CYFL-GIGA SERIES

CONTINUOUS WAVE YTTERBIUM FIBER LASER

1.0 µm

KEY FEATURES

- Output power up to 20 W
- 1083 nm standard wavelength
- 2 GHz linewidth
- Wavelength tuning up to 100 GHz
- Random or linear polarization
- Excellent SMSR
- Diffraction limited output
- Robust and reliable
- Turn-key system

Description

The Keopsys CYFL-GIGA are Ytterbium fiber doped laser emitting at 1083 nm up to 20 W. This very special laser offers a linewidth of 1 to 2 GHZ filled with a high number of single-longitudinal modes. This allows in particular to achieve high pumping efficiency of gas atomics transitions.

The system is designed as a MOPA (Master Oscillator Power Amplifier) and can be continuously tuned over 100 GHz and can be modulated for locking purpose.
At 1083 nm, the laser can overlap 3 He transitions C3 to C9 as well as 4 He transitions D0 to D2.

The laser is provided into a 3U rack benchtop system, included all necessary controls for setting output power and wavelength direct from the front panel.

APPLICATIONS



- Medical imaging
- Nuclear physics
- Absorption spectroscopy
- Wavelength conversion

2 Platforms

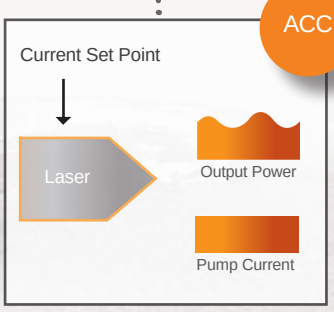
B 206

B 301

Modes of operation

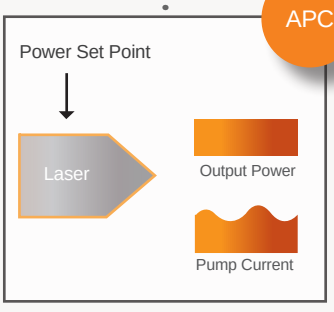
The devices offer several modes of operation :

ACC



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

APC



APC (Automatic Power Control) mode allows to control 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.

Non contractual photos

CYFL-GIGA SERIES

1.Ø µm GIGAHERTZ LINEWIDTH FIBER LASERS

Optical Specifications ***@ 25 °C***	**CYFL-GIGA**
Mode of operation	CW
Output power	From 2 to 20 W
Operating wavelength	1083 or 1064 or 1075 nm
Wavelength stability over 1 hour, +/-1 °C	10 pm
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	2 GHz max
Power stability (rms) over 1 hour	<2 %
Polarization	Random or Linear (17 dB)
Seed Tap	Option
Output monitoring	Option (Internal photodiode and automatic power control mode)
Beam quality, M^2	< 1.1
Output termination	FC/APC, E2PS or Collimated

The CYFL-GIGA series lasers are available as benchtop for a press button use.

RELIABILITY

The Keopsys 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 9001:2008 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 guarantee.
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

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