

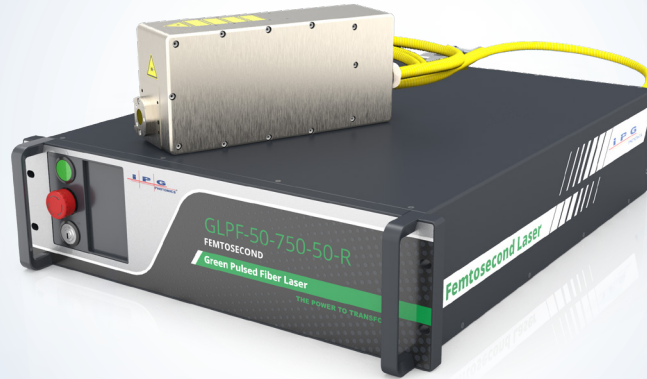


# GLPF-50-750-50-R

## Green Femtosecond Hybrid Laser

NEW PRODUCT

Up to 50 W, 600 -900 fs



### Applications

- ▶ Precision Micromachining
- ▶ Microdrilling
- ▶ Thin Film Ablation
- ▶ Photomask Cutting
- ▶ Medical Device Manufacturing
- ▶ LED Dicing
- ▶ Solar Cell Structuring
- ▶ Fine Tube Cutting
- ▶ Glass, Silicon, Ceramics, Polymer and Composite Material Processing



### Features

- ▶ Wavelength 515 nm
- ▶ Output Power up to 50 W
- ▶ Pulse Energy up to 50  $\mu$ J
- ▶ High Peak Power up to 80 MW
- ▶ Pulse Duration Options 600-900 fs
- ▶ Repetition Rate up to 2 MHz
- ▶ Low-maintenance
- ▶ Rugged Design

IPG Photonics NEW **GLPF-50-750-50** green hybrid-fiber picosecond laser provide high peak power with scalable average output power of 50 W and customer selected pulse durations in the range of 600 to 900 fs at full operational repetition rate range of 50-2000 kHz.

The fiber design allows for the adjustment of peak power and/or pulse repetition rate without affecting any of the output beam parameters. IPG's novel fiber laser is much more efficient, compact and easy to integrate into OEM equipment than conventional lasers now on the market. It is ideal for applications in precision micromachining.

The excellent beam quality, ultrashort pulse duration and high pulse energy combine to provide peak power densities suitable for micromachining virtually any material: metal, glass, ceramic, silicon, plastics. The ultrashort pulse duration and green wavelength result in a very small heat affected zone.

# GLPF-50-750-50-R

## Green Femtosecond Hybrid Laser

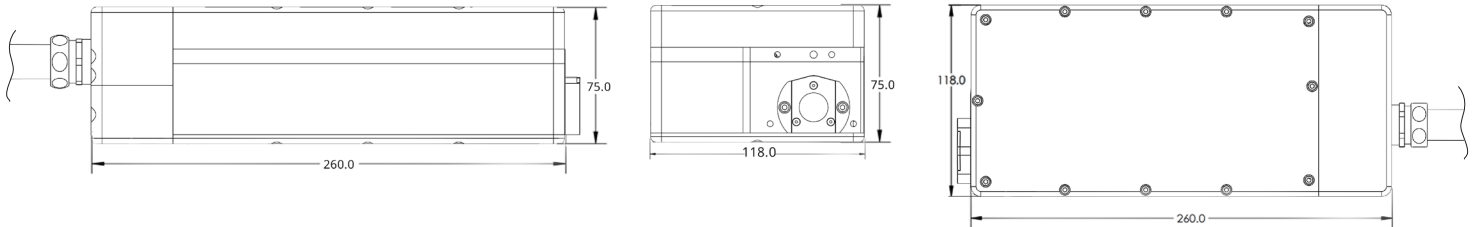
### Optical Characteristics\*

Wavelength, nm	515
Max. Average Power, W	Up to 50
Pulse Energy, $\mu\text{J}$	Up to 50
Pulse Duration, fs	600-900, Typ. 750
Peak Power, MW	Up to 80
Repetition Rate, kHz	50-2000
Beam Quality, $M^2$	<1.3

\*Customer can select models with specified power, pulse energy and pulse durations in 600-900 fs range. Shorter pulse durations and pulse energies are available upon request.

### General Characteristics

Control Unit Dimensions (W x D x H), mm	448 x 580 x 133
Optical Head Dimensions (W x D x H), mm	75 x 260 x 118
Cooling	Water-cooled
Supply Voltage, VAC	100-240, 50/60 Hz
Power Consumption, W	<1000 W



+1 (508) 373-1100; sales.us@ipgphotonics.com  
 +49 2736 44200; sales.europe@ipgphotonics.com (European Inquiries)

[www.ipgphotonics.com](http://www.ipgphotonics.com)

**Legal notices:** All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind IPG only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with use of a product or its application. IPG, IPG Photonics, The Power to Transform and IPG Photonics' logo are trademarks of IPG Photonics Corporation. © 2020 IPG Photonics Corporation. All rights reserved. **Patents Pending.**

MAX. AVERAGE OUTPUT POWER: 100 W  
 MAX. PEAK OUTPUT POWER: 160 MW  
 PULSE DURATION: 600-900 fs  
 PULSE REPETITION RATE: 50-2000 kHz  
 WAVELENGTH RANGE: 900-1200 nm

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

IEC 60825-1:2014

**The Power to Transform®**