

GLR Series

CW Green Single-frequency Fiber Laser

Output Power up to 100 W



FEATURES

- ▶ Wavelength 532 nm
- ▶ Output Power up to 100 W
- ▶ Beam Quality $M^2 < 1.1$
- ▶ Single-frequency < 1 MHz
- ▶ Power Stability 1%
- ▶ Optical Noise $< 0.2\%$ RMS
- ▶ Linear Polarization $> 100:1$
- ▶ Compact and Low Cost
- ▶ Industrial Performance



APPLICATIONS

- ▶ Pumping Ti:Sapphire, OPOs, Solid State and Dye Lasers
- ▶ Atom Cooling and Trapping
- ▶ Solar Cell Manufacturing
- ▶ Holography and Interferometry
- ▶ Medical Diagnostics, Therapy and Surgery
- ▶ Manufacturing Inspection and Quality Control
- ▶ Entertainment and Projection
- ▶ Particle Imaging Velocimetry/Flow Visualization

IPG's GLR Series is a family of single-mode, single-frequency CW green fiber lasers with output powers up to 100 W. Based on IPG's pioneering highly efficient and reliable fiber laser technologies, GLR lasers feature a super-compact lightweight optical head, connected with a fiber cable to an air-cooled rack-mounted main laser console. The all fiber construction allows for full range adjustment of output power without any change in power stability and beam mode parameters. The GLR Series green CW lasers are used across a variety of applications from materials processing and medical to scientific and entertainment.

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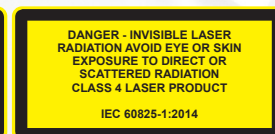
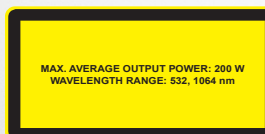
Optical Characteristics	GLR-10	GLR-20	GLR-30	GLR-50	GLR-100
Wavelength, nm			532		
Linewidth FWHM, MHz			<1		
Mode of Operation			CW		
Average Power, W			± 0.5		
Power Stability*, %	10	20	30	50	100
Optical Noise (<20 MHz), %RMS			0.2		
Polarization			Linear, >100:1		
Beam Quality, M ²			< 1.1		

*Over 8 hours, T= const.

General Characteristics					
Main Console Dimensions (W × D × H), mm	180 × 280 × 100		448 × 503 × 176		
Optical Head Dimensions (W × D × H), mm			130 × 308 × 58		
Cooling			Air-cooled		
Supply Voltage, VAC			100-240, 50-60 Hz		
Power Consumption, W	120	180	240	300	500



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