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.

Current Set Point -> ACC -> Output Power -> Pump Current

ACC ACC (Automatic Current Control)

Description

MIRVISION series Erbium-doped fiber lasers are eye-safe pulsed laser sources. These lasers benefit from Keopsys design, can deliver pulses from 0.5 to 200 ns over a wide range of repetition rates (10 kHz to 1 MHz).

Energy per pulse up to 350 µJ and high peak power up to 25 kW, are available with excellent beam quality near gaussian mode (1.5< M² < 2.5).

The module incorporates a microcontroller for internal controls, alarms and RS232/USB communication. External TTL signal triggers the optical pulses.

The compact, light weight and rugged package makes it ideal for airborne and harsh environmental applications.

Applications

• Telemetry, range-finding
• Obstacle detection
• Airborne survey, mapping
• 3D scanning
• Wind sensing

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 10 kHz to 1 MHz
• Linear or random polarization
• High output-beam quality (from 1.5 to 2.5)
• Low power consumption
• Wide operating temperature range (-35 °C to +65 °C)
• Rugged and compact package

PEFL-MIRVISION SERIES
PULSED ERBIUM FIBER LASER
1.5 µm EYE-SAFE HIGH POWER LASER TRANSMITTER
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Keopsys 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.

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

The PELF-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.

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**PEFL-MIRVISION**

**1.5 µm EYE-SAFE HIGH POWER LASER TRANSMITTER**

**Optical Specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>PEFL-MIRVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode of operation</td>
<td>Pulsed</td>
</tr>
<tr>
<td>Operating wavelength</td>
<td>1545 +/- 1 nm</td>
</tr>
<tr>
<td>Wavelength excursion over T °C range</td>
<td>&lt;0.3 nm</td>
</tr>
<tr>
<td>Energy per pulse</td>
<td>From 20 to 350 µJ</td>
</tr>
<tr>
<td>Peak power</td>
<td>From 5 to 25 kW</td>
</tr>
<tr>
<td>Average power</td>
<td>From 3 to 10 W</td>
</tr>
<tr>
<td>Pulse repetition frequency</td>
<td>From 20 to 250 kHz</td>
</tr>
<tr>
<td>Pulse duration (FWHM)</td>
<td>From 4 to 20 ns</td>
</tr>
<tr>
<td>Random or Linear (15 dB) polarization</td>
<td>RP or LP</td>
</tr>
<tr>
<td>Output termination</td>
<td>FC/APC or Collimator</td>
</tr>
<tr>
<td>Seed tap (option)</td>
<td>1 m pigtail length, SMF, FC/PC</td>
</tr>
</tbody>
</table>

* Other wavelength on request