



# Genesis CX 355 STM Compact (OEM)

TEM<sub>00</sub> 355 nm OEM OPS Laser Systems

Coherent's unique Optically Pumped Semiconductor Laser (OPSL) technology powers the Genesis CX-STM Compact, providing up to 100 mW of 355 nm laser light from an OEM system.

Ideal for applications such as Flow Cytometry and Particle Counting, these lasers provide a TEM<sub>00</sub> power invariant beam with low noise and high stability in a simple-to-integrate, air-cooled package.

The Genesis CX STM Compact is the perfect laser platform for customers requiring easy integration of high-performing CW laser technology into life science and bioinstrumentation.



**Superior Reliability & Performance**

## **Genesis CX 355 STM Compact (OEM) Features:**

- **Single transverse mode (TEM<sub>00</sub>)**
- **Reduced sized OEM**
- **Air-cooled solution**

## **Genesis CX 355 STM Compact (OEM) Applications:**

- **Flow Cytometry**
- **Particle Counting**
- **Microscopy**

[www.Coherent.com/GenesisCX355STM](http://www.Coherent.com/GenesisCX355STM)

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Optical Specifications <sup>1</sup>	Genesis CX 355
Wavelength (nm)	355 ±2
FWHM Linewidth (GHz)	<50
Pulse Format	CW
Spectral Purity (%)	>99
Output Power (mW)	40, 60, 80, 100
Spatial Mode	TEM <sub>00</sub>
Beam Quality (M <sup>2</sup> )	<1.2
Beam Circularity <sup>2</sup>	1.0 ±0.1
Beam Waist Diameter (mm)(FW, 1/e <sup>2</sup> )	
Horizontal	0.975 ±0.2
Vertical	0.915 ±0.2
Beam Divergence (mrad)(FW, 1/e <sup>2</sup> )	<1.2
Beam Waist Location <sup>3</sup> (mm)	±325
Beam Pointing Stability <sup>4</sup> (μrad/°C)	<6
Horizontal Beam Position Tolerance (mm)	±<1.0
Vertical Beam Position Tolerance (mm)	±<1.0
Beam Pointing Tolerance (mrad)	<5
Polarization Ratio	Linear, >100:1
Polarization Direction	Horizontal, ±5°
Noise (% rms)(10 Hz to 1 MHz)	<0.1
Power Stability (%)(pk-pk)	±<1
Warm-up Time (minutes)	<10
CDRH Compliant	Yes

## Electrical Specifications

Operating Voltage (VAC)	100 to 240
Frequency (Hz)	50 to 60
Power Consumption (W)	500

## Environmental Conditions

Ambient Temperature (°C)	
Operating	10 to 40
Non-operating	-10 to 60
Relative Humidity <sup>5</sup> (%)	5 to 95
CE Marking	IEC 61010-1/EN 61010-1
Dimensions (L x W x H)	
Laser Head <sup>6</sup>	250.1 x 138.0 x 50.8 mm (9.84 x 5.4 x 2.0 in.)
Cables (laser head to controller)	2m (6.5 ft.)

<sup>1</sup> Optical parameters measured at the output plane of the laser head. Unless noted all parameters valid for the lifetime of the unit.

<sup>2</sup> Circularity defined as vertical diameter divided by horizontal diameter.

<sup>3</sup> Negative value corresponds to a location inside head.

<sup>4</sup> After warm-up over 2 hours.

<sup>5</sup> Non-condensing.

