

The Rock Brillouin Fiber Laser System

PRODUCT DATA SHEET

NP Photonics' Rock Brillouin Fiber Laser System has ultra narrow linewidth, high power and is the best performing laser of its kind.

NP Photonics' Rock Brillouin Fiber Laser System is a stand-alone fiber laser for sensing, LIDAR, RF-photonics, metrology, test and measurement, telecommunications, and general research applications. The Brillouin Fiber Laser Source incorporates proprietary EMF (Erbium Micro Fiber) technology developed at NP Photonics. A high power, narrow linewidth EMF fiber laser is used to pump a stabilized Brillouin fiber ring laser to achieve unprecedented narrow linewidth and low noise.

The laser provides 25 mW of CW output power (1530-1565 nm).

FEATURES

- Extremely narrow linewidth 200 Hz
- Center wavelength over 1530-1565 nm
- 25 mW output power
- Single longitudinal mode
- Single polarization operation
- Integrated locking loop
- Integrated RIN reduction
- High wavelength stability
- Microprocessor control
- Easy tuning from front panel
- RS232 interface
- Wavelength display
- Power read-out

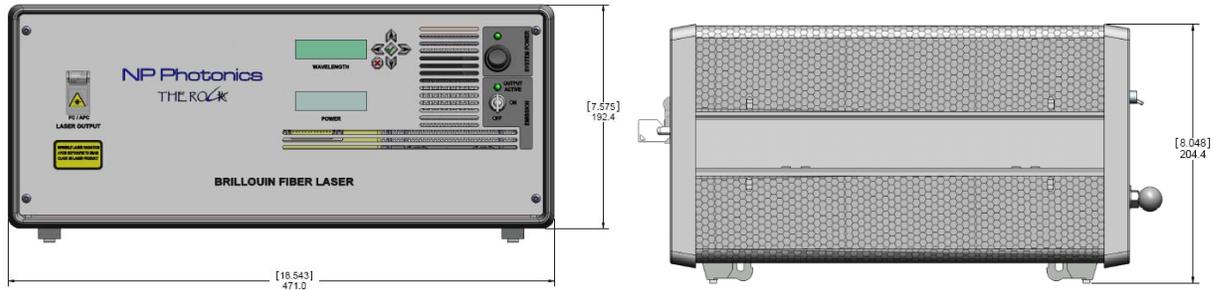
APPLICATIONS

- Sensing
- LIDAR
- Test & Measurement
- Metrology
- RF-Photonics

PRODUCT SPECIFICATIONS

Parameter	Value
Wavelength Range	1530–1565 nm
Output Power	25 mW
Longitudinal Mode	Single Frequency
Wavelength Accuracy	50 MHz
Spectral Line Width	~ 200 Hz
Relative Intensity Noise (RIN) @ Peak ~ 1 MHz	< -120 dB/Hz
Relative Intensity Noise (RIN) > 50 MHz	< 155 dB/Hz
Signal to ASE Noise Ratio (50 pm, bandwidth)	> 65 dB
Side Mode Suppression Ratio (SMSR)	> 50 dB
Polarization Extinction Ratio (PER)	> 25 dB
Tuning Range	30 GHz
Power Stability over Hours	± 2%
Connectors	FC/APC
Package Dimension	471 x 362 x 204 mm

Mechanical Outline:



Ordering Example: BRFLS-25-1-1550.XX = Brillouin Rock Fiber Laser System, 25 mW output power, tuning, with a wavelength at 1550.XX nm.

BRFLS — —

Power	Code	Tunability	Code	Wavelength	Code
25 mW	25	None	0	Standard	15XX.XX
		Tuning	1	Or ITU Grid	HXX/CXX
				Generic +/- 2 nm	15XX

NP Photonics Rock Laser Sources are protected by a 12-month warranty. All components and assemblies are unconditionally warranted to be free of defects in workmanship and materials for the warranty period, beginning from the date of shipment. This warranty is in lieu of all other warranties, expressed or implied, and does not cover incidental or consequential loss. This warranty does not apply to devices damaged due to operating conditions outside of the specified parameters. Modified warranties for OEM customers are available.

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