Sol
Compact Q-Switched DPSS Laser

Features
- Up to 40W @1064nm
- Up to 10W @532nm
- 300 kW peak power
- Compact air-cooled single unit
- Up to 200 kHz repetition rate
- Electronic pulse energy modulation
- Sealed and rugged
- Monolithic design
- 24 V DC
- RS232 monitor port

Applications
- Material processing
- Marking
- Scribing
- Thin film removal
- Micro-machining
- Nonlinear optics
- Medical and aesthetic
Sol is the most compact Q-switched DPSS laser available on the market in the power range from 6W to 40W @ 1064nm. Sol versions @ 532nm are also available with the same footprint.

These air-cooled DPSS lasers are offered in a rugged and lightweight single unit, designed to allow easy and reliable integration in micro-machining and marking applications. The Sol single unit design is based on a permanently aligned monolithic optical resonator integrated with 24 V DC powered driving electronics. Cooling of the unit is provided by low noise fans, water cooling and contact cooling versions are also available. Due to the single unit design, optical fiber and other delicate cable connections are not necessary for system integration.

Compactness, insensitivity to environmental conditions and ease of handling guarantee superior operation flexibility and performance/cost ratio.

The high peak power and the excellent beam quality of Sol lasers make them the ideal source for the most demanding industrial, medical and scientific applications.

The new electronic interface allows the user to integrate the laser according to the most recent safety standards for industrial machinery (EN 13849) and to monitor the laser status through a RS232 port.

A new version of the Control Box and a new proprietary Software Interface are available for simplified remote control and monitoring.

**OPTIONS AVAILABLE:**

- Beam expanding and collimating optics
- Fiber coupling
- Red aiming beam
- Extended operating temperature range
- Extended frequency range
- Pulswidth modulation
- Circular polarization
- Monitoring photodiode
- Remote control box and software interface
- AC-DC power supply

*Fiber coupling option*
# Sol Compact Q-Switched DPSS Laser

<table>
<thead>
<tr>
<th>Sol Models</th>
<th>Sol DPSS 1064nm</th>
<th>Sol DPSS 532nm</th>
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<tbody>
<tr>
<td>Available models\Max average output power</td>
<td>6W 10W 20W 30W 40W</td>
<td>3W 5W 10W</td>
</tr>
<tr>
<td>Q-Switch repetition rate</td>
<td>10 to 100 kHz [option: single shot to 200 kHz]</td>
<td></td>
</tr>
<tr>
<td>CW operating mode</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Pulswidth</td>
<td>6 to 80 ns</td>
<td></td>
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<tr>
<td>Beam diameter</td>
<td>&lt; 8 mm [option: customized internal or external BEX]</td>
<td></td>
</tr>
<tr>
<td>Cooling</td>
<td>Air-cooled with thermostatic fan [option: water cooling, contact cooling]</td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>15 to 40 °C</td>
<td>15 to 35 °C</td>
</tr>
<tr>
<td>DC Voltage IN</td>
<td>24 V</td>
<td></td>
</tr>
<tr>
<td>Mechanical dimensions</td>
<td>23 x 10 x 95 cm³ [9 x 4 x 37 in³]</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>&lt; 4.5 kg [&lt; 10 lbs]</td>
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