

UP55-H

55 mm Ø, 5 mW - 500 W



KEY FEATURES

- > **MODULAR CONCEPT**
Increase the power capability of your detector:
4 different cooling modules
- > **HIGH PERFORMANCE**
Fast rise time (2 s)
High damage threshold (45 kW/cm²)
- > **COMPACT DESIGN**
Only 32 mm thick (40S model)
- > **ENERGY MODE**
Measure single shot energy up to 200 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

UP55-H

Specifications



*Also traceable to NRC-CNRC



	UP55N-40S-H9-D0	UP55N-100H-H9-D0	UP55N-300F-H12-D0	UP55M-500W-H12-D0
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	40 W / 80 W	100 W / 200 W	300 W / 300 W	500 W ^f / 500 W ^f
EFFECTIVE APERTURE	55 mm Ø	55 mm Ø	55 mm Ø	55 mm Ø
COOLING METHOD	Convection	Heatsink	Fan-cooled	Water-cooled

MEASUREMENT CAPABILITY

Spectral range	0.19 - 20 µm	0.19 - 20 µm	0.19 - 20 µm	0.19 - 20 µm
Calibrated spectral range^a	0.248 - 2.1 µm	0.248 - 2.1 µm	0.248 - 2.1 µm	0.248 - 2.1 µm
Noise equivalent power^b	5 mW	5 mW	15 mW	15 mW
Rise time (nominal)^c	2 s	2 s	2 s	2 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	200 J	200 J	200 J	200 J
Noise equivalent energy ^b	0.25 J	0.25 J	0.25 J	0.25 J
Minimum repetition period	11.1 s	11.1 s	12 s	12 s
Maximum pulse width	433 ms	433 ms	430 ms	430 ms
Accuracy with energy calibration option	± 5%	± 5%	± 5%	± 5%

DAMAGE THRESHOLDS

Maximum average power density				
1064 nm, 10 W, CW	45 kW/cm ²	45 kW/cm ²	45 kW/cm ²	45 kW/cm ²
10.6 µm, 10 W, CW	14 kW/cm ²	14 kW/cm ²	14 kW/cm ²	14 kW/cm ²
Maximum energy density				
1064 nm, 360 µs, 5 Hz	9 J/cm ²	9 J/cm ²	9 J/cm ²	9 J/cm ²
1064 nm, 7 ns, 10 Hz	1 J/cm ²	1 J/cm ²	1 J/cm ²	1 J/cm ²
532 nm, 7 ns, 10 Hz	0.6 J/cm ²	0.6 J/cm ²	0.6 J/cm ²	0.6 J/cm ²
266 nm, 7 ns, 10 Hz	0.3 J/cm ²	0.3 J/cm ²	0.3 J/cm ²	0.3 J/cm ²

PHYSICAL CHARACTERISTICS

Effective aperture	55 mm Ø	55 mm Ø	55 mm Ø	55 mm Ø
Absorber (high damage threshold)	H9	H9	H12	H12
Dimensions	89H x 89W x 32D mm	89H x 89W x 106D mm	92H x 92W x 117D mm	89H x 89W x 40D mm
Weight (head only)	0.62 kg	0.93 kg	1.41 kg	0.81 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 1.5 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.