



HP500A-120KW-HD-D0

High power detector for laser power measurement up to 120 000 W.



PRODUCT FAMILY KEY FEATURES

CUSTOM-BUILT

Contact us with your requirements for a version tailored to your needs

THE HIGHEST POWER HANDLING

Custom models handle up to 120 000 W of continuous power. Higher powers are available upon request.

STABLE READING

Less sensitive to variations in water cooling temperature than any other high-power water-cooled meter on the market.

INFINITE CUSTOMIZATION CAPABILITIES

- Choose your size
- Choose your maximum power
- We will customize one just for you!

COMPACT AND LIGHT WEIGHT

Lighter and more compact than any other high-power detector on the market, thanks to our unique design.

AVAILABLE WITH YAG AND CO₂ CALIBRATION

All HP models can be calibrated at YAG and CO₂ wavelengths with a calibration uncertainty of +/- 5%.

DIRECT USB CONNECTION TO A PC

Each head comes with both a DB-15 connector (for use with a Gentec-EO monitor) and a USB2.0 output for direct connection to a PC. Other connectors are available upon request.

SPECIFICATIONS

MEASUREMENT CAPABILITIES

Maximum average power (continuous)	150000 W
Minimum average power ¹	6000 W
Noise equivalent power ²	300 W
Spectral range	0.193 - 20 μm
Typical rise time	60 s
Power calibration uncertainty	±5 %
Back reflections	~ 15 %

1. For lower powers, call your Gentec-EO representative.
2. Depending on cooling water flow and temperature stability

WATER REQUIREMENTS

Required cooling flow ¹	(36 - 48) LPM < ±1 LPM/min
Temperature range	15 - 25 °C
Rate of temperature change	< ±1°C/min
Maximum water pressure	621 kPa (90 psi)

1. Contact Gentec-EO for clean deionized water cooling module option.

DAMAGE THRESHOLDS

Maximum average power density ¹	3.5 kW/cm ²
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1. At 1064 nm, 1.07-1.08 μm and 10.6 μm, 10 kW CW. Refer to user manual for damage threshold at other powers. May vary with wavelength and average power.



CONTROLLER AND GUI SPECIFICATIONS

Data display	Real time, scope, needle, averaging, histogram and statistics
Analog output ¹	0-2 Volts
Serial commands via	USB
External power supply ²	Through USB or Gentec-EO displays & PC interfaces
Display type	None

1. 12 V maximum output signal available upon request.
2. A USB power adaptor will be necessary if the HP is used with a DB-15 extension cable.

PHYSICAL CHARACTERISTICS

Cooling	Water
Aperture width	500 mm
Aperture height	500 mm
Absorber	HD
Dimensions	525H x 525W x 90D mm

ORDERING INFORMATION

HP500A-120KW-HD-D0	Custom
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Specifications are subject to change without notice. Refer to the user manual for complete specifications.

INTERESTED IN THIS PRODUCT?

[GET A QUOTE](#)

Find your local sales representative at gentec-eo.com/contact-us