

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



B 202/ B 203



M 701



4 Platforms

Optical Specifications

@ 25°C

	Model			
	CRFL02	CRFL05	CRFL10	CRFL20
Mode of operation	CW			
Output power	2W	5W	10W	20W
Standard operating wavelength*	1455 - 1480 nm			
Linewidth	< 2nm		< 3nm	
In band power	> 90% (over +/- 5nm from peak operating wavelength)			
Side mode suppression (1000-1400nm)	> 15dB			>14 dB
Relative intensity noise	< -105 dB/Hz			
Power stability (rms) over 1 hour	<1%		<2%	
Polarization	Random			
Beam quality, M ²	< 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 264VAC (47 to 63Hz)		24VDC
Control Interface	Front panel and RS232		RS232
Optical interface	3mm PVC, 1m		
Warm-up time	<15min		<5min
Dimensions	448x446x88mm, 2U	448x446x133mm, 3U	300x200x35mm
Weight	< 15 kg		<1.5kg
Operating case temperature	+15°C to +35°C		-20°C to +65°C
Storage temperature	-20°C to +55°C		-40°C to +85°C

* Other wavelengths available on special request

** Power consumption for modules

Ordering information

C	R	F	L	-	-	-	O	M	-	-	-	-			
Output power				Center Wavelength				Platform				Output termination			
0	1	1 W		1	4	5	5	1455 nm	B	2	0	2	F	A	FC/APC
0	5	5 W		1	4	8	0	1480 nm	B	2	0	3	C	1	Collimator 1
1	0	10 W							B	3	1	2			
2	0	20 W							M	7	0	1			
Output monitor & APC															
1	Yes														
0	No														



All products comply with IEC 60825-1 and FDA (21 CFR Subchapter J) laser safety standards.

Keopsys undertakes a continuous and intensive product development program to ensure that its products perform to then highest technical standards. As a result, the specifications in this document are subject to change without notice.