

RLD Series

Desktop Raman Fiber Laser



Applications

- ▶ Remote Fiber Amplifier Pumping
- ▶ Component Testing
- ▶ Repeaterless Submarine/Long Span Systems

Features

- ▶ 1100-1700 nm Wavelength Choices
- ▶ Up to 30 W Output Optical Power
- ▶ Telecom Grade Reliability
- ▶ Convenient Desktop Packaging
- ▶ Single-mode Fiber Output

IPG Photonics' RLD Series fiber lasers are conveniently packaged for use in a laboratory environment. Everything is contained in one desktop instrument including a Raman laser with up to 30 W output power. The front panel includes a monitor display, a keyed on/off switch, power control and fiber outputs. The RS-232 or GPIB port on the rear panel allows computer control of the module. Standard RLD fiber lasers provide an optical output in the range of 1100-1700 nm as specified by the customer. Typical laser output is provided by a 1.5 meter, standard SMF-28 optical fiber cable with input/output connectors. The front panel provides user control of the amplifier output power and readout of the pump diode current and pump diode temperature.

These universal devices operate in the temperature range of 0-50°C and require 100/110/200/220 VAC (50/60 Hz). IPG's RLD Series can be employed for research and development in fields such as telecommunications, photonics, sensing and product test beds.

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Optical Characteristics

	RLD-1-XXXX ²	RLD-5-XXXX ²	RLD-10-XXXX ²
Mode of Operation	CW		
Polarization ¹	Random		
Nominal Output Power, W	1	5	10
Output Power Tunability, %	10-100		
Output Power Instability: Long Term (over 8 hrs), %	1	1	2
Emission Bandwidth, nm 3 dB (FWHM)	<1	<2	<3
10 dB	<1.5	<3	<4
Central Emission Wavelength, nm	1455		
Suppression Ratio, dB 1050-1440	20		
1500-1700	>50		
In Band Power, %	97	97	95
Operating Voltage (VAC)	100/110/200/220		
Max. Power Consumption (at 20°C), W	<25	<65	<110

¹Linear Polarization is available on request

²Desired wavelength to be specified in place of XXXX from the range 1100-1700 nm

General Characteristics

	Min.	Max.
AC Power Line, V	100	
Chassis Dimensions, mm	341 x 132 x 305	
Operational Temperature Range, °C	0 to +50	
Storage Temperature Range, °C	-30 to +70	
Humidity, %	5	90
Warm-up Time, min	1	
Cooling	Forced Air/ Heat Sink	
Input/ Output Termination	1.5 m SMF-28 Fiber with FC/APC Connectors	

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