Coherent’s unique Optically Pumped Semiconductor Laser (OPSL) technology powers the OBIS LG, featuring variable output powers without changing the beam parameters.

The OPSL-based OBIS LG provides plug-and-play flexibility, which allows customers to integrate the product of their choice much faster, thereby reducing their time-to-market costs. These true CW lasers deliver up to 50 mW in UV and 3W in the Visible, making them ideal for applications like Flow Cytometry, Particle Counting and Microscopy.

This, combined with a diffraction limited beam, low noise and high stability, provides unparalleled laser performance in the smallest package.

The OBIS LG is the perfect laser platform for customers requiring high performing CW laser technology for research and instrumentation in life sciences and biological applications.

OBIS LG Features:
- Power invariant beam quality
- OBIS USB interface compatibility
- Integrated control electronics

OBIS LG Applications:
- Flow Cytometry
- Particle Counting
- DNA Sequencing
- Microscopy

www.Coherent.com/OBISLG
### System Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>OBIS LG 355-20</th>
<th>OBIS LG 355-50</th>
<th>OBIS LG 532-3000</th>
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</thead>
<tbody>
<tr>
<td>Wavelength (nm)</td>
<td>355 ±2</td>
<td>355 ±2</td>
<td>532 ±3</td>
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<tr>
<td>FWHM Linewidth (GHz)</td>
<td></td>
<td>550</td>
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<tr>
<td>Pulse Format</td>
<td>CW</td>
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<tr>
<td>Spectral Purity (%)</td>
<td>&gt;99</td>
<td></td>
<td></td>
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<tr>
<td>Output Power (mW)</td>
<td>&gt;20</td>
<td>&gt;50</td>
<td>&gt;3000</td>
</tr>
<tr>
<td>Spatial Mode</td>
<td>TEM₀₀</td>
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<td></td>
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<tr>
<td>Beam Quality (M²)</td>
<td>&lt;1.2</td>
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</tr>
<tr>
<td>Beam Circularity²</td>
<td>1.0 ± 0.15</td>
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</tr>
<tr>
<td>Beam Waist Diameter (mm)(FW, 1/e²)</td>
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<td></td>
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<tr>
<td>Beam Waist Location³ (mm)</td>
<td>±325</td>
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<td></td>
</tr>
<tr>
<td>Beam Pointing Stability (µrad/°C)</td>
<td>&lt; 10</td>
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</tr>
<tr>
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<td>&gt;99</td>
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<tr>
<td>Beam Pointing Stability (µrad/°C)</td>
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<tr>
<td>Polarization Ratio</td>
<td>Linear, &gt;100:1</td>
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<tr>
<td>Polarization Direction</td>
<td>Vertical, ± 5°</td>
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<td>Noise (% RMS)(10 Hz to 1 MHz)</td>
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<tr>
<td>Power Stability (%)(pk-pk)</td>
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<tr>
<td>CDRH Compliant³</td>
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</tbody>
</table>

#### Electrical Specifications

- Operating Voltage (VDC): 24 ±10%
- Power Consumption (W): <150

#### Environmental Conditions

- Ambient Temperature:
  - Operating: 10 to 40°C (50 to 104°F)
  - Non-Operating: -10 to 60°C (-14 to 160°F)
- Relative Humidity⁴ (%): 5 to 95
- CE Marking: EN 61010/EN 60825/EN 61326
  - EN 55011/EN 5058
- Dimensions (L x W x H):
  - Laser Head⁶: 125.0 x 70.0 x 36.2 mm (4.9 x 2.76 x 1.43 in.)
  - Power Supply⁶: 125.0 x 70.0 x 36.2 mm (4.9 x 2.76 x 1.43 in.)
- Cables (laser head to power supply⁷): 2m (6.5 ft.)

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¹ Optical parameters measured at the output plane of the laser head. Unless noted all parameters valid for the lifetime of the unit.
² Circularity defined as vertical diameter divided by horizontal diameter.
³ Negative value corresponds to a location inside the laser head.
⁴ Ready to be integrated compliant system.
⁵ Non-condensing.
⁶ Back connector not included in laser head length dimension.
⁷ Power supply not included.
Mechanical Specifications

Laser Head

Top View

Rear View

Side View

Bottom View

Front View

Mounting Holes for 3 mm or No. 4 Screws (4x)

Status Indicators

USB

Control

Fan

Emission Indicator

Output Beam

Shutter Control

Heat Sink Surface

Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent’s scientific and industrial lasers are certified to comply with the Federal Regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health on all systems ordered for shipment after August 2, 1976.

Coherent offers a limited warranty for all OBIS LG lasers. For full details of this warranty coverage, please refer to the Service section at www.Coherent.com or contact your local Sales or Service Representative.

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