



GLR Series

CW Green Single-frequency Fiber Laser

Output Power up to 100 W





Applications

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



Features

- ▶ Wavelength 532 nm
- ▶ Output Power up to 100 W
- ▶ Beam Quality M² <1.1
- ► Single-frequency <1 MHz
- ▶ Power Stability 1%
- ▶ Optical Noise <0.2% RMS
- ▶ Linear Polarization >100:1
- ► Compact and Low Cost
- ▶ Telecom Reliability
- ▶ Industrial Performance

IPG Photonics' 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			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			< 1.1		

^{*}Over 8 hours, T= const.

General Characteristics						
Main Console Dimensions (W \times D \times H), mm	448 × 403 × 132		448 × 503 × 176			
Optical Head Dimensions (W \times D \times 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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RADIATION AVOID EYE OR SKIN
EXPOSURE TO DIRECT OR
SCATTERED RADIATION
CLASS 4 LASER PRODUCT
IEC 60825-1:2014