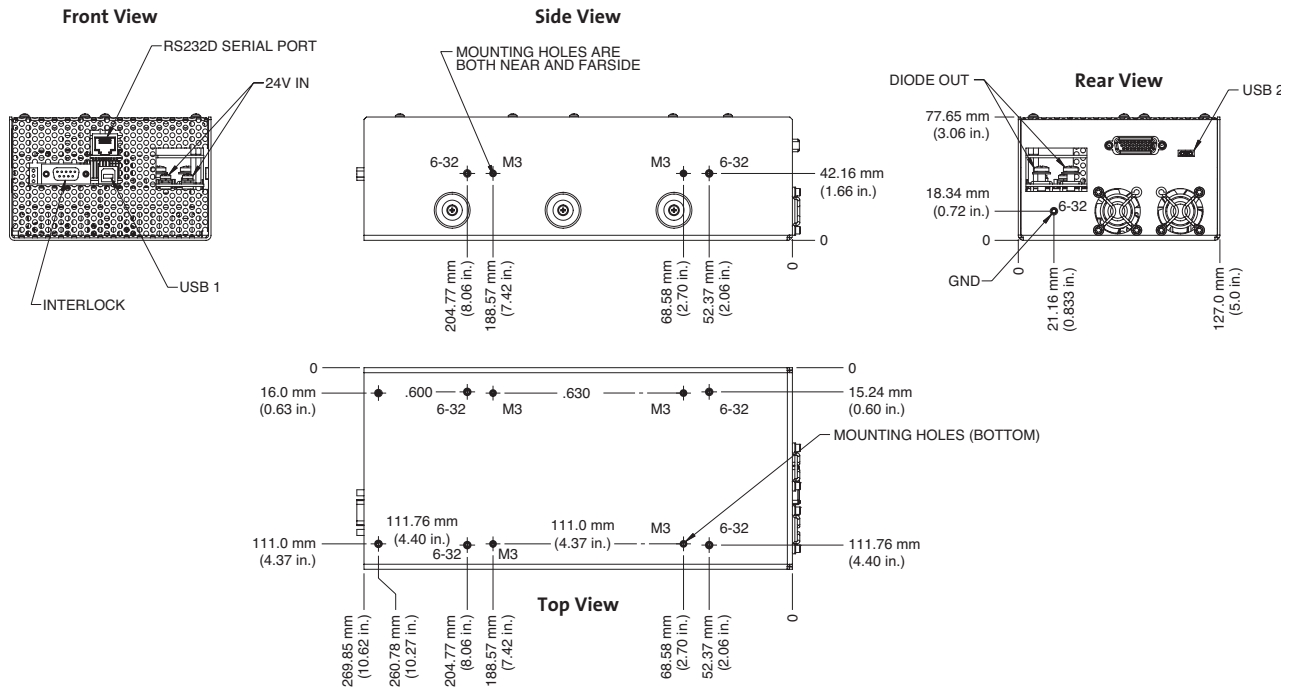
<sup>6</sup> Back connector not included in laser head length dimension.

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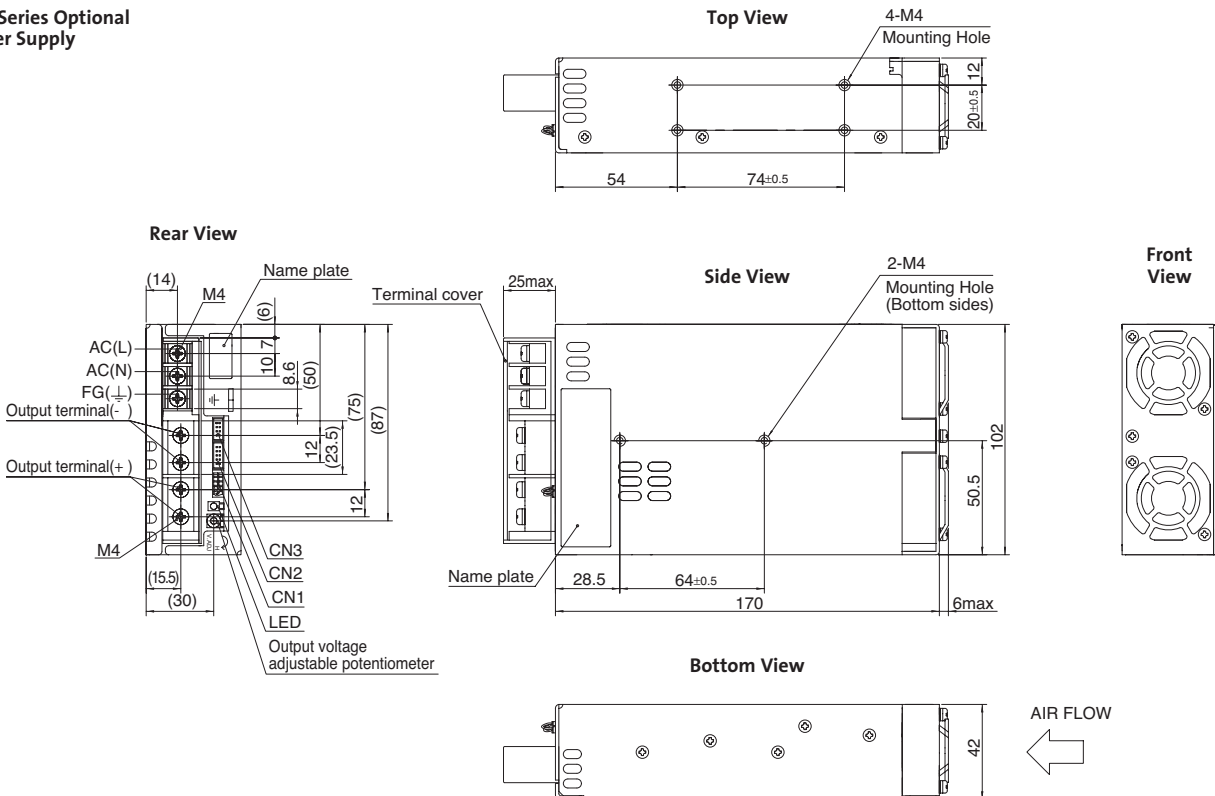
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## Mechanical Specifications

