Genesis MX-Series STM

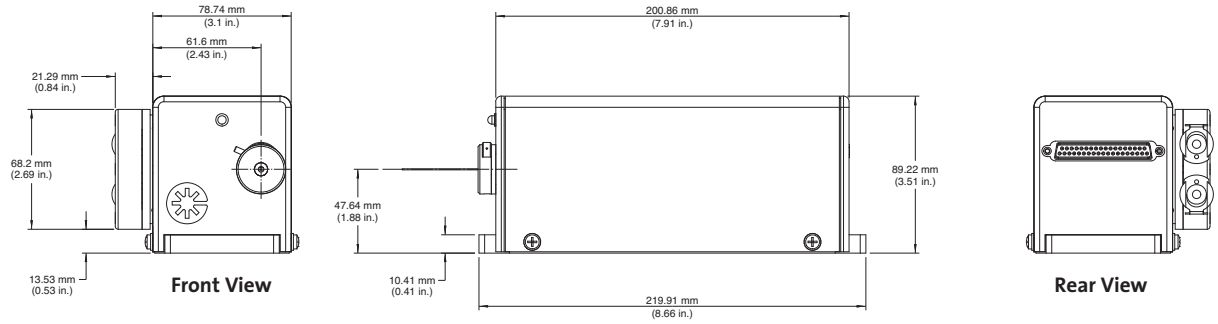
High-Power Optically Pumped Semiconductor Lasers (OPSL)

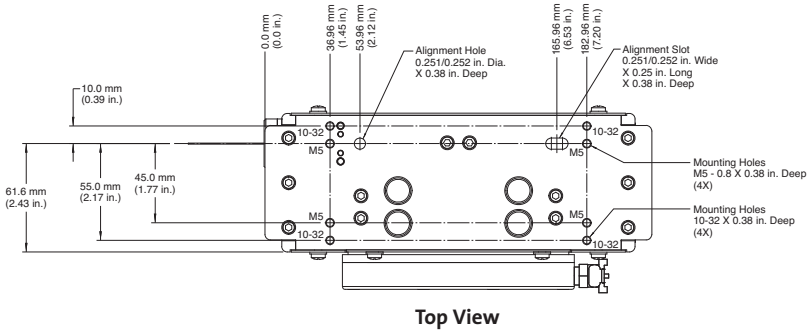
Features

- 500 mW and 1W output power at 532 nm
- End user, turn key solution
- OPSL reliability
- Compact, efficient design
- Low noise performance
- Superior mode quality
- Choice of air or water-cooled solutions

Mechanical Specifications

MX-Series STM
Water-cooled version





Superior Reliability & Performance

Genesis™ MX-Series STM

High-Power Optically Pumped Semiconductor Lasers (OPSL)

	Genesis	MX 532-500/1000
Optical Specifications[1]	Wavelength (nm)	532 ±3
	FWHM Linewidth (GHz)	<30
	Pulse Format	CW
	Spectral Purity (%)	>99
	Output Power[2] (mW)	500, 1000
	Spatial Mode	TEM00
	Beam Quality	<1.1
	Beam Circularity[4]	1.0 ±0.1
	Beam Waist Diameter[1] (mm)(FW, 1/e²)	1.0 ±0.1
	Beam Divergence[1] (mrad)(FW, 1/e²)	<0.7 ±0.1
	Beam Waist Location[1,3] (m)	±0.25
	Beam Pointing Stability[2] (µrad/°C)	<5
	Horizontal Beam Position Tolerance[5] (mm)	±<1.0
	Vertical Beam Position Tolerance[5] (mm)	±<1.0
	Beam Pointing Tolerance[5] (mrad)	<5
	Polarization Ratio	Linear, >100:1
	Polarization Direction	Horizontal, ±5°
	Noise (%, rms)(10 Hz to 10 MHz)	<0.1
	Power Stability[6] (%)(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[7] (%)	5 to 95
	CE Marking	IEC 61010-1/EN 61010-1
	Dimensions (L x W x H)	
	Laser Head[8]	281 x 156 x 85 mm (11.06 x 6.14 x 3.35 in.)
	Cables (laser head to controller)	2m (6.5 ft.)

