# CEFL-TERA cw erbium fiber laser , terahertz linewidth





CEFL-TERA is CW Erbium fiber laser delivering up to 30 W in random or linear polarization. This laser is a perfect tool for wide range of applications. It offers a cost effective and no maintenance solution.

This erbium fiber laser is useful for optical components testing, spectroscopy, OPO pumping or thulium laser pumping. Lumibird original conception allows proposing a cost-effective fiber laser.

Lumibird integrates standard and proven optical components reducing the FIT rate for a high MTBF value.

The laser is available in random or linear polarization and delivers a perfect diffraction limited beam with a linewidth of a few nm. Furthermore, the central wavelength can be selected from 1532nm to 1550nm. Finally, the output power can be modulated with an external TTL signal up to 10kHz.

This erbium fiber laser is available in a turn-key benchtop which can be monitored from the front panel or via RS232. Also, this fiber laser meets superior wall-plug efficiency of 10%.

No maintenance is needed for this high-quality fiber laser. Additionally, no installation is required, plug it, run it and forget it.

## — Key features —

- 1532,1535, 1550 nm operating wavelength
- Output power up to 30W
- Linewidth of a few nm
- Diffraction limited output
- Amplitude modulation (optional)
- Random or linear polarization
- High wall-plug efficiency
- Maintenance free

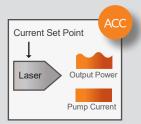
## - What applications

- Optical component testing
- Laser trapping spectroscopy
- Medical (dermatology)
- Heating
- OPO and Thulium fiber pumping

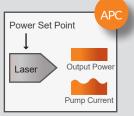


#### Modes of operation

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.

## CEFL-TERA CW ERBIUM FIBER LASER, TERAHERTZ LINEWIDTH



Optical Specifications @ 25 ℃	CEFL-TERA
Mode of operation	CW or modulation
Output power	From 1 to 30 W
Operating wavelength	1532 +/-1 nm, 1535 +/-1 nm or 1550 +/- 5nm
Linewidth (FWHM)	< 1 nm
Output power stability over 1 hour	< 2 % rms
Polarization	Random or Linear
Beam quality, M <sup>2</sup>	< 1.1
Amplitude modulation	Option
Output power monitor and APC	Option
Fiber type	SM/PANDA
Output termination	FC/APC or Collimator

#### The CEFL-TERA lasers are available as turn-key benchtop or as OEM module (up to 2 W)

### 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



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 to connect with any of our global sites.

