

# GLPF-5-500-5-R

## Femtosecond Green Fiber Laser

PRELIMINARY



### Applications

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



### Features

- ▶ 515 nm
- ▶ Pulse Energy up to 5  $\mu$ J
- ▶ High Peak Power up to 10 MW
- ▶ Output Power >5 W
- ▶ Pulse Duration 400-600 fs
- ▶ Repetition Rate up to 1 MHz
- ▶ Low-maintenance
- ▶ Rugged Design

**IPG Photonics' NEW GLPF Series** femtosecond green fiber lasers provide high peak power with scalable average output power of 5 W, short pulse duration of 500 fs at full operational repetition rate range of 20-1000 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 results in negligible heat affected zone. Higher output powers are planned.

# GLPF-5-500-5-R

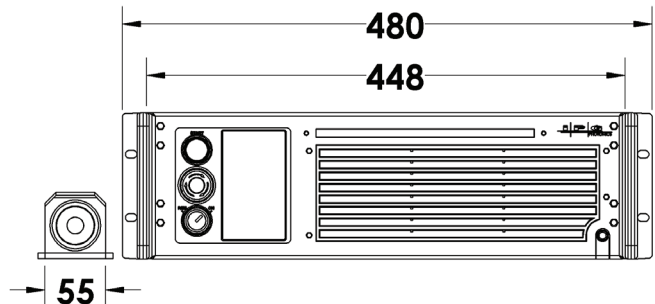
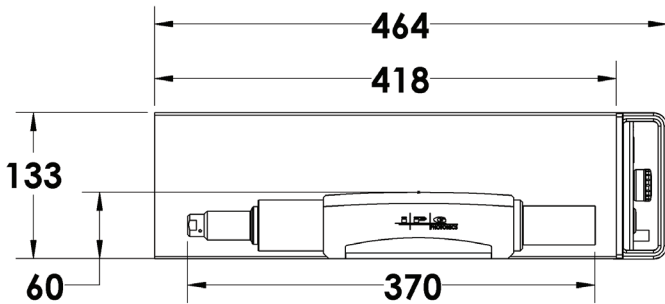
## Femtosecond Green Fiber Laser

### Optical Characteristics

Wavelength, nm	515
Average Power, W	5
Pulse Energy, $\mu$ J	5
Pulse Duration, fs	400-600
Peak Power, MW	up to 10
Repetition Rate, kHz	20-1000
Beam Quality, $M^2$	< 1.2

### General Characteristics

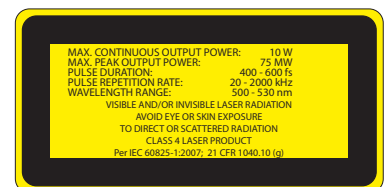
Control Unit Dimensions, mm	448 x 418 x 133
Optical Head Dimensions, mm	55 x 370 x 60
Supply Voltage, VAC	100-240, 50/60 Hz
Typical Power Consumption, W	50
Cooling	Air-cooled



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