

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 ALTIITUDE



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)



Replacement cover
for fiber adaptors






Pelican carrying Case

UP12-H

Specifications

CE NIST*
Traceable
*Also traceable to NRC-CNRC



| | 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 / 110 W ^f |
| EFFECTIVE APERTURE | 12 mm ϕ | 12 mm ϕ | 12 mm ϕ |
| COOLING METHOD | Convection | Heatsink | Water-cooled |
| MEASUREMENT CAPABILITY | | | |
| Spectral range | 0.19 - 20 μ m | 0.19 - 20 μ m | 0.19 - 20 μ m |
| Calibrated spectral range^a | 0.248 - 2.1 μ m | 0.248 - 2.1 μ m | 0.248 - 2.1 μ m |
| 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 | \pm 2.5% | \pm 2.5% | \pm 2.5% |
| Repeatability | \pm 0.5% | \pm 0.5% | \pm 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 | \pm 5% | \pm 5% | \pm 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 μ s, 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 ϕ | 12 mm ϕ | 12 mm ϕ |
| 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 21 to 2.5 μ m and 10.6 μ m 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 μ s pulses. Higher pulse energy possible for long pulses (ms), less for short pulses (ns).
 f. Minimum cooling flow 0.5 liters/min, water temperature \leq 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.

Specifications are subject to change without notice