

GLR Series

CW Green Single-frequency Fiber Laser

Output Power up to 100 W



FEATURES

- ▶ Wavelength 515 and 532 nm
- ▶ Output Power up to 100 W
- ▶ Beam Quality $M^2 < 1.2$
- ▶ Single-frequency < 1 MHz
- ▶ Power Stability 1%
- ▶ Optical Noise $< 0.2\%$ RMS
- ▶ Linear Polarization $> 100:1$
- ▶ Compact and Low Cost



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.

GLR Series

CW Green Single-frequency Fiber Laser

Optical Characteristics	GLR-10	GLR-20	GLR-30	GLR-50	GLR-100
Wavelength, nm	515 or 532				
Linewidth FWHM, MHz	<1				
Mode of Operation	CW				
Average Power, W	10	20	30	50	100
Power Stability*, %	± 0.5				
Optical Noise (<20 MHz), %RMS	0.2				
Polarization	Linear, >100:1				
Beam Quality, M ²	< 1.2, Typ.1.1				

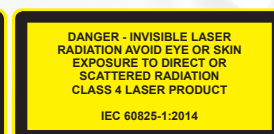
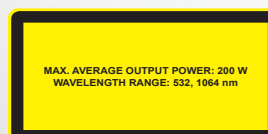
*Over 8 hours, T= const.

General Characteristics					
Main Console Dimensions (W × D × H), mm	448 × 403 × 132		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	300	350	500	600	1000

OEM GLM modules are available upon request.



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