



GLPF-10-500-20-R

Green Femtosecond Fiber Laser

NEW PRODUCT

Up to 20 W, 250-500 fs



Applications

- ▶ Life Sciences
- ▶ Medical Device Manufacturing
- ▶ Microdrilling
- ▶ Fine Tube Cutting
- ▶ Thin-film Ablation
- ▶ LED Dicing
- ▶ Solar Cell Structuring
- ▶ Photomask Cutting and Repairing
- ▶ Specialty Marking



Features

- ▶ 515 nm
- ▶ Pulse Energy up to 10 μ J
- ▶ Peak Power up to 40 MW
- ▶ Output Power >20 W
- ▶ Pulse Duration 250-500 fs
- ▶ Repetition Rate up to 2 MHz
- ▶ Low-maintenance
- ▶ Rugged Design

IPG Photonics NEW **GLPF-10-500-20-R** green femtosecond fiber laser provides pulses with 10 μ J pulse energy with scalable average output power of 20 W and customer selected pulse durations in the range of 250-500 fs at full operational repetition rate range of 50-2000 kHz. The all fiber format 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 and compact than conventional lasers now on the market. It is ideal for applications in life sciences and 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 negligible heat affected zone. Higher output powers and ultraviolet versions are planned.

GLPF-10-500-20-R

Femtosecond Green Fiber Laser

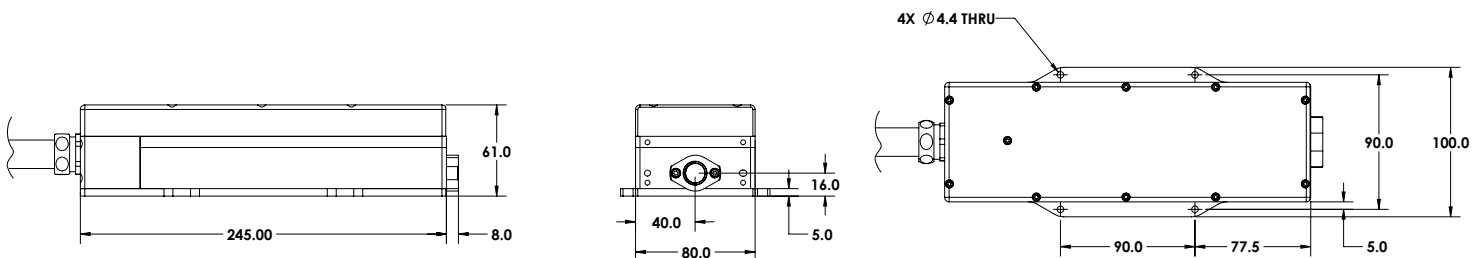
Optical Characteristics*

Wavelength, nm	515*
Average Power, W	20
Pulse Energy, μJ	10
Pulse Duration, fs	250-500
Peak Power, MW	up to 40
Repetition Rate, kHz	50-2000
Beam Quality, M^2	<1.2

*Customer can select models within specified maximum power, maximum pulse energy and pulse durations in 250-500 fs range. Shorter pulsed durations and higher 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	80 x 245 x 61
Supply Voltage, VAC	100-240, 50/60 Hz
Typical Power Consumption, W	300
Cooling	Water-cooled



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

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: 80 W
 MAX. PEAK OUTPUT POWER: 40 MW
 PULSE DURATION: 250-500 fs
 PULSE REPETITION RATE: 20-2000 kHz
 WAVELENGTH RANGE: 500-1100 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®