CYFL-MEGA

CONTINUOUS WAVE YTTERBIUM FIBER LASER
1 µm MEGALITE FIBER LASERS FOR SENSING AND SHG

KEOPSYS BY LUMIBIRD

1.0 µm

Narrow linewidth of a few of MHz,
Single longitudinal mode,
...

CYFL-MEGA stands for Continuous Ytterbium-Doped Fiber Laser. Based on a Lumibird patented design, the CYFL-MEGA provides a single mode operation and delivers a linewidth of few MHz up to 20 W of output power. No maintenance is required for this high-power fiber laser.

The CYFL-MEGA is the result of a long research and development activity on fiber lasers. The CYFL-MEGA series exhibit low relative intensity noise (RIN) and high optical power stability. Furthermore, the output beam is diffraction limited either in random or polarized versions. The design of the fiber laser allows the high stability of the polarization.
Standard operating wavelength is 1064nm, but other wavelengths can be requested on a custom basis.
The CYFL-MEGA fiber laser is manufactured according a production process which ensures to all lasers a perfect reproducibility of performances and a high level of reliability.
No specific installation is required, the ytterbium fiber laser is easy to install and operate. Run it and forget it.

The CYFL-MEGA series are available in benchtops or compact OEM modules. The benchtop platforms offer the possibility to monitor the laser via the front panel or remotely via serial port. Both models offer robustness and reliability.

Key features

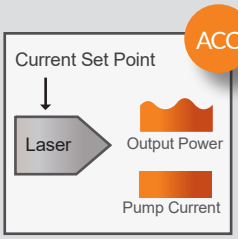
- Narrow linewidth of a few of MHz
- Single longitudinal mode
- 1064 nm standard operating wavelength
- Output power up to 20 W
- Wavelength tunability (optional)
- Laser frequency modulation (optional)
- Low amplitude noise
- Diffraction limited output
- Random or linear polarization
- Maintenance free

What applications

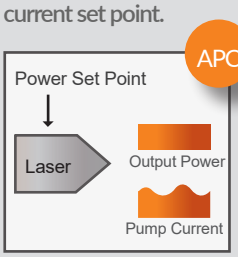
- Sensing
- Second harmonic generation (SHG)
- Optical component testing

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.

For ordering information and custom solutions, please contact us : websales@keopsys.com

Non contractual photos

CYFL-MEGA

CONTINUOUS WAVE YTTERBIUM FIBER LASER
1 µm MEGALITE FIBER LASERS FOR SENSING AND SHG

KEOPSYS BY LUMIBIRD

Optical Specifications @ 25 °C	CYFL-MEGA
Mode of operation	CW
Output power	From 1 to 20 W
Standard operating wavelength	1064 nm
Wavelength stability over 1 hour, +/-1 °C	10pm
Wavelength thermal tuning range	Option
Laser frequency modulation range	Option
Laser frequency modulation bandwidth	DC to 1 kHz (input analog voltage 0 to +4 V)
Spectral linewidth	4 MHz Typ, 20 MHz Max
Optical S/N ratio	>50 dB (+/-1 nm from central wavelength, 0.07 nm resolution)
Polarization	Random or Linear
Seed Tap	Option
Output monitoring	Option (Internal photodiode and automatic power control mode for P ≤ 15 W)
Beam quality, M^2	< 1.1
Output termination	FC/APC, E2PS or Collimated

The CYFL-MEGA is available as turn-key benchtop or as OEM module.

RELIABILITY

The Lumibird range of fiber amplifiers 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

RoHS REACH COMPLIANT CE

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.

LUMIBIRD MORE THAN LASERS