

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



	UP12E-10S-H5-D0	UP12E-20H-H5-D0	UP12E-70W-H5-D0
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	10 W / 20 W	20 W / 40 W	70 W ^f / 110 W ^f
EFFECTIVE APERTURE	12 mm Ø	12 mm Ø	12 mm Ø
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 - 2.1 µm	0.248 - 2.1 µm	0.248 - 2.1 µm
Noise equivalent power^b	1 mW	1 mW	1 mW
Rise time (nominal)^c	0.3 s	0.3 s	0.3 s
Calibration uncertainty^d	± 2.5%	± 2.5%	± 2.5%
Repeatability	±0.5%	±0.5%	±0.5%
Energy mode			
Maximum measurable energy^e	5 J	5 J	5 J
Noise equivalent energy^b	0.02 J	0.02 J	0.02 J
Minimum repetition period	1.5 s	1.5 s	1.5 s
Maximum pulse width	50 ms	50 ms	50 ms
Accuracy with energy calibration option	± 5%	± 5%	± 5%
DAMAGE THRESHOLDS			
Maximum average power density^g	36 kW/cm ²	36 kW/cm ²	36 kW/cm ²
Maximum energy density			
1064 nm, 360 µs, 5 Hz	5 J/cm ²	5 J/cm ²	5 J/cm ²
1064 nm, 7 ns, 10 Hz	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
266 nm, 7 ns, 10 Hz	0.3 J/cm ²	0.3 J/cm ²	0.3 J/cm ²
PHYSICAL CHARACTERISTICS			
Effective aperture	12 mm Ø	12 mm Ø	12 mm Ø
Absorber (high damage threshold)	H5	H5	H5
Dimensions	38H x 38W x 14D mm	38H x 38W x 45D mm	38H x 38W x 32D mm
Weight (head only)	0.13 kg	0.15 kg	0.19 kg
ORDERING INFORMATION			
Available output options	DB15, USB or RS-232	DB15, USB or RS-232	DB15, USB or RS-232
Compatible stand	STAND-S-233	STAND-S-233	STAND-S-233
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 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.