

# PYFL-MIRVISION SERIES

## PULSED YTTERBIUM FIBER LASER

1.0  $\mu\text{m}$  HIGH POWER LASER TRANSMITTER



### KEY FEATURES

- Energy per pulse up to 100  $\mu\text{J}$
- Peak power up to 25 kW
- Choice of pulse duration from 1 ns to 200 ns
- Pulse repetition frequency from 10 kHz to 1 MHz
- Linear or random polarization
- High output-beam quality
- Low power consumption
- Wide operating temperature range (-35  $^{\circ}\text{C}$  to +65  $^{\circ}\text{C}$ )
- Rugged and compact package

### Description

Keopsys proposes PYFL-MIRVISION series. This pulsed Ytterbium fiber doped laser provides pulses from 1 to 200 nm over a wide range of repetition rates (10 kHz to 1 MHz).

Thanks to our patented VSP technology, these lasers deliver an energy per pulse up to 100  $\mu\text{J}$  and a high peak power up to 25 kW with a high beam quality ( $M^2 < 1.3$ ). These laser come with two compacts and rug-ged modules platforms. Each module incorporates a microcontroller for internal controls, alarms, and RS232/USB communication. It requires an external TTL signal to trig the optical pulses.

Without any optical part to realign, the maintenance-free and light-weight package, make PYFL-MIRVISION ideal for OEM integration in hard environment, for example in airborne.

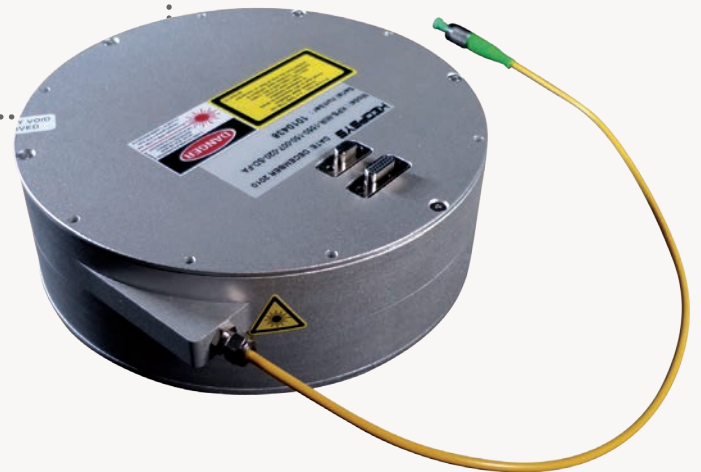
### APPLICATIONS



- Telemetry,
- Range-finding / Obstacle detection
- Airborne survey
- Mapping / 3D scanning
- Harmonic generation
- Bathymetry

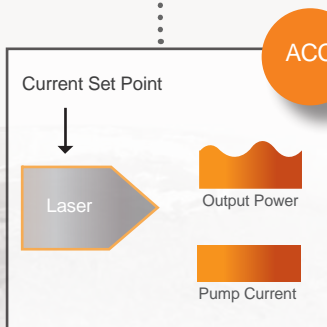
### 2 Platforms

PM 2D / PM 3D



### Mode 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.

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## 1 $\mu\text{m}$ HIGH POWER LASER TRANSMITTER

### Optical Specifications @ 25 °C

	PYFL-MIRVISION
Mode of operation	Pulsed
Operating wavelength	1064 +/-2 nm
Wavelength excursion over T range	<0.3 nm
Energy per pulse	From 25 to 60 $\mu\text{J}$
Peak power	From 15to 25 kW
Average power	From 3 to 10 W
Pulse repetition frequency	From 50 to 400 kHz
Pulse duration (FWHM)	From 1 to 4 ns
Fiber type	LMA / LMA PANDA (20 $\mu\text{m}$ , 0.08 NA)
Polarization	Random or Linear
Beam quality, $M^2$	<1.3
Output termination	FC/APC or Collimator
Seed tap (option)	1 m pigtail length, SMF, FC/APC

The PYFL-MIRVISION series lasers are available as OEM module for an easily integration.

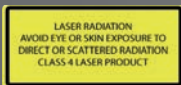
### RELIABILITY

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](mailto:websales@keopsys.com)



Keopsys 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.



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