



GLPN-500-1-50-M

Pulsed Green Nanosecond Fiber Laser

NEW PRODUCT





Applications

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



Features

- ▶ Wavelength 515 nm
- ▶ Pulse Energy 500 µJ
- ▶ Pulse Duration 1.5-10 ns
- ▶ Peak Power >60 kW
- ▶ High Beam Quality
- ▶ Repetition Rate up to 1 MHz
- ▶ Record Wall-plug Efficiency
- Air-cooled
- ▶ Rugged Design

IPG Photonics' NEW GLPN-M Series of green nanosecond fiber lasers provide high peak power with scalable average output power up to 50 W and <2 ns pulse duration at full operational repetition rate range of 10-1000 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 is 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-500-1-50-M

Pulsed Green Nanosecond Fiber Laser

Optical Characteristics	
Wavelength, nm	515
Average Power, W	50
Pulse Energy, µJ	500
Pulse Duration*, ns	1.5; 4; 10
Peak Power, kW	>60
Repetition Rate, kHz	10-1000
Beam Quality, M ²	<1.6

General Characteristics	
Module Dimensions (W \times D \times H), mm	270 × 260 × 90
Optical Head Dimensions (W \times D \times H), mm	65 × 365 × 70
Control Unit Cooling	Air
Optical Head Cooling	Water
Supply Voltage, VDC	24
Power Consumption, W	240

^{*}User can select preset pulse durations in the 1-10 ns range.

+1 (508) 373-1100;

+49 2736 44200; sales.europe@ipgphotonics.com (European Inquiries)

www.ipgphotonics.com

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MAX. AVERAGE OUTPUT POWER: 100 W MAX. PEAK OUTPUT POWER: >120 kW PULSE DURATION: 1-12 ns PULSE REPETITION RATE: 10-1200 kHz WAVELENGTH RANGE: 500-540 nm DANGER - INVISIBLE LASER RADIATION AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION CLASS 4 LASER PRODUCT