.4µm

# **CRFL** SERIES

**CONTINUOUS WAVE RAMAN FIBER LASER** 

S-BAND RAMAN FIBER LASERS

#### **FEATURES**

- High output power up to 20W
- Standard 1455 or 1480 nm operating wavelengths
- High efficiency frequency conversion
- Excellent power stability
- Non polarized output light
- Benchtop or module available
- Maintenance free

#### **APPLICATIONS**







Distributed Raman amplification / Remote EDFA pumping / Pump splitting architecture Fiber optic component testing

## Description

The CRFL series Raman fiber lasers provide high output power up to 20W at 1455 and 1480 nm. The diffraction limited beam is unpolarized.

Principle of operation involves utilization of a high power Ytterbium fiber laser source to pump a cascaded Raman resonator. High conversion efficiency is achieved from fundamental pump laser to final Raman Stokes.

These Raman lasers are well suited for distributed Raman amplification, remote pumping of EDFAs or for Telcordia fiber optic component testing.

The CRFL are available in benchtop format for laboratory environment or in module format for easy integration into a system.

**B**312

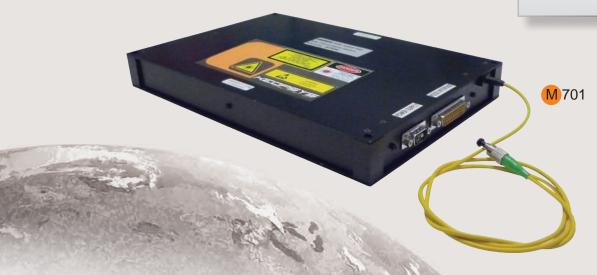








### 4 Platforms



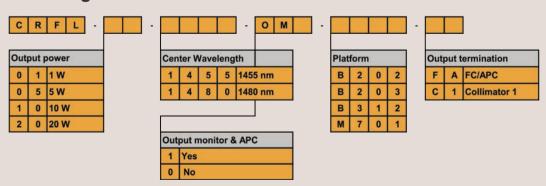


Optical Specifications	Model				
@ 25°C	CRFL02	CRFL05	CRFL10	CRFL20	
Mode of operation	CW				
Output power	2W	5W	10W	20W	
Standard operating wavelength*	1455 - 1480 nm				
Linewidth	< 2nm		< 3	< 3nm	
In band power	> 90% (over +/- 5nm from peak operating wavelength)				
Side mode suppression (1000-1400nm)	> 15dB >14 dB			>14 dB	
Relative intensity noise	< -105 dB/Hz				
Power stability (rms) over 1 hour	<1% <2%			2%	
Polarization	Random				
Beam quality, M²	< 1.1				
Output monitor and APC (option)	Internal photodiode and automatic power control mode				
Output power tunability	25 to 100%	10 to 100%			
Output fiber type	SMF28				
Output termination	FC/APC, E2PS or Collimator				
Power consumption**	<30W	<80W	<150W	<300W	
Associated platform	B202/M701	B203/M701	B203	B312	

Platform Specifications	Platform type				
	B202/B203	B312	M701		
Voltage	84 to 264VA	24VDC			
Control Interface	Front pane	RS232			
Optical interface	3mm PVC, 1m				
Warm-up time	<15	<5min			
Dimensions	448x446x88mm, 2U	448x446x133mm, 3U	300x200x35mm		
Weight	< 1	<1.5kg			
Operating case temperature	+15°C 1	-20°C to +65°C			
Storage temperature	-20°C t	-40°C to +85°C			

<sup>\*</sup> Other wavelengths available on special request

### **Ordering information**







<sup>\*\*</sup> Power consumption for modules