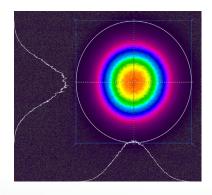
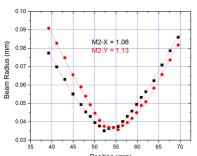


# **GLPN-532-QCW HIGH POWER**

## **Ultra-high Frequency Pulses**

The World's First 1 kW Green Single-mode Laser!





**Output Power up to 1000 W** 





#### **FEATURES**

- ▶ Wavelength 532 nm
- ▶ Output Power up to 1 kW
- ▶ Beam Quality M² <1.2
- ▶ Power Stability ±2%
- ▶ Wall Plug Efficiency up to 25%
- ▶ Linear Polarization >100:1
- ▶ AOM Option
- ▶ Super Compact Head



### **APPLICATIONS**

- ▶ 3D Printing of Copper
- ▶ Welding and Cutting of Copper
- ▶ Semiconductor Wafer Annealing
- ▶ Solar Cell Manufacturing
- ▶ Laser Shows

GLPN-532-QCW lasers provide record average power up to 1 kW in a perfectly single-mode output beam. The small focus is beneficial for high precision 3D printing of copper and the low beam divergence allows printing of larger parts. GLPN-532-QCW lasers take advantage of a high repetition rate operation mode to allow for a high-efficiency super compact optical head. The lasers are offered as both highly cost-effective compact OEM modules and user-friendly 19" rack-mounted consoles. The optical head is connected to a water-cooled, high-efficiency fiber amplifier pioneered by IPG. The result is a rugged, industrial-grade, high-power green fiber laser with unmatched performance and remarkable wall-plug efficiency.

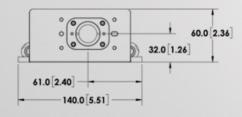
## **GLPN-532-QCW HIGH POWER**

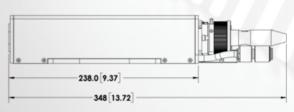
### **Green Single-mode Fiber Laser**

Optical Characteristics	GLPN-100	GLPN-200	GLPN-500	GLPN-1000
Wavelength, nm	532			
Mode of Operation		Pulsed/QCW		
Repetition Rate, MHz	~25	~50	~125	~250
Average Power, W	100	200	500	1000
Power Tunability, %	1-100			
Pulse Duration, ns	~1.2			
Power Stability*, %	±2			
Polarization		Linear, >100:1		
Beam Quality, M <sup>2</sup>	<1.2			

<sup>\*</sup> Over 8 hours, T= const.

#### General Characteristics Optical Head (W $\times$ D $\times$ H), mm 114 × 238 × 60 Air-cooled\* Water-cooled Module Dimensions (W $\times$ D $\times$ H), mm 294 × 491 × 149 332 × 527 × 71 Air-cooled\* Water-cooled Console Dimensions (W × D × H), mm 448 × 533 × 177 448 × 678 × 176 Module Supply Voltage, VDC 48 VDC 56 VDC 100-120 VAC, Console Supply Voltage, VAC 200-240 VAC, 50-60 Hz 50-60 Hz 950 Power Consumption, W 580 2100 3900







IPGPhotonics.com/contact

www.ipgphotonics.com

MAX. AVERAGE OUTPUT POWER: 2000 W
MAX. PEAK OUTPUT POWER: 5 kW
PULSE DURATION: ~ 1.5 ns
PULSE REPETITION RATE: 2-150 MHz
WAVELENGTH RANGE: 532, 1084 nm

DANGER - INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION CLASS 4 LASER PRODUCT

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<sup>\*</sup> Water-cooled 100 W modules and 3U 19" rack-mounted consoles are available upon request.