

## PEFL-EOLA SERIES

## PULSED ERBIUM FIBER LASER

1.5 µm LONG PULSE FIBER LASER

### KEY FEATURES

- Eye-safe 1.5 µm operating wavelength
- Energy per pulse up to 10 μJ
- Peak power up to 50 W
- Pulse duration from 100 to 500 ns
- Pulse repetition frequency from 10 kHz to 20 kHz
- Narrow linewidth available down to 3 kHz
- Low RIN and low phase noise
- Linear Polarization
- Fourier transform limited linewidth operation
- Diffraction limited or M<sup>2</sup> < 1.1
- Wide operating temperature range from 0 °C to +70 °C
- Highly integrated design

## Description



PEFL-EOLA are pulsed Erbium fiber doped lasers delivering Fourier transform limited pulses. These eye-safe pulsed lasers are coming linearly polarized. These lasers have excellent RIN and phase noise characteristics.

The Keopsys design allows the lasers to deliver energy pulse up to 10 µJ, pulsewidth ranges from 100 to 500 ns, and an output beam diffraction limited (M<sup>2</sup><1.1).

The laser system is highly integrated, saving space and cost of integration, which makes it ideal for Doppler heterodyne LIDAR systems.

## APPLICATIONS







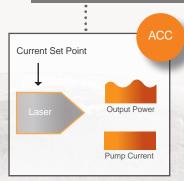
- Aerosol detection
- Weather monitoring
- Pollution monitoring





- 2D/3D wind profiler

# Mode of operation



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





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Optical Specifications @ 25 ℃	PEFL-EOLA
Mode of operation	Pulsed
Operating wavelength	1550 +/-10 nm or ITU channel
Energy per pulse	From 0,75 μJ to 1.6 nJ
Peak power	From 8 mW to 50 W
Pulse repetition frequency	From 10 to 20 kHz
Pulse duration	From 100 to 200 ns
Average output power	From 8 µW to 200 mW
Spectral linewidth	From 3 kHz to <1 MHz
Polarization	Linear
Beam quality, M <sup>2</sup>	<1.1
CW seed tap	>1 mW power on Panda, 100 +/-5 cm, 3 mm PVC
Tap and output termination	FC/APC

### The PEFL-EOLA series lasers are available as OEM module for an easily integration

### 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









Keopsys undertakes a contunuous 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.





















