



# **gentec-**

# HP60A-10KW-GD-IMP-D0

High power detector for laser power measurement up to 10 000 W.



#### PRODUCT FAMILY KEY FEATURES

#### SPECIAL MODEL FOR SMALL BEAMS

Perfect for small beams (with Avg Power Densities up to 10 kW/cm<sup>2</sup> @ 10 kW).

#### 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  $\rm CO_2$  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.

413 kPa (60 psi)

### COMPATIBLE STAND

STAND-S-443-C

### **SPECIFICATIONS**

MEASOREMENT CAPABILITIES	
Maximum average power (continuous)	10000 W
Minimum average power <sup>1</sup>	300 W
Noise equivalent power <sup>2</sup>	10 W
Spectral range	0.8 - 12 μm
Typical rise time	12 s
Power calibration uncertainty	±5 %
Repeatability	±2 %
Back reflections	~ 10 %
Linearity with power	±2 %
Linearity vs beam diameter	±2.0 %
Linearity vs beam position <sup>3</sup>	±3 %
<ol> <li>For lower powers, call your Gentec-EO representative.</li> <li>Nominal value. Actual value depends on electrical noise in the measurement system.</li> <li>For a beam size of 20% of the aperture area, moved across 80% of the aperture area.</li> </ol>	
WATER REQUIREMENTS	
Required cooling flow <sup>1</sup>	(6 - 8) LPM < ±1 LPM/min
Temperature range	15 – 25 °C
Rate of temperature change	< ±3°C/min

Maximum water pressure

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

### DAMAGE THRESHOLDS





# **Instrument Expert** Original factory packaging www.dorgean.com

80 kW/cm<sup>2</sup>

5 kg

2013051

### ${\sf Maximum\ average\ power\ density}^l$

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	
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
<ol> <li>12 V maximum output signal available upon request.</li> <li>2. A USB power adaptor will be necessary if the HP is used with a DB-15 extension cable.</li> </ol>	
PHYSICAL CHARACTERISTICS	
Cooling	Water
Aperture diameter	60 mm
Absorber	GD
Dimensions	127H x 127W x 95D mm

Dimensions

Weight

#### ORDERING INFORMATION

HP60A-10KW-GD-IMP-D0

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