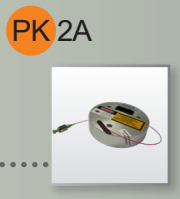
PYFL-KULT

PULSED YTTERBIUM FIBER LASER

1.0 µm ULTRA-COMPACT LASER TRANSMITTER

KEOPSYS BY LUMIBIRD



1064 nm operating wavelength
Energy per pulse up to 25 µJ
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The PYFL-KULT series is a range of 1µm pulsed fiber laser transmitters, delivering high peak power and high energy per pulse in ultra-compact modules with diffraction-limited output beam for range finding applications. A varied choice of models offers the possibility to operate over a wide range of operating setpoints (pulse duration, pulse repetition frequency and energy) allowing to be suitable for a various of high-accuracy systems. Compact pulsed laser transmitters are commonly used in applications such as 3D scanning, mapping, telemetry, and also harmonic and supercontinuum generation.

The compact platforms allow an easy integration in highly integrated systems. The all-in-fiber design requires no maintenance. The PYFL-KULT has been tested under vibrations and shocks conditions in accordance with military standards (MIL-STD-810G, RTCA-DO-160G...) allowing operations in the harshest environmental conditions over a long period of time.

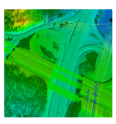
Lumibird electronic board designs offer a wide range of functionalities. The control of the PYFL-KULT can be analogic or digital. Platforms incorporate a microcontroller for internal controls, alarms, and RS232/USB communication making the laser compatible all systems. Pulses are triggered by an external signal supplied by the user system.

Key features

- 1064 nm operating wavelength
- Energy per pulse up to 25 µJ
- Peak power up to 25 kW
- Pulse duration 1 ns to 3 ns
- Pulse repetition frequency from 5 kHz to 1 MHz
- Continuous or burst operation
- Linear or random polarization
- Diffraction limited output beam
- Low power consumption
- Wide operating temperature range (-35 °C to +65 °C)
- Compact and rugged module

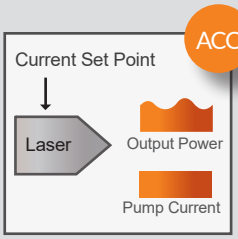
What applications

- Supercontinuum generation
- Harmonic generation
- Telemetry
- Range-finding
- 3D scanning
- Mapping



Modes of operation

The devices offer one mode of operation :



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

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

Non contractual photos

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Optical Specifications @ 25 °C	PYFL-KULT
Mode of operation	Pulsed
Operating wavelength	1064 +/-2 nm
Wavelength excursion over T range	<0.3 nm
Energy per pulse (EPP)	Up to 25 µJ
Peak power (PP)	Up to 25 kW
Average power (AP)	Up to 2W
Pulse repetition frequency (PRF)	From 5 kHz to 1 MHz
Pulse duration (FWHM)	From 1 to 3 ns
Seed tap (option)	1 m pigtail length, > 0.1mW peak power, SMF, FC/APC
Pigtail length	32 +/-2 cm
Fiber type	SMF / PANDA / LMA / LMA PANDA
Polarization	Random or Linear
Beam quality, M^2	1.1 to 1.3
Output termination	FC/APC or Collimator

The PYFL-KULT is available as OEM module for an easy integration.

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.

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RoHS REACH COMPLIANT

LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT

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