The PEFL-MIRVISION series is a range of 1.5µm pulsed fiber laser transmitters, delivering high peak power and high energy per pulse in compact modules for long-range 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 Airborne 3D scanning and mapping, telemetry, obstacle detection and supercontinuum generation.

The all-in-fiber design requires no maintenance. The PEFL-MIRVISION 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. 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**

- 1.5 µm eye-safe operation
- Energy per pulse up to 350 µJ
- Peak power up to 25 kW
- Choice of pulse duration from 0.5 ns to 200 ns
- Pulse repetition frequency from 15 kHz to 2 MHz
- Linear or random polarization
- High output-beam quality (from 1 to 2.5)
- Low power consumption
- Wide operating temperature range (-35 °C to +65 °C)
- Rugged and compact package

**What applications**

- Telemetry, range-finding
- Obstacle detection
- Airborne survey, mapping
- 3D scanning
- Supercontinuum generation

For ordering information and custom solutions, please contact us: websales@keopsys.com
The PEFL-MIRVISION lasers are available as OEM module for an easily 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.

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

Lumibird undertakes a continuous and intensive product development program to ensure that its products perform to the highest technical standards. As a result, the specifications in this document are subject to change without notice.

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.

<table>
<thead>
<tr>
<th>Optical Specifications</th>
<th>PEFL-MIRVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode of operation</strong></td>
<td>Pulsed</td>
</tr>
<tr>
<td><strong>Operating wavelength</strong></td>
<td>1545+/−1 nm ¹</td>
</tr>
<tr>
<td><strong>Wavelength excursion over T °C range</strong></td>
<td>&lt;0.3 nm</td>
</tr>
<tr>
<td><strong>Energy per pulse</strong></td>
<td>Up to 350 µJ</td>
</tr>
<tr>
<td><strong>Peak power</strong></td>
<td>Up to 25 kW</td>
</tr>
<tr>
<td><strong>Average power</strong></td>
<td>From 3 to 10 W</td>
</tr>
<tr>
<td><strong>Pulse repetition frequency</strong></td>
<td>From 15 kHz to 2 MHz</td>
</tr>
<tr>
<td><strong>Pulse duration (FWHM)</strong></td>
<td>From 0.5 to 200 ns</td>
</tr>
<tr>
<td><strong>Random or Linear (15 dB) polarization</strong></td>
<td>RP or LP</td>
</tr>
<tr>
<td><strong>Output termination</strong></td>
<td>FC/APC or Collimator</td>
</tr>
<tr>
<td><strong>Seed tap (option)</strong></td>
<td>1 m pigtail length, &gt; 0.1mW peak power, SMF, FC/PC</td>
</tr>
</tbody>
</table>

¹ : Other wavelength on request