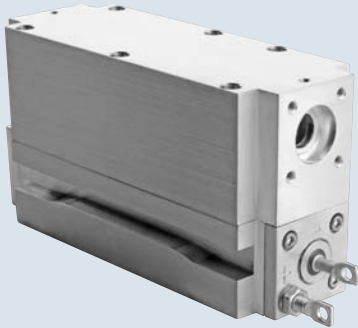




Genesis MX-Series MTM (OEM)

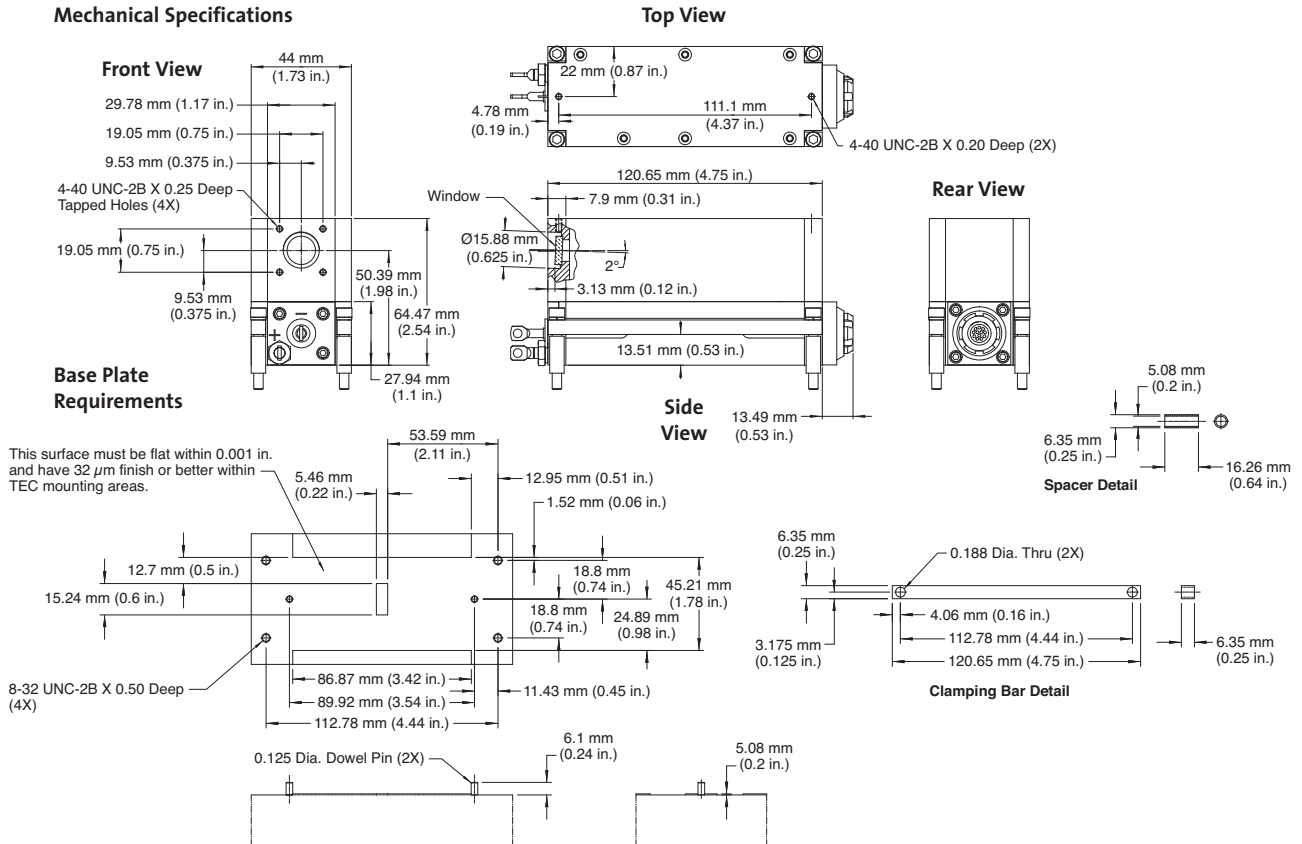
High-Power Optically Pumped Semiconductor Lasers (OPSL)



Features

- OEM laser head designed for easy integration
- OPSL reliability
- Compact, efficient design
- Modulation rate to >50 kHz
- Optimum wavelengths and power for superior results
 - Up to 8W at 532 nm and 5W at 577 nm
 - 532 nm for strong absorption by retinal pigment epithelium
 - 577 nm matches peak absorption in oxyhemoglobin

Mechanical Specifications



Superior Reliability & Performance

Genesis™ MX-Series MTM (OEM)

High-Power Optically Pumped Semiconductor Lasers (OPSL)

Optical Specifications¹

Genesis	MX 532-3000/5000/8000	MX 577-3000/5000
Wavelength (nm)	532 ±3	577 ±3
Output Power (mW)	3000, 5000, 8000	3000, 5000
Spatial Mode	Multimode	
Bandwidth (nm)	<0.5	
Beam Waist Dimensions (mm)		
Horizontal Size ² (FW, 1/e ² , mm)	0.17	
Vertical Size ² (FW, 1/e ² , mm)	0.13	
Location ^{2,3} (mm)	-63	
Beam Divergence		
Horizontal ² (FW, 1/e ² , mrad)	<20	
Vertical ² (FW, 1/e ² , mrad)	<14	
Collimated Version		
Beam Waist Diameter ² (1/e ² , mm)	2.3	
Beam Divergence ² (1/e ² , mrad)	1.5	
Beam Waist Location ² (m)	0.25 ±0.25	
M ²		
Horizontal	<7	
Vertical	<4	
Pointing Stability ⁴ (μrad/°C)	<5	
Noise		
10 Hz to 10 MHz ² (% rms)	<1	
10 Hz to 5 kHz (% peak-to-peak)	<10	
Polarization Ratio	Horizontal, >100:1	
Direct Modulation ⁵	Available	

