SUPER HP

Custom sizes and shapes, up to 150 000 W upon request

KEY FEATURES

THE HIGHEST POWER HANDLING
Custom models handle up to 150 000 W of continuous power

INFINITE CUSTOMIZATION CAPABILITIES
1. Choose YOUR size
2. Choose YOUR maximum power
3. 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_2 CALIBRATIONS
All HP models can be calibrated at YAG and CO_2 wavelengths with a calibration uncertainty of ± 5 %

DIRECT USB CONNECTION TO A PC
Each head comes with both a DB15 connector (for use with a Gentec-EO display device) and a USB2.0 output for direct connection to a PC. Other connectors available upon request

TRACK WATER PARAMETERS
Water flow and temperature are monitored in real time and displayed continuously

HIGH POWER NIST-TRACEABLE CALIBRATION WITH A 5 KW FIBER LASER

OUTPUT OPTIONS

SMART DB15 CONNECTOR
Contains all the calibration data

USB PORT
- Connects directly to a PC
- Included in all HP models

CUSTOM OPTION: RS-232
Contact you Gentec-EO representative to configure your available connectors

COMPATIBLE DISPLAYS & PC INTERFACES

MAESTRO

TUNER

UNO

ACCESSORIES

Stand with steel post
For 30 kW model

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

5 m USB cable
(Included)

Pelican carrying case

SUPER HP
Specifications

*Also traceable to NRC-CNRC

	HP280A-30KW-HD	HP100A-50KW-GD	CUSTOMIZATION CAPABILITIES
MAX AVERAGE POWER	30 000 W	50 000 W	Up to 150 000 W
EFFECTIVE APERTURE	280 x 280 mm	100 mm Ø	Up to 500 x 500 mm
COOLING METHOD	Water-cooled	Water-cooled	Water-cooled
MEASUREMENT CAPABILITY			
Spectral range	0.19 - 20 µm	0.8 - 12 µm	0.19 - 20 µm
Calibrated spectral range [a]	1.064 - 1.070 µm	1.030 - 1.080 µm	1.064 - 1.070 µm
Noise equivalent power [b]	± 30 W	± 200 W	Adapted to maximum power
Minimum average power [c]	1000 W	1000 W	Adapted to maximum power
Rise time (nominal)	25 s	80 s	≤ 45 s
Back reflections	10-15%	< 2.5 %	Depends on the design
Calibration uncertainty [d]	± 5%	± 5 %	± 5%
Repeatability	± 2%	± 2 %	± 2%
Linearity with power	± 2%	± 2 %	± 2%
DAMAGE THRESHOLDS			
Maximum average power density [e]			
10 kW	2.5 kW/cm²	25 kW/cm²	2.5 kW/cm²
30 kW	0.2 kW/cm²	11 kW/cm²	0.45 kW/cm²
PHYSICAL CHARACTERISTICS			
Effective aperture	280 x 280 mm	100 mm Ø	Square apertures up to 500 x 500 mm Rectangular and round apertures also available
Absorber (high damage threshold)	HD	GD	HD
Cooling water			
Required cooling flow	0-30 kW: (15 - 18) LPM < ± 1 LPM/min [f] 0-10 kW: (12-15) LPM < ± 1 LPM/min [f]	(18 - 25) LPM < ± 1 LPM/min	Adapted to maximum power
Temperature range	15 - 25 °C	15 - 25 °C	15 - 25 °C
Rate of temperature change	< ± 3°C/min	< ± 1°C/min	< ± 3°C/min
Dimensions	314H x 324W x 89D mm	305H x 324W x 197D mm	
Weight (head only)	20 kg	60 kg	
ORDERING INFORMATION			
Available output options	DB15 & USB	DB15 & USB	DB15 & USB
Compatible stand	STAND HP280A-30KW-HD	Ask	Ask
Product page			

** These products are custom-built. Contact us with your requirements for a version tailored to your needs.*

a. Calibrations at 0.248 to 2.5 µm and 10.6 µm are available on special request.
b. Nominal value, actual value depends on electrical noise in the measurement system.
c. For lower powers, call your Gentec-EO representative.
d. At 1064 nm and 1070 nm.
e. At 1064 nm, 1.07-1.08 µm and 10.6 µm.
f. > 1min