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Standard 1455 or 1480 nm operating  
wavelengths,  
...

CRFL are Raman fiber lasers able to deliver a high output power, up to 20 W at a standard wavelength of 1455 nm or 1480 nm. Many other wavelengths are available on request.

The Raman fiber laser can be used in a lot of different applications such as distributed Raman amplification, remote EDFA pumping, specialty doped fiber pumping or optical components testing. Lumibird patented architecture is offering a high optical efficiency, a high beam quality and a high power stability.

The manufacturing process permits to propose a reliable and robust fiber laser, even for harsh environmental conditions of use.

Raman lasers are maintenance free and are designed to work continuously over an extended period of time.

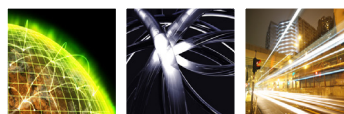
Finally, they are available in turnkey benchtop format for laboratory applications or in compact OEM module for an easy integration. No specific installation is required, but Lumibird proposes on request a free support for the first integration.

### Key features

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

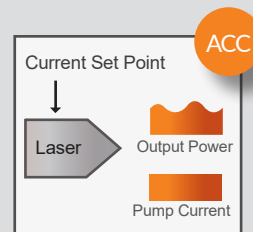
### What applications

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

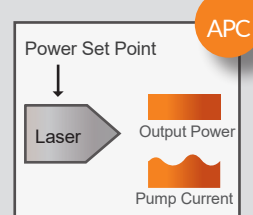


### Modes of operation

The devices offer several modes of operation :



ACC (Automatic Current Control) mode is standard for all devices. The laser is controlled from diodes current set point.



APC (Automatic Power Control) mode allows controlling the laser at a fixed output power set point. The device maintains a constant optical output power monitored with a photodiode. The current is adjusted automatically.

Optical Specifications @ 25 °C	CRFL
	CW
Mode of operation	From 2 to 20 W
Output power	1455 - 1480 nm
Standard operating wavelength*	< 2 nm or < 3 nm
Linewidth	> 90 % (over +/- 5 nm from peak operating wavelength)
In band power	> 15 dB or >14 dB depending of the output power
Side mode suppression (1000-1400 nm)	Random
Polarization	< 1.1
Beam quality, M <sup>2</sup>	Internal photodiode and automatic power control mode
Output monitor and APC (option)	25 to 100 % or 10 to 100 % depending of the output power
Output power tunability	SMF28
Output fiber type	FC/APC, E2PS or Collimator
Output termination	

The CRFL is available as turn-key benchtop or as OEM module

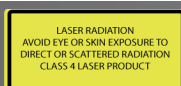
### RELIABILITY

The Lumibird range of fiber lasers are manufactured with tested components and are submitted to several inspections during the manufacturing process under a rigorous quality management certified in accordance with the ISO 9001:2015 standard. Our all-in-fiber systems offer maintenance-free operation. Countless units are continuously running in demanding environments with no failure.

### GUARANTEE

Our fiber systems are under 1 full year parts and labor warranty. We offer a warranty extension of 1 or 2 years. Please contact us.

For ordering information and custom solutions, please contact us : [websales@keopsys.com](mailto:websales@keopsys.com)



Lumibird 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.

Lumibird has locations across the globe that are available to provide support for any product, service or inquiry. Visit [www.lumibird.com](http://www.lumibird.com) to connect with any of our global sites.

