

SUPER HP

Custom Sizes and Shapes, up to 100 kW upon request



AVAILABLE MODELS (CUSTOM BUILT)



HP280/100A-10KW-HD
(10 kW-Water-Cooled)



HP210A-25KW-HD
(25 kW-Water-Cooled)

ACCESSORIES



Stand with Steel Post
For 25 kW Model



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



5 m USB Cable
(Included)



Pelican Carrying Case

KEY FEATURES

- 1. THE HIGHEST POWER HANDLING**
Custom models handle up to 100 000 W of continuous power. Higher powers are available upon request
- 2. STABLE READING**
Less sensitive to variations in water cooling temperature than any other high power water-cooled meter on the market
- 3. INFINITE CUSTOMIZATION CAPABILITIES**
 1. Choose YOUR size
 2. Choose YOUR maximum power
 3. We will customize one just for you!
- 4. COMPACT AND LIGHT WEIGHT**
Lighter and more compact than any other high power detector on the market, thanks to our unique design
- 5. AVAILABLE WITH YAG AND CO₂ CALIBRATIONS**
All HP Models can be calibrated at YAG and CO₂ wavelengths with a calibration uncertainty of ±5%
- 6. DIRECT USB CONNECTION TO A PC**
Each head comes with both a DB-15 connector (for use with a Gentec-E0 monitor) and a USB2.0 output for direct connection to a PC. Other connectors available upon request

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MONITORS

ENERGY DETECTORS

POWER DETECTORS

HIGH POWER SOLUTIONS

PHOTO DETECTORS

THZ DETECTORS

OEM DETECTORS

SPECIAL PRODUCTS

BEAM DIAGNOSTICS

SUPER HP



*Also traceable to NRC-CNRC

SPECIFICATIONS

	HP280/100A-10KW-HD	HP210A-25KW-HD	CUSTOMIZATION CAPABILITIES
MAX AVERAGE POWER (CONTINUOUS / 5 MINUTES)	10 000 W / 10 000 W	25 000 W / 25 000 W	Up to 100 000 W
EFFECTIVE APERTURE	280 x 100 mm	210 x 210 mm	Up to 400 x 400 mm
COOLING METHOD	Water-Cooled	Water-Cooled	Water-Cooled
MEASUREMENT CAPABILITY			
Spectral Range	0.19 – 20 μm	0.19 – 20 μm	0.19 – 20 μm
Noise Equivalent Power ^a	± 10 W	± 20 W	$\leq \pm 30$ W
Minimum Average Power ^b	300 W	500 W	≤ 600 W
Rise Time (nominal)	20 sec	25 sec	≤ 45 sec
Sensitivity (typ into 100 k Ω load)	0.2 mV/W	0.08 mV/W	≥ 0.08 mV/W
Calibration Uncertainty			
@ 1064 nm		± 5 %	± 5 %
@ 0.25- 2.5 μm		± 6 %	± 6 %
Repeatability		± 2 %	± 2 %
Linearity with Power		± 2 %	± 2 %
Linearity vs Beam Diameter ^c		± 2 %	± 2 %
DAMAGE THRESHOLDS			
Maximum Average Power Density ^d			
10 kW	3.5 kW/cm ²	3.5 kW/cm ²	3.5 kW/cm ²
25 kW	---	0.25 kW/cm ²	0.25 kW/cm ²
PHYSICAL CHARACTERISTICS			
Effective Aperture	280 x 100 mm	210 x 210 mm	210 x 210 mm 280 x 280 mm 350 x 350 mm 400 x 400 mm (Rectangular apertures also available upon request)
Absorber (High Damage Threshold)		HD	HE, HD
Required Cooling Flow	(6 - 10) LPM $< \pm 1$ LPM/min ^f	(12 - 15) LPM $< \pm 1$ LPM/min ^f	Adapted to Maximum Power
Temperature of Cooling Water	(15 - 25) °C $< \pm 1$ °C/min ^f	(15 - 25) °C $< \pm 1$ °C/min ^f	(15 - 25) °C $< \pm 1$ °C/min ^f
Output Connectors		DB-15 cable & USB port	DB-15 cable & USB port
PCB Electrical Supply		Through USB or Gentec-E0 monitors	Through USB or Gentec-E0 monitors
Maximum Output Signal		2 V	Analog Output 2V or 12V
Dimensions	152H x 305W x 75D mm	229H x 229W x 80D mm	
Weight (head only)	11 kg	16 kg	
ORDERING INFORMATION			
Product Name	HP280/100A-10KW-HD	HP210A-25KW-HD	Please call for more information on our customization capabilities

Specifications are subject to change without notice

- a. Nominal value, actual value depends on electrical noise in the measurement system.
 b. For lower powers, call your Gentec-E0 representative.
 c. For a centered beam with size from 20% to 80% of the total aperture.

- d. At 1064 nm, 1.07-1.08 μm and 10.6 μm .
 e. Average period > 1 min.
 f. > 1 min