

OBIS LG

True CW, UV and Visible Lasers

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**



Superior Reliability & Performance

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System Specifications ¹	OBIS LG 355-20	OBIS LG 355-50	OBIS LG 532-3000
Wavelength (nm)	355 ±2	355 ±2	532 ±3
FWHM Linewidth (GHz)		<50	
Pulse Format		CW	
Spectral Purity (%)		>99	
Output Power (mW)	>20	>50	>3000
Spatial Mode		TEM ₀₀	
Beam Quality (M ²)		<1.2	
Beam Circularity ²		1.0 ± 0.15	
Beam Waist Diameter (mm)(FW, 1/e ²)		<1.2	
Beam Waist Location ³ (mm)		±325	
Beam Pointing Stability (μrad/°C)		<10	
Polarization Ratio		Linear, >100:1	
Polarization Direction		Vertical, ±5°	
Noise (% RMS)(10 Hz to 1 MHz)		<0.25	
Power Stability (%)(pk-pk)		±1	
CDRH Compliant ⁴		No	
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 Humidity ⁵ (%)		5 to 95	
CE Marking		EN 61010/EN 60825/EN 61326 EN 55011/EN 5058	
Dimensions (L x W x H)			
Laser Head ⁶		125.0 x 70.0 x 36.2 mm (4.9 x 2.76 x 1.43 in.)	
Power Supply ⁷			
Cables (laser head to power supply ⁷)		2m (6.5 ft.)	

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 in compliant system.

⁵ Non-condensing.

⁶ Back connector not included in laser head length dimension.

⁷ Power supply not included.

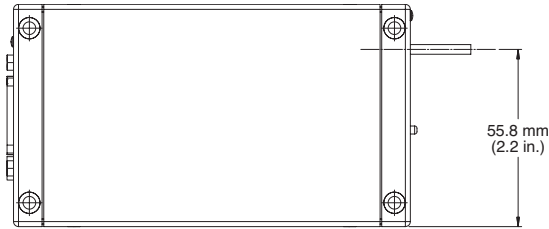
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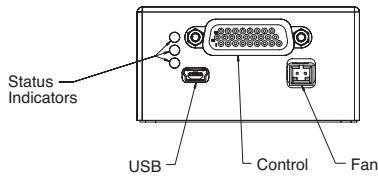
Mechanical Specifications

Laser Head

Top View



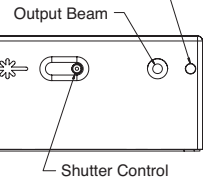
Rear View



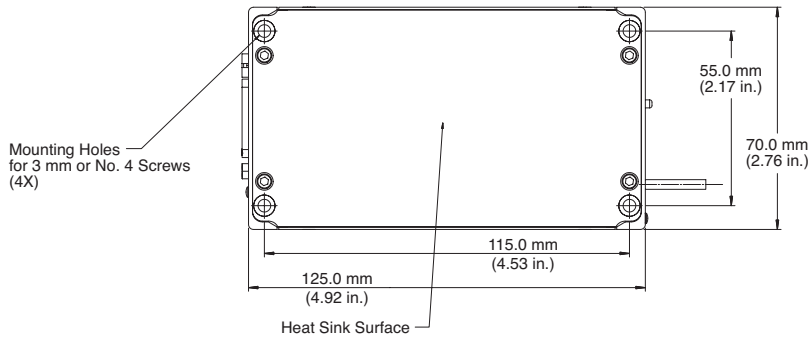
Side View



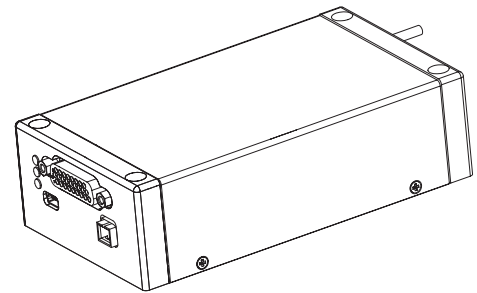
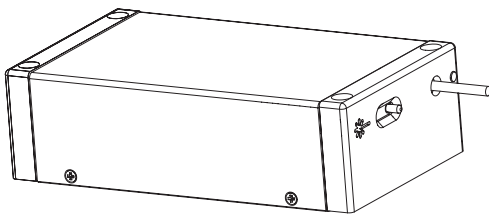
Emission Indicator



Bottom View



Front View



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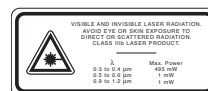
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Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

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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