### Genesis CX Compact Controller



### Genesis CX-Series Optional AC/DC Power Supply

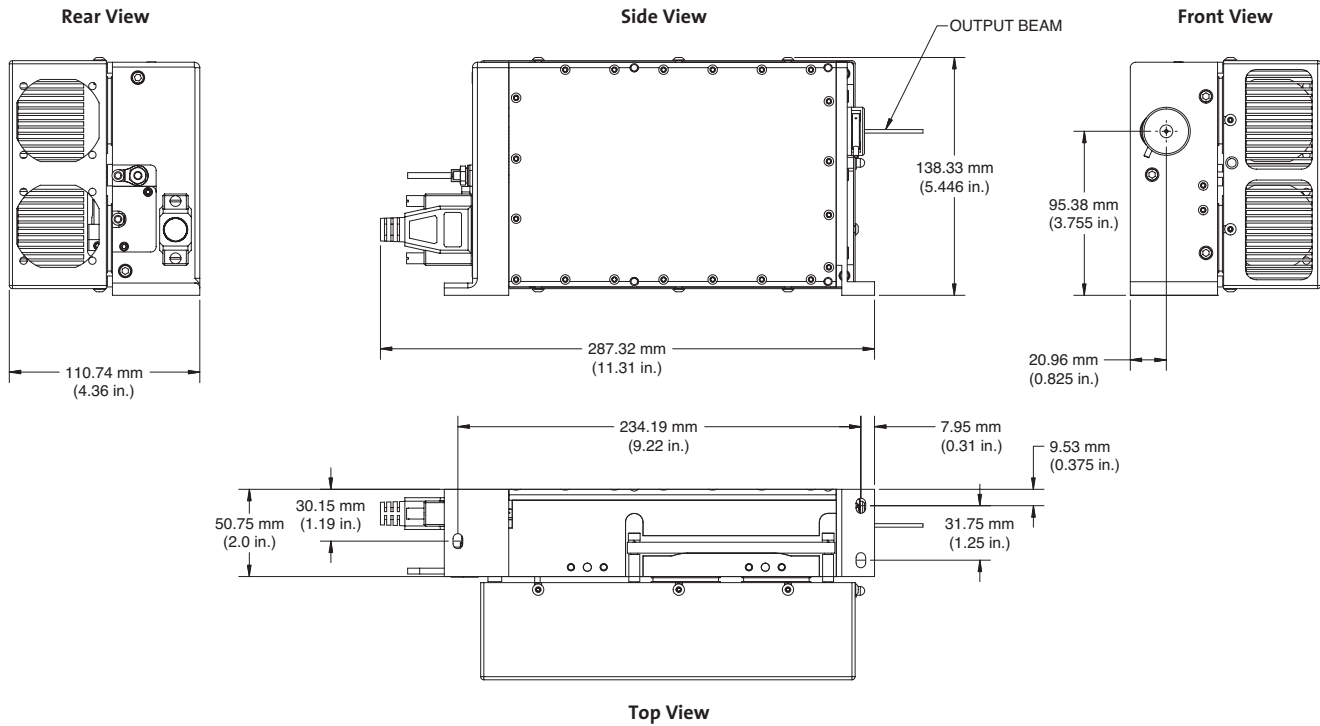


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## Mechanical Specifications

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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 Genesis CX-Series 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.