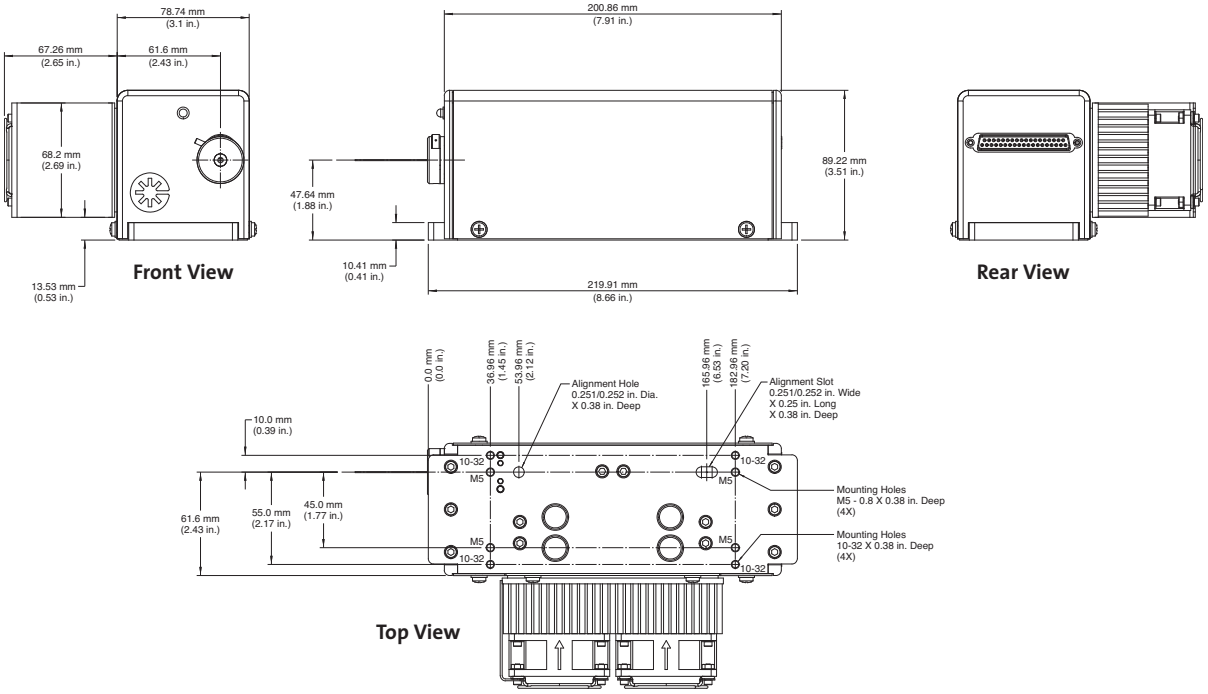
1 Optical parameters measured at the output plane of the laser head. Unless noted all parameters valid for the lifetime of the unit.
2 Circularity defined as vertical diameter divided by horizontal diameter.
3 Negative value corresponds to a location inside head.
4 After 2-hour warm-up.
5 Measured at the output window.
6 Measured over 8 hrs.
7 Non-condensing.
8 Back connector not included in laser head length dimension.

Genesis™ MX-Series STM

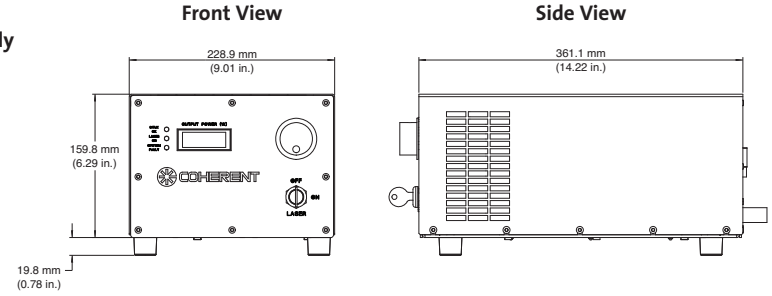
High-Power Optically Pumped Semiconductor Lasers (OPSL)

Mechanical Specifications

MX-Series STM
Air-cooled version



Genesis MX-Series
Benchtop Power Supply



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 MX-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.

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www.Coherent.com

Coherent, Inc.
5100 Patrick Henry Drive
Santa Clara, CA 95054
phone (800) 527-3786
(408) 764-4983
fax (408) 764-4646
e-mail tech.sales@Coherent.com

Benelux +31 (30) 280 6060
China +86 (10) 6280 0209
France +33 (0)1 6985 5145
Germany +49 (6071) 968 333
Italy +39 (02) 34 530 214
Japan +81 (3) 5635 8700
Korea +82 (2) 460 7900
UK +44 (1353) 658 833

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Printed in the U.S.A. MC-022-10-0M0510Rev.A

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