



HP60A-15KW-GD-QBH-IMP-D0

High power detector for laser power measurement up to 15 000 W. Includes QB/QBH fiber adaptor.



PRODUCT FAMILY KEY FEATURES

HIGH POWER HANDLING

Handles up to 30 kW of continuous power with our standard models. Custom models are available for higher powers ([See SUPER HP](#)).

STABLE READING

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

LARGE APERTURE

Our standard HP models (4KW, 12KW, 15KW and 30KW) have a very large effective aperture of up to 280 mm to accommodate even the largest laser beams. Larger apertures with various shapes are available upon request ([See SUPER HP](#)).

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.



SPECIFICATIONS

MEASUREMENT CAPABILITIES

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|---|-------------|
| Maximum average power (continuous) | 15000 W |
| Minimum average power ¹ | 500 W |
| Noise equivalent power ² | 15 W |
| Spectral range | 0.8 - 12 μm |
| Typical rise time | 15 s |
| Power calibration uncertainty | ±5 % |
| Repeatability | ±2 % |
| Back reflections | 1 - 2 % |
| Linearity with power | ±2 % |
| Linearity vs beam diameter | ±1.5 % |
| Linearity vs beam position ³ | ±0.5 % |

1. For lower powers, call your Gentec-EO representative.
2. Nominal value. Actual value depends on electrical noise in the measurement system.
3. With the fiber adaptor

WATER REQUIREMENTS

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|------------------------------------|---------------------------|
| Required cooling flow ¹ | (8 - 10) LPM < ±1 LPM/min |
| Temperature range | 15 – 25 °C |
| Rate of temperature change | < ±3°C/min |
| Maximum water pressure | 413 kPa (60 psi) |

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

DAMAGE THRESHOLDS

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|--|-----------|
| Maximum average power density ¹ | 80 kW/cm² |
|--|-----------|

1. At 1064 nm, 1.07-1.08 μm and 10.6 μm, 500 W CW. Refer to user manual for damage threshold at other powers. May vary with wavelength and average power.

CONTROLLER AND GUI SPECIFICATIONS



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|------------------------------------|---|
| 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

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|-------------------|-----------------------|
| Cooling | Water |
| Aperture diameter | 70 mm |
| Absorber | GD |
| Dimensions | 153H x 153W x 386D mm |
| Weight | 16 kg |

ORDERING INFORMATION

| | |
|--------------------------|---------|
| HP60A-15KW-GD-QBH-IMP-D0 | 205558I |
|--------------------------|---------|

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