

GLPF/GLPP, 0.6-5 ps, 25-50 W

Green Ultrafast Hybrid Lasers

Up to 50 W
0.6 - 5 picoseconds



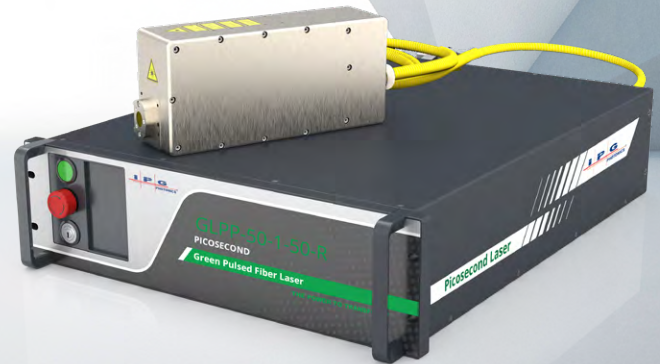
FEATURES

- ▶ Wavelength 515 nm
- ▶ Output Power up to 50 W
- ▶ Pulse Duration Options 0.6 to 5 ps
- ▶ Pulse Energy up to 100 μ J
- ▶ Repetition Rate up to 5.5 MHz
- ▶ Up to 4 m Fiber to Remote Head
- ▶ Burst Mode Option
- ▶ Integrated AOM Pulse Picker
- ▶ Cold and Warm Start in Seconds
- ▶ Low-maintenance Rugged Design



APPLICATIONS

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



GLPF and GLPP green hybrid-fiber ultrashort lasers provide high peak power with scalable average output power up to 50 W and customer selected pulse durations in the range of 600 fs to 5 ps at full operational repetition rate range of 50-5500 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 novel fiber lasers are much more efficient, compact and easy to integrate into OEM equipment than conventional lasers now on the market. 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 a very small heat affected zone. Models can be designed within specified maximum power, maximum pulse energy and pulse durations in 600 fs to 5 ps range. Burst mode option, shorter pulse durations and higher pulse energies are available upon request.

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Optical Characteristics*	GLPF-100-750-25-R	GLPF-50-750-50-R	GLPP-100-1-25-R	GLPP-50-1-50-R
Wavelength, nm	515			
Average Power, W	25	50	25	50
Pulse Energy, μJ	100	50	100	50
Pulse Duration, ps	0.6 - 0.9		1-5	
Repetition Rate, kHz	50-5500			
Beam Quality, M²	<1.2			

General Characteristics	
Control Unit Dimensions (W × D × H), mm	448 × 580 × 133
Optical Head Dimensions (W × D × H), mm	82 × 271 × 124
Cooling	Water
Supply Voltage, VAC	100-240, Single-phase 50-60 Hz
Power Consumption, W	<1000



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MAX. AVERAGE OUTPUT POWER: 100 W
 MAX. PEAK OUTPUT POWER: 100 MW
 PULSE DURATION: 1-5 ps
 PULSE REPETITION RATE: 50-2000 kHz
 WAVELENGTH RANGE: 500-1200 nm

DANGER - INVISIBLE LASER
 RADIATION AVOID EYE OR SKIN
 EXPOSURE TO DIRECT OR
 SCATTERED RADIATION
 CLASS 4 LASER PRODUCT
 IEC 60825-1:2014

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