Utility and Environmental Requirements

Operating Diode Current (A)	<30, <33, <38	<30, <33
Maximum Diode Current (A)	<36, <40, <45	<36, <40
Diode Voltage (V)	1.5 to 2.2	
Cooling Requirements ⁶	Active cooling required	
Case Temperature (°C)	25 ±2	
Humidity	Non-condensing	
Dimensions (L x W x H)		
Laser Head	121 x 44 x 65 mm (4.76 x 1.73 x 2.56 in.)	
Weight		
Laser Head (g)	730 ±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 from the output face, negative value corresponds to a location inside the head; positive outside.

⁴ Measured at the output window; tolerance relative to the nominal center of the output window and perpendicular to the mounting plane.

⁵ Theoretical limit is >1 MHz; actual performance will be limited by the diode-driver (not included).

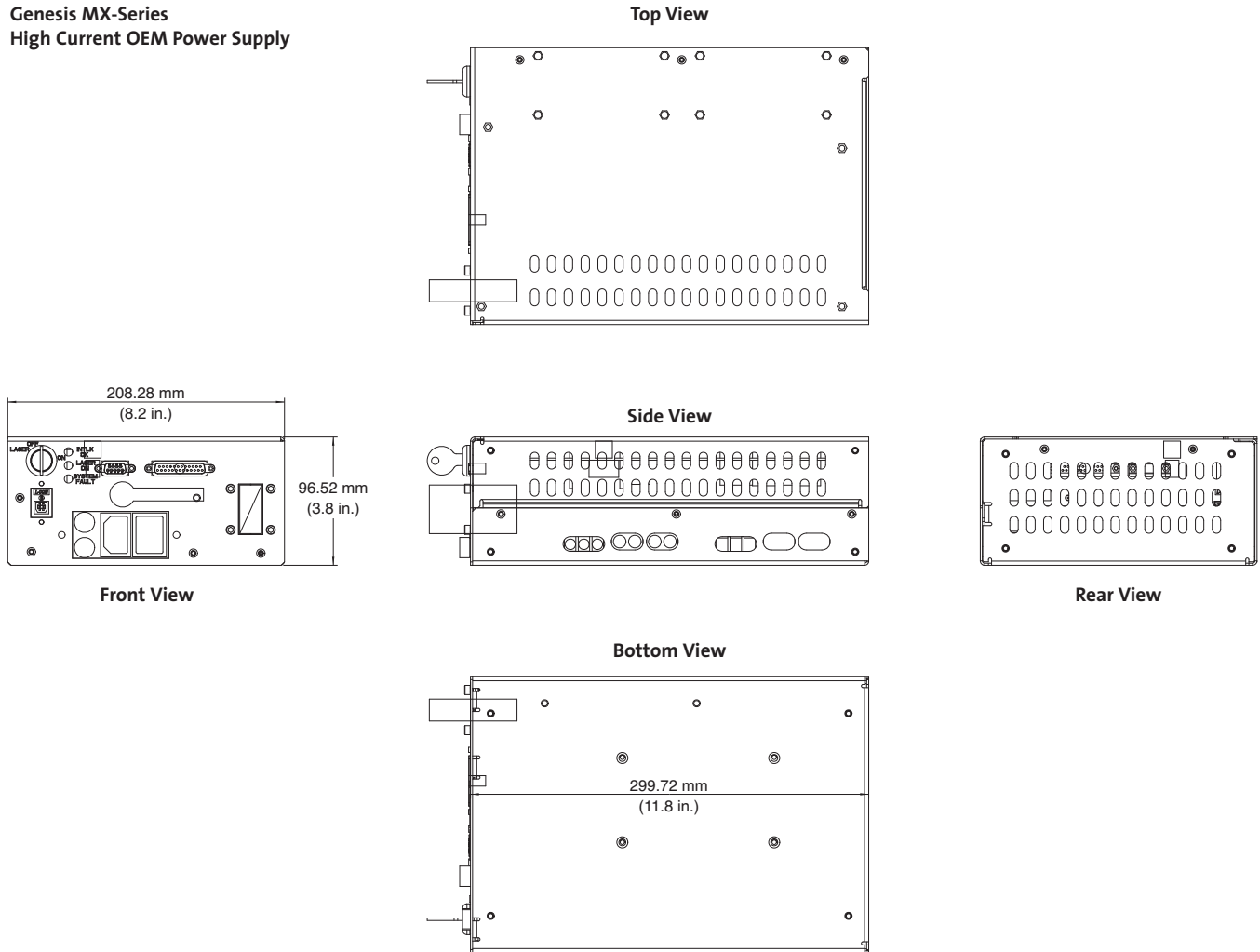
⁶ Contact integration support for options on air-cooling TEC or waterplate.

Genesis™ MX-Series MTM (OEM)

High-Power Optically Pumped Semiconductor Lasers (OPSL)

Mechanical Specifications

Genesis MX-Series High Current OEM 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.



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