

GLPN-M 50-75 W

Green Nanosecond Fiber Lasers

Pulse Energy 700 μ J
Green Pulsed Lasers
for Microprocessing



FEATURES

- ▶ Wavelength 517 nm
- ▶ Pulse Energy up to 700 μ J
- ▶ Pulse Durations 1.5 -200 ns
- ▶ Peak Power >60 kW
- ▶ High Beam Quality
- ▶ Repetition Rate up to 3.5 MHz
- ▶ Record Wall-plug Efficiency
- ▶ Air-cooled
- ▶ Rugged Design



APPLICATIONS

- ▶ Materials Processing
- ▶ Micromachining
- ▶ Solar/Photovoltaic
- ▶ Plastics Marking
- ▶ Texturing
- ▶ Si Ablation
- ▶ Scribing

IPG Photonics' NEW GLPN-M Series of green nanosecond fiber lasers provide high peak power with scalable average output power up to 75 W at full operational repetition rate range of up to 3500 kHz. The all fiber format allows for the adjustment of pulse energy and/or pulse repetition rate without affecting any of the output beam parameters. IPG's novel fiber laser are much more efficient and compact than conventional lasers on today's market and is ideal for applications in the solar/photovoltaic arena, resistor trimming and marking of transparent materials. The short wavelength, short pulse duration and high peak power result in a very small heat affected zone.

GLPN-M 50-75 W

Green Nanosecond Fiber Lasers

Optical Characteristics	GLPN-50-M	GLPN-75-M
Wavelength, nm	517	
Average Power, W	50	70
Pulse Energy, μ J	500	500*
Pulse Duration, ns	1.5; 4; 10	20; 50; 100*
Peak Power, kW	>60	
Repetition Rate, kHz	10-1000	10-700*
Beam Quality, M^2	<1.6	

*Higher average powers, peak power and pulse energies are available upon request

Optical Characteristics		
Module Dimensions (W × D × H), mm	270 × 260 × 90	270 × 450 × 157
Optical Head Dimensions (W × D × H), mm	65 × 365 × 70	197 × 375 × 71
Control Unit Cooling	Air	
Optical Head Cooling	Water	
Supply Voltage, VDC	24	39
Power Consumption, W	240	650

*Customized specifications with pulse energies up to 700 μ J, pulse duration up to 200 ns and PRR up to 3.5 MHz are available upon request.



www.ipgphotonics.com

MAX. AVERAGE OUTPUT POWER: 150 W
 MAX. PEAK OUTPUT POWER: 60 kW
 PULSE DURATION: 1-200 ns
 PULSE REPETITION RATE: 10-3500 kHz
 WAVELENGTH RANGE: 500-530 nm

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