



UP25-H

25 mm Ø, 3 mW - 350 W



KEY FEATURES

1. **MODULAR CONCEPT**
Increase the power capability of your detector:
4 different cooling modules
2. **HIGH PERFORMANCE**
Fast Rise Time (1.3 sec)
High Damage Threshold (45 kW/cm²)
3. **ENERGY MODE**
Measure single shot energy up to 40 J
4. **SMART INTERFACE**
Containing all the calibration data
5. **integra OPTIONS**
 - Standard: USB Output (-INT)
 - In Option: RS-232 Output (-IDR)

AVAILABLE MODELS



UP25N-40S-H9
(40W-Standalone)



UP25N-100H-H9
(100W-Heatsink)



UP25N-250F-H12
(250W-Fan-Cooled)



UP25M-350W-H12
(350W-Water-Cooled)

ACCESSORIES



Stand with Steel Post
(Model Number: 200234)



Extension Cables
(4, 15, 20 or 25 m)



Fiber Adaptors and Connectors
(FC, SC or SMA)



12V Power Supply
(Model Number: 200130)



Pelican Carrying Case

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UP25-H



*Also traceable to NRC-CNRC

SPECIFICATIONS

	UP25N-40S-H9	UP25N-100H-H9	UP25N-250F-H12	UP25M-350W-H12
MAX AVERAGE POWER (CONTINUOUS / 1 MINUTE)	40 W / 80 W	100 W / 200 W	250 W / 300 W	350 W ^f / 350 W ^f
EFFECTIVE APERTURE	25 mm Ø	25 mm Ø	25 mm Ø	25 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
Noise Equivalent Power ^a	3 mW	3 mW	10 mW	10 mW
Rise Time (nominal) ^b	1.3 sec	1.3 sec	1.3 sec	1.3 sec
Sensitivity (typ into 100 kΩ load) ^c	0.23 mV/W	0.23 mV/W	0.1 mV/W	0.1 mV/W
Calibration Uncertainty ^d	±2.5 %	±2.5 %	±2.5 %	±2.5 %
Repeatability	±0.5 %	±0.5 %	±0.5 %	±0.5 %
Energy Mode				
Sensitivity	0.14 mV/J	0.14 mV/J	0.05 mV/J	0.05 mV/J
Maximum Measurable Energy ^e	40 J	40 J	40 J	40 J
Noise Equivalent Energy ^a	0.2 J	0.2 J	0.2 J	0.2 J
Minimum Repetition Period	4.6 sec	4.6 sec	11.5 sec	11.5 sec
Maximum Pulse Width	123 ms	123 ms	390 ms	390 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
Pulsed Laser Damage Thresholds				
	Max Energy Density		Peak Power Density	
1064 nm, 360 µs, 5 Hz	9 J/cm ²		25 kW/cm ²	
1064 nm, 7 ns, 10 Hz	1 J/cm ²		143 MW/cm ²	
532 nm, 7 ns, 10 Hz	0.6 J/cm ²		86 MW/cm ²	
266 nm, 7 ns, 10 Hz	0.3 J/cm ²		43 MW/cm ²	
PHYSICAL CHARACTERISTICS				
Effective Aperture	25 mm Ø	25 mm Ø	25 mm Ø	25 mm Ø
Absorber (High Damage Threshold)	H9	H9	H12	H12
Dimensions	89H x 89W x 32D mm	89H x 89W x 106D mm	89H x 89W x 116D mm	89H x 89W x 40D mm
Weight (head only)	0.68 kg	0.99 kg	1.44 kg	0.87 kg
ORDERING INFORMATION				
Product Name	UP25N-40S-H9	UP25N-100H-H9	UP25N-250F-H12	UP25M-350W-H12
Product Number (Including stand)	200198	200202	201154	201894
Add Extension for INTEGRA (USB)	-INT	-INT	-INT	-INT
Add Extension for INTEGRA (RS-232)	-IDR	-IDR	-IDR	-IDR

Specifications are subject to change without notice

* For the calibrated spectral range, see the user manual.

- a. Nominal value, actual value depends on electrical noise in the measurement system.
 b. With anticipation
 c. Maximum output voltage = sensitivity x maximum power.
 d. Including linearity with power.
 e. For 360 µs pulses. Higher pulse energy possible when customized 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.