

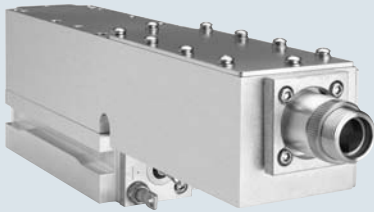


Genesis MX 607/639 STM (OEM)

High-Power Optically Pumped Semiconductor Lasers (OPSL)

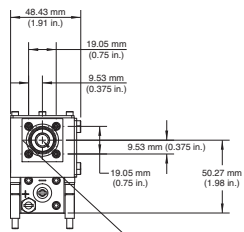
Features

- OPSL reliability
- Compact, efficient design
- Modulation rate to >50 kHz
- Ability to deliver high output powers at unique wavelengths
 - 500 mW at 607 nm
 - 1W at 639 nm
- Low heat load for ease of integration

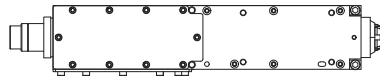


Mechanical Specifications

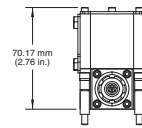
Front View



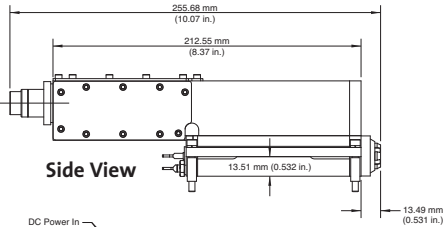
Top View



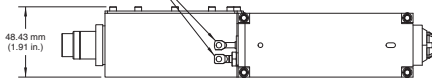
Rear View



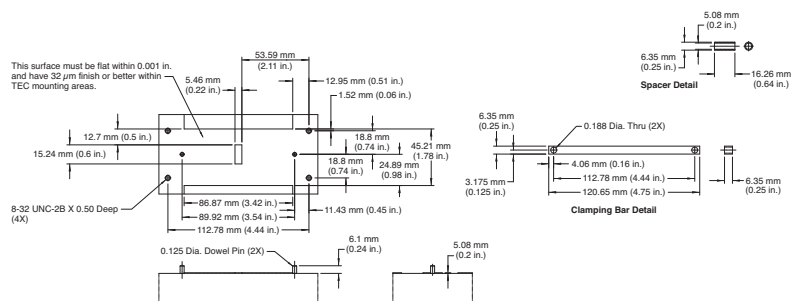
Side View



Bottom View



Base Plate Requirements



Superior Reliability & Performance

Genesis™ MX 607/639 STM (OEM)

High-Power Optically Pumped Semiconductor Lasers (OPSL)

Optical Specifications¹

Genesis	MX 607-500	MX 639-1000
Wavelength (nm)	607 ±1	639.5 ±1
Output Power (mW)	500	1000
Spatial Mode	TEM ₀₀	
Bandwidth (nm)	<0.5	
Collimated Version		
Beam Waist Diameter ² (1/e ² , mm)	1.0	
Beam Divergence ² (1/e ² , mrad)	1.5	
Beam Waist Location ² (m)	0.25 ±0.5	
M ²		
Horizontal	<1.2	
Vertical	<1.2	
Pointing Stability ³ (μrad/°C)	<10	
Noise		
10 Hz to 10 MHz (% rms)	<5	
10 Hz to 100 kHz (% peak-to-peak)	<1	
Polarization Ratio	Vertical, >100:1	
Direct Modulation	Available	

Utility and Environmental Requirements

Operating Diode Current (A)	<27
Maximum Diode Current (A)	<32
Diode Voltage (V)	1.5 to 2.2
Cooling Requirements ⁴	Active cooling required
Case Temperature (°C)	25 ±2
Humidity	Non-condensing
Dimensions (L x W x H)	
Laser Head ⁵	296 x 49 x 71 mm (11.64 x 1.91 x 2.76 in.)
Weight	
Laser Head (g)	900 ±10

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

² Typical value.

³ Measured at the output window: tolerance relative to the nominal center of the output window and perpendicular to the mounting plane.

⁴ Air cooling available with appropriate heat sink and fans.

⁵ Includes collimator.

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 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.



www.Coherent.com

U.S. Patent No. 5,991,318
 U.S. Patent No. 6,167,068
 U.S. Patent No. 6,285,702
 U.S. Patent No. 6,438,153
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