

HP

60 and 100 mm Ø, 3 W – 12 000 W



KEY FEATURES

- 1 High Power Handling**
Handles up to 12 kW of continuous power
- 2 Thermally Stable**
Less sensitive to variations in water cooling temperature
- 3 Conical Shape**
To prevent unwanted specular back reflections (12KW version only)
- 4 Custom Model for Small Beams**
10 kW model with reflective cone available upon request. Perfect for small beams (with Avg Power Densities up to 10 kW/cm²)
- 5 2 Output Connectors on each head**
 - DB-15 cable: Use this with a Gentec-EO power monitor
 - USB port: If you prefer to link the head directly to your computer (software supplied)

AVAILABLE MODELS



HP60A-3KW-HE
(3000W-Water-Cooled)



HP100A-12KW-HD
(12000W-Water-Cooled)

CUSTOM MODEL



HP60A-10KW-GD
(10000W-Water-Cooled)

- 60 mm Ø Usable Aperture
- Reflective Cone to spread the beam in the aperture
- 0.8 - 12 μm
- High Avg Power Density: 10 kW/cm² @ Maximum Power

ACCESSORIES



Stand with Steel Post



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



USB Cable



Pelican Carrying Case

SEE ALSO

HOW IT WORKS	12
CALIBRATION	6
TECHNICAL DRAWINGS	98
COMPATIBLE MONITORS	
MAESTRO	18
TUNER	22
UNO	24
S-LINK-2	26

HP

SPECIFICATIONS



*Also traceable to NRC-CNRC

MODELS	HP60A-3KW-HE	HP100A-12KW-HD
MAX AVERAGE POWER (CONTINUOUS / 5 MINUTE)	3 000 W / 4 000 W	12 000 W / 12 000 W
EFFECTIVE APERTURE	60 mm Ø	100 mm Ø
COOLING METHOD	Water-Cooled	Water-Cooled

MEASUREMENT CAPABILITY

Spectral Range	0.19 – 20 µm	0.19 – 20 µm
Noise Equivalent Power ^a	3 W	10 W
Rise Time (nominal)	7 sec	9 sec
Sensitivity (typ into 100 kΩ load)	0.5 mV/W	0.15 mV/W
Calibration Uncertainty	±5 % @ 1064 nm	±5 % @ 1064 nm
Repeatability	±2 %	±2 %
Linearity with Power	±2 %	±2 %
Spatial Uniformity	±1 %	±1 %

DAMAGE THRESHOLDS

Maximum Average Power Density ^b	10 kW/cm ²	16 kW/cm ²
--	-----------------------	-----------------------

PHYSICAL CHARACTERISTICS

Effective Aperture Diameter	60 mm Ø	100 mm Ø, conical
Absorber (High Damage Threshold)	HE	HD
Required Cooling Flow	(4 - 6) LPM < ±1 LMP/min ^c	(6 - 10) LPM < ±1 LMP/min ^c
Temperature of Cooling Water	(15 - 25) °C < ±3°C/min ^c	(15 - 25) °C < ±3°C/min ^c
Output Connectors	DB-15 cable & USB port	DB-15 cable & USB port
PCB Electrical Supply	Through USB or Gentec-EO monitors	Through USB or Gentec-EO monitors
Maximum Output Signal	2 V	2 V
Dimensions	127H x 127W x 74D mm	127H x 127W x 84D mm
Weight (head only)	1.8 kg	5 kg

ORDERING INFORMATION

Full Product Name	HP60A-3KW-HE	HP100A-12KW-HD
Product Number (Including stand)	201184	201331

a. Nominal value, actual value depends on electrical noise in the measurement system.
 b. At 1064 nm, 500 W CW.
 c. > 1 min.

Specifications are subject to change without notice