO
<b>MAX AVERAGE POWER (CONTINUOUS/1 MINUTE)</b>	40 W / 80 W	S0W / SSW	50 W / 85 W
<b>EFFECTIVE APERTURE</b>	50mm(II)	50mm(II)	50mm(II)
<b>COOLING METHOD</b>	Convection	Heatsink	Fan-cooled
<b>MEASUREMENT CAPABILITY</b>			
Spectral range	0.19 - 10.0 $\mu\text{m}$	0.19 - 10.0 $\mu\text{m}$	0.19 - 10.0 $\mu\text{m}$
Calibrated spectral range <sup>a</sup>	0.248 - 21 $\mu\text{m}$	0.248-2.1 $\mu\text{m}$	0.248 - 21 $\mu\text{m}$
Noise equivalent power <sup>b</sup>	SmW	SmW	SmW
Rise time (nominal) <sup>c</sup>	3.5s	3.5s	3.5 s
Calibration uncertainty <sup>d</sup>	$\pm 2.5\%$	$\pm 2.5\%$	$\pm 2.5\%$
Repeatability	$\pm 0.5\%$	$\pm 0.5\%$	$\pm 0.5\%$
Energy mode			
Maximum measurable energy <sup>e</sup>	SO0J	SO0J	SO0J
Noise equivalent energy <sup>f</sup>	0.25J	0.25J	0.25J
Minimum repetition period	111 s	111 s	111 s
Maximum pulse width	467ms	467ms	467ms
Accuracy with energy calibration option	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$
<b>DAMAGE THRESHOLDS</b>			
Maximum average power density <sup>1</sup>	100kW/cm <sup>1</sup>	100kW/cm <sup>1</sup>	100kW/cm <sup>1</sup>
Maximum energy density			
1064 nm, 150 $\mu\text{s}$ , 5 Hz	100J/cm <sup>1</sup>	100J/cm <sup>1</sup>	100J/cm <sup>1</sup>
1064 nm, 7 ns, 10 Hz	1.1J/cm <sup>1</sup>	1.1J/cm <sup>1</sup>	1.1J/cm <sup>1</sup>
532 nm, 7 ns, 10 Hz	1.1J/cm <sup>1</sup>	1.1J/cm <sup>1</sup>	1.1J/cm <sup>1</sup>
248 nm, 26 ns, 10 Hz	0.7 J/cm <sup>1</sup>	0.7 J/cm <sup>1</sup>	0.7 J/cm <sup>1</sup>
<b>PHYSICAL CHARACTERISTICS</b>			
Effective aperture	SOmm(II)	50mm(II)	50mm(II)
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)	0.62g	0.93g	1.38g
<b>ORDERING INFORMATION</b>			
Available output options	D815, USB, RS-232 or Bluetooth	D815, USB, RS-232 or Bluetooth	D815, USB, RS-232 or Bluetooth
Compatible stand	STAND-5-443	STAND-5-443	STAND-5-443
Product page			

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