

## HP400A-100KW-HD-TUBE-D0

High power detector for laser power measurement up to 100 000 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 CO<sub>2</sub> CALIBRATION

All HP models can be calibrated at YAG and CO<sub>2</sub> 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)	100000 W
Minimum average power <sup>1</sup>	4000 W
Noise equivalent power <sup>2</sup>	200 W
Spectral range	0.193 - 20 μm
Typical rise time	45 s
Power calibration uncertainty	±5 %
Back reflections	< 4 %

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

### WATER REQUIREMENTS

Required cooling flow <sup>1</sup>	(30 - 40) 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 <sup>1</sup>	3.5 kW/cm <sup>2</sup>
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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 <sup>1</sup>	0-2 Volts
Serial commands via	USB
External power supply <sup>2</sup>	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 diameter	250 mm
Absorber	HD
Dimensions	451H x 464W x 557D mm

## ORDERING INFORMATION

HP400A-100KW-HD-TUBE-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](http://gentec-eo.com/contact-us)