UP25N(M)(T)

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)

PICTURE NOT AVAILABLE
UP25T-15S-H12
(15W-Standalone)

PICTURE NOT AVAILABLE
UP25T-250W-H12
(250W-Water-Cooled)

ACCESSORIES

Stand with Steel Post


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


Fiber Adaptors and Connectors
(FC, SC or SMA)


12V Power Supply
(for Fan-Cooled version)


Pelican Carrying Case

SEE ALSO

UP25N(M)(T)

SPECIFICATIONS

CE NIST* Traceable WEEE/RoHS COMPLIANT

*Also traceable to NRC-CNRC

MODELS	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 [g] / 250 W [g]
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	0.5 mV/J	0.5 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	1300 ms	1300 ms
Accuracy with energy calibration option	±5 %	±5 %	±5 %	±5 %	±5 %	±5 %
DAMAGE THRESHOLDS						
Maximum Average Power Density [h]	45 kW/cm²	45 kW/cm²	45 kW/cm²	45 kW/cm²	45 kW/cm²	45 kW/cm²
Pulsed Laser Damage Thresholds		Max Energy Density			Peak Power Density	
1064 nm, 360 µs, 5 Hz		9 J/cm²			25 kW/cm²	
1064 nm, 7 ns, 10 Hz		1 J/cm²			143 MW/cm²	
532 nm, 7 ns, 10 Hz		0.6 J/cm²			86 MW/cm²	
266 nm, 7 ns, 10 Hz		0.3 J/cm²			43 MW/cm²	
PHYSICAL CHARACTERISTICS						
Effective Aperture Diameter	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						
Full 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	201961	201875

a. Nominal value, actual value depends on electrical noise in the measurement system.
b. With Gentec-EO MAESTRO, UNO, P-LINK and S-LINK-2 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 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.
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.
g. At 1064 nm, 10 W CW.

Specifications are subject to change without notice

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