

UP12-H

12 mm Ø, 1 mW - 110 W



KEY FEATURES

- > **MODULAR CONCEPT**
Increase the power capability of your detector: 3 different cooling modules
- > **HIGH PERFORMANCE**
Fast rise time (0.3 s)
High damage threshold (36 kW/cm²)
- > **COMPACT DESIGN**
Only 14 mm thick (10S model)
- > **ENERGY MODE**
Measure single shot energy up to 5 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)

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)



Pelican carrying Case

UP12-H

Specifications



*Also traceable to NRC-CNRC



	UP12E-10S-HS-DO	UP12E-20H-HS-DO	UP12E-70W-HS-DO
MAX AVERAGE POWER (CONTINUOUS/1 MINUTE)	10W/20W	20W/40W	70W/110W ^f
EFFECTIVE APERTURE	12mm(l)	12mm(l)	12mm(l)
COOLING METHOD	Convection	Heatsink	Water-cooled

MEASUREMENT CAPABILITY

Spectral range	0.19-20 μm	0.19-20 μm	0.19-20 μm
Calibrated spectral range ^a	0.248 - 21 μm	0.248 - 21 μm	0.248 - 21 μm
Noise equivalent power ^b	1 mW	1 mW	1 mW
Rise time (nominal) ^c	0.35	0.35	0.35
Calibration uncertainty ^d	±2.5%	±2.5%	±2.5%
Repeatability	±0.5%	±0.5%	±0.5%
Energy mode			
Maximum measurable energy ^e	SJ	SJ	SJ
Noise equivalent energy ^f	0.02J	0.02J	0.02J
Minimum repetition period	15.5	1.55	15.5
Maximum pulse width	50m5	50m5	50m5
Accuracy with energy calibration option	±5%	±5%	±5%

DAMAGE THRESHOLDS

Maximum average power density ^g	36kW/cm ²	36 kW/cm ²	36kW/cm ²
Maximum energy density			
1064 nm, 360 μs, 5 Hz	SJ/cm ²	SJ/cm ²	SJ/cm ²
1064 nm, 7 ns, 10 Hz	1J/cm ²	1J/cm ²	1J/cm ²
532 nm, 7 ns, 10 Hz	0.6J/cm ²	0.6J/cm ²	0.6J/cm ²
266 nm, 7 ns, 10 Hz	0.3J/cm ²	0.3J/cm ²	0.3J/cm ²

PHYSICAL CHARACTERISTICS

Effective aperture	12mm(l)	12mm(l)	12mm(l)
Absorber (high damage threshold)	HS	HS	HS
Dimensions	38H x 38W x 14D mm	38H x 38W x 4SD mm	38H x 38Wx32D mm
Weight (head only)	0.13kg	0.15kg	0.19kg

ORDERING INFORMATION

Available output options	D815, USB or RS-232	D815, USB or RS-232	D815, USB or RS-232
Compatible stand	STAND-S-233	STAND-S-233	STAND-S-233
Product page			

- a. Calibrations at 21 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 0.5 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.
- g. At 1064 nm, 10 W CW.