Ultra Compact OEM Laser

Ultra compact OEM lasers feature high power in a compact size. Wavelengths available from 405 nm to 1319 nm can be used for industrial, medical, scientific fields. It is a perfect choice for design and integration into OEM instrumentation, systems, research and development.

**Features:**
- Ultra compact
- Plug & play
- Cost-effective
- Many wavelengths available
- Easy integration
- Can be equipped with software

**Applications:**
- Confocal microscopy
- Laser medical treatment
- Scientific research
- Cell sorting
- Optical instrument
- OEM integration

**Specifications:**

<table>
<thead>
<tr>
<th>Wavelength (nm)</th>
<th>Type</th>
<th>Output power (free space)</th>
<th>Output power (after fiber)</th>
<th>Wavelength tolerance ±</th>
<th>Spectral linewidth FWHM (typical)</th>
<th>Noise (20Hz-20MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>Diode</td>
<td>1.5 W</td>
<td>1.2 W</td>
<td>5 nm</td>
<td>2 nm</td>
<td>0.5%</td>
</tr>
<tr>
<td>445</td>
<td>Diode</td>
<td>15 W</td>
<td>13 W</td>
<td>5 nm</td>
<td>2 nm</td>
<td>0.5%</td>
</tr>
<tr>
<td>465</td>
<td>Diode</td>
<td>10 W</td>
<td>8.5 W</td>
<td>5 nm</td>
<td>2 nm</td>
<td>0.5%</td>
</tr>
<tr>
<td>473</td>
<td>DPSS</td>
<td>1 W</td>
<td>800 mW</td>
<td>1 nm</td>
<td>0.2 nm</td>
<td>N/A</td>
</tr>
<tr>
<td>532</td>
<td>DPSS</td>
<td>5.5 W</td>
<td>5 W</td>
<td>1 nm</td>
<td>0.2 nm</td>
<td>1%</td>
</tr>
<tr>
<td>561</td>
<td>DPSS</td>
<td>1 W</td>
<td>800 mW</td>
<td>1 nm</td>
<td>0.2 nm</td>
<td>N/A</td>
</tr>
<tr>
<td>589</td>
<td>DPSS</td>
<td>800 mW</td>
<td>600 mW</td>
<td>1 nm</td>
<td>0.2 nm</td>
<td>N/A</td>
</tr>
<tr>
<td>593</td>
<td>DPSS</td>
<td>300 mW</td>
<td>200 mW</td>
<td>1 nm</td>
<td>0.2 nm</td>
<td>N/A</td>
</tr>
<tr>
<td>637</td>
<td>Diode</td>
<td>2.5 W</td>
<td>2 W</td>
<td>5 nm</td>
<td>2 nm</td>
<td>0.5%</td>
</tr>
<tr>
<td>671</td>
<td>DPSS</td>
<td>2.5 W</td>
<td>2 W</td>
<td>1 nm</td>
<td>0.2 nm</td>
<td>N/A</td>
</tr>
<tr>
<td>1319</td>
<td>DPSS</td>
<td>1 W</td>
<td>800 mW</td>
<td>1 nm</td>
<td>0.3 nm</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Other wavelengths can be customized on request.

**Other Parameters:**

**BEAM PROPERTIES (FOR DPSS):**
- Transversal mode: Near TEM₀₀
- Beam diameter at aperture (1/e²): ~3 mm
- Beam divergence (full angle): <1 mrad
- Polarization ratio: better than 100:1

**POWER STABILITY:**
- Power stability of free-space lasers <1 % RMS over 8 hrs
- Power stability of fiber-coupled lasers <1 % RMS over 8 hrs

**MODULATION:**
- All diode lasers can be modulated up to more than 100kHz via TTL pin
- All DPSS lasers can be modulated at 0–30kHz TTL pin

**FIBER SPECS:**
- All lasers are made with FC or SMA905 connectors
- Standard length of a fiber is 1 m or 2 m, other lengths available on request.
PHYSICAL PROPERTIES:
Control interface type: RS232 or USB
- External power supply requirement: +5VDC, 12A for DPSS, +12VDC, 3A for diode
Dimensions (L-W-H): 87 (L) × 50 (W) × 19 (H) (excluding pins and output window)
- Beam height from the base: 12 mm
- Optimum heatsink temperature (non-condensing): +15…+30°C
- Max. heatsink temperature 40°C
- Internal temperature stabilization: TEC
- Overheat protection: Yes
- Storage temperature (non-condensing): -10 to +50 °C
- Warranty: 12 months

Dimensions

94 (L) × 50 (W) × 19 (H) mm³