

# Genesis MX 607/639 MTM

High-Power Optically Pumped Semiconductor Lasers (OPSL)



#### **Features**

- End user, turn key solution
- OPSL reliability
- Compact, efficient design
- Optimum wavelengths and power for superior results
- 1250 mW at 607 nm
- 1W and 2W at 639 nm
- Choice of air or water-cooled solutions

#### **Mechanical Specifications MX-Series MTM** Side View Water-cooled version 360.02 mm (14.17 in.) o[..... **© ⊕** 10.41 mm (0.41 in.) **Front View Rear View** Д © 0 0 180.58 mm (7.11 in.) 131.85 mm (5.19 in.) **Top View**

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Optical Specifications <sup>1</sup>	Genesis	Preliminary MX 607-1250	Preliminary MX 639-1000/2000	
	Wavelength (nm)	607 ±3	639 ±3	
	Bandwidth (nm)		<0.5	
	Output Power (mW)	1250	1000, 2000	
	Spatial Mode	Mu	Multimode	
	Beam Quality (M²)		<1.5	
	Beam Waist Diameter <sup>2</sup> (mm)(FW, 1	/e <sup>2</sup> )	0.8	
	Beam Divergence <sup>2</sup> (mrad)(FW, 1/e <sup>2</sup> )		1.4	
	Beam Waist Location <sup>2,4</sup> (m)	±0.25		
	Beam Pointing Stability <sup>3</sup> (µrad/°C)		<10	
	Horizontal Beam Position Tolerance	e <sup>5</sup> (mm)	±<1	
	Vertical Beam Position Tolerance <sup>5</sup> (I	mm)	±<1	
	Beam Pointing Tolerance <sup>5</sup> (mrad)		<10	
	Polarization Ratio Linear, >100:1		ar, >100:1	
	Polarization Direction Horizontal, ±5°		zontal, ±5°	
	Noise RMS (%)(10 Hz to 10 MHz) <sup>8</sup> RMS (%)(10 Hz to 100 kHz) <sup>8</sup>			
	Warm-Up Time (minutes) <10		<10	
	CDRH Compliant			
Electrical Specifications	Operating Voltage (VAC)	100	100 to 240	
	Frequency (Hz)			
	Power Consumption (W)		500	
Environmental Conditions	Ambient Temperature (°C) Operating Non-Operating Relative Humidity <sup>6</sup> (%)	-10	10 to 40 -10 to 60 5 to 95	
	CE Marking	-	IEC 61010-1/EN 61010-1	
	Dimensions (L x W x H)  Laser Head <sup>7</sup> Cables (laser head to controlle	296 x 49 x 71 mm	296 x 49 x 71 mm (11.64 x 1.91 x 2.76 in.) 2m (6.5 ft.)	
	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> Typical value

<sup>3</sup> Measured at the output window: tolerance relative to the nominal center of the output window and perpendicular to the mountaing plane.

<sup>4</sup> Negative value corresponds to a location inside head.

<sup>5</sup> Measured at the output window.

<sup>6</sup> Non-condensing

<sup>7</sup> Back connector not included in laser head length dimension.

<sup>&</sup>lt;sup>8</sup> At operating power.

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## **Mechanical Specifications MX-Series MTM** Air-cooled version **Side View** 360.02 mm (14.17 in.) 62.54 mm (2.46 in.) Œ**©**⊃ b 379.07 mm (14.92 in.) 13.53 mm (0.53 in.) **Front View Rear View** 0 0 0 **Top View** Side View **Genesis MX-Series Front View Benchtop Power Supply** 228.9 mm (9.01 in.)

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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