Wedge
Short Pulse Q-Switched DPSS Laser

Features
- Up to 4 mJ Pulse Energy
- 4 MW Peak Power
- 400 ps to 3 ns Pulsewidth
- Single Shot to 100 kHz
- @1064 @1570 @532 @355 @266nm
- MOPA configurations
- Monolithic Design
- Air Cooling
- Low heat waste

Applications
- Micromachining of glass
- Specialty marking
- Thin film removal
- LIDAR and Bathymetry
- Non-linear spectroscopy
- Harmonic and parametric generation
- Visible to IR OPO pumping
- TeraHertz generation

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SOLUZIONI LASER INNOVATIVE
Wedge
Short Pulse Q-Switched DPSS Laser

*IP 68 MOPA configuration

In the following table the main features of standard Wedge models are presented; for a complete description of laser performances at 1064, 1570, 532, 355, 266 nm please refer to product datasheets.

<table>
<thead>
<tr>
<th>1064nm Wedge models</th>
<th>High energy</th>
<th>Sub-ns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wedge HB</td>
<td>Wedge XB</td>
</tr>
<tr>
<td>Max Pulse Energy</td>
<td>2 mJ</td>
<td>4 mJ</td>
</tr>
<tr>
<td>Repetition rate</td>
<td>Single Shot to 2 kHz</td>
<td>Single Shot to 1 kHz</td>
</tr>
<tr>
<td>Harmonics / Wavelength conversion</td>
<td>532 nm - 355 nm - 266 nm</td>
<td>1.5 µm</td>
</tr>
<tr>
<td>Pulselength</td>
<td>&lt; 1.5 ns</td>
<td>down to 600 ps</td>
</tr>
<tr>
<td>Peak Power</td>
<td>up to 2 MW</td>
<td>up to 4 MW</td>
</tr>
<tr>
<td>Polarization</td>
<td>Linear 100 : 1 (option circular polarization)</td>
<td></td>
</tr>
<tr>
<td>Beam quality (M²)</td>
<td>&lt; 3.5</td>
<td>&lt; 5</td>
</tr>
<tr>
<td>Cooling</td>
<td>Air-cooled (option: water cooling and contact cooling)</td>
<td></td>
</tr>
<tr>
<td>DC Voltage IN</td>
<td>Dual 8V - 15V</td>
<td>Dual 12V - 15V</td>
</tr>
<tr>
<td>Overall mechanical dimensions</td>
<td>26 x 22 x 8 cm³ (10 x 9 x 3 in³)</td>
<td>26 x 25 x 10 cm² (10 x 10 x 4 in³)</td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 10 kg (&lt; 22 lbs)</td>
<td>&lt; 12 kg (&lt; 27 lbs)</td>
</tr>
</tbody>
</table>

*1mJ – 1.5 µm – 1kHz Eye-safe

OPTIONS AVAILABLE:
- Beam expanding and collimating optics
- Fiber coupling
- Low jitter option
- Extended operating temperature range
- Pulse energy modulation up to IP68 Package
- 28 V DC Input for airborne installation
- Circular polarization
- Monitoring photodiode
- Red aiming beam
- Remote control box and software interface
- AC-DC power supply

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