



DLR-970-1500

High Brightness Diode-to-fiber Laser

NEW PRODUCT



Applications

- ▶ Optical Pumping
- ▶ Plastics Welding
- ▶ Metal Hardening
- ▶ Soft Soldering
- ▶ Brazing
- ▶ FPD Bonding
- ▶ Silicon Surface Modification

Features

- ▶ Output Power up to 1.5 kW
- ▶ High Brightness
- ▶ Modulated up to 50 kHz
- ▶ Stabilized Central Wavelength
- ▶ Narrow Emission Linewidth
- ▶ Compact and Low Cost
- ▶ High Wall-plug Efficiency
- ▶ Industrial Performance

IPG Photonics' DLR 970 Series industrial grade high power diode laser system provides 970 +/-10 nm emission combined in various power levels up to 1.5 kW. IPG's advanced technology is based on highly reliable entirely sealed high efficiency single-emitter diodes. The wall-plug efficiency of the DLR-970 system approaches 35%. IPG's DLR 970 diode laser is brighter, higher quality and more reliable than any other diode laser on the market. Air or water-cooled, this compact platform is cost-effective and virtually maintenance-free. DLR-970 lasers are used in soft soldering, metal hardening, plastics welding, silicon surface modification and FPD bonding, and are also an ideal source for optical laser pumping.

DLR-970-1500

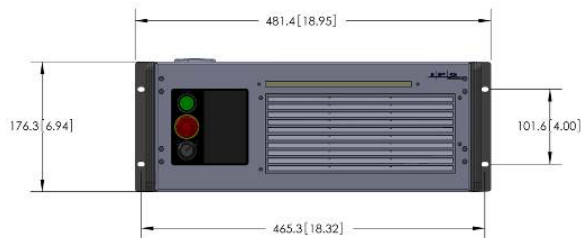
High Brightness Diode-to-fiber Laser

Optical Characteristics	DLR-970-100	DLR-970-300	DLR-970-500	DLR-970-1000	DLR-970-1500
Wavelength, nm	970 ±10				
Linewidth FWHM, nm	5				
Mode of Operation	CW/Modulated				
Modulation Frequency, kHz	0-50				
Average Power, W	100	300	600	1000	1500
Power Tunability, %	10-100				
Power Stability*, %	±1				
Optical Noise**, % RMS	1				
Output Fiber Core Diameter, μm	200		300		450
Output Fiber NA	<0.22				

*Over 4 hours, T= ±1°C

**10 kHz - 20 MHz

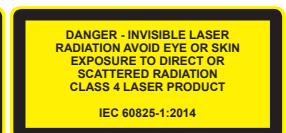
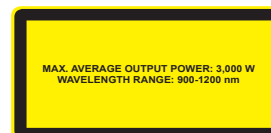
Cabinet Dimensions (W × D × H), mm	448 × 403 × 132		448 × 580 × 132		448 × 677 × 177
Cooling	Air-cooled		Water-cooled		
Supply Voltage, VAC	100-240, 50-60 Hz		200-240, 50-60 Hz		
Power Consumption, W	<300	<900	<1800	<3000	<4500



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