

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. **COMPACT DESIGN (T VERSION)**
Only 62.4 x 62.4 mm front and 38.1 mm thick for up to 250 W continuous power
4. **ENERGY MODE**
Measure single shot energy up to 40 J
5. **SMART INTERFACE**
Containing all the calibration data

AVAILABLE MODELS



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



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



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



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



UP25T-15S-H12
(15W-Standalone)



UP25T-250W-H12
(250W-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

SPECIFICATIONS



*Also traceable to NRC-CNRC

	UP25N-40S-H9	UP25N-100H-H9	UP25N-250F-H12	UP25M-350W-H12	UP25T-15S-H12	UP25T-250W-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	15 W / 15 W	250 W ^f / 250 W ^f
EFFECTIVE APERTURE	25 mm Ø	25 mm Ø	25 mm Ø	25 mm Ø	25 mm Ø	25 mm Ø
COOLING METHOD	Convection	Heatsink	Fan-Cooled	Water-Cooled	Convection	Water-Cooled
MEASUREMENT CAPABILITY						
Spectral Range [*]	0.19 – 20 µm	0.19 – 20 µm	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	10 mW	10 mW
Rise Time (nominal) ^b	1.3 sec	1.3 sec	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	0.1 mV/W	0.1 mV/W
Calibration Uncertainty ^d	±2.5 %	±2.5 %	±2.5 %	±2.5 %	±2.5 %	±2.5 %
Repeatability	±0.5 %	±0.5 %	±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	0.05 mV/J	0.05 mV/J
Maximum Measurable Energy ^e	40 J	40 J	40 J	40 J	40 J	40 J
Noise Equivalent Energy ^a	0.2 J	0.2 J	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	11.5 sec	11.5 sec
Maximum Pulse Width	123 ms	123 ms	390 ms	390 ms	390 ms	390 ms
Accuracy with energy calibration option	±5 %	±5 %	±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	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	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	25 mm Ø	25 mm Ø
Absorber (High Damage Threshold)	H9	H9	H12	H12	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	62.4H x 62.4W x 38.1D mm	62.4H x 62.4W x 38.1D mm
Weight (head only)	0.68 kg	0.99 kg	1.44 kg	0.87 kg	0.31 kg	0.33 kg
ORDERING INFORMATION						
Product Name	UP25N-40S-H9	UP25N-100H-H9	UP25N-250F-H12	UP25M-350W-H12	UP25T-15S-H12	UP25T-250W-H12
Product Number (Including stand)	200198	200202	201154	201894		

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

a. Nominal value, actual value depends on electrical noise in the measurement system.

b. With Gentec-EO MAESTRO, UNO, P-LINK, TUNER and S-LINK monitors.

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.

Specifications are subject to change without notice