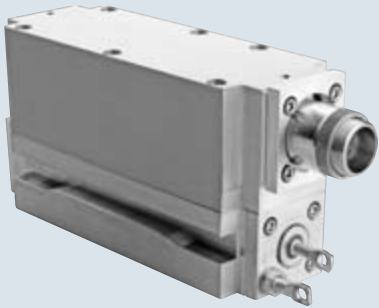




Genesis Taipan 460/480/532/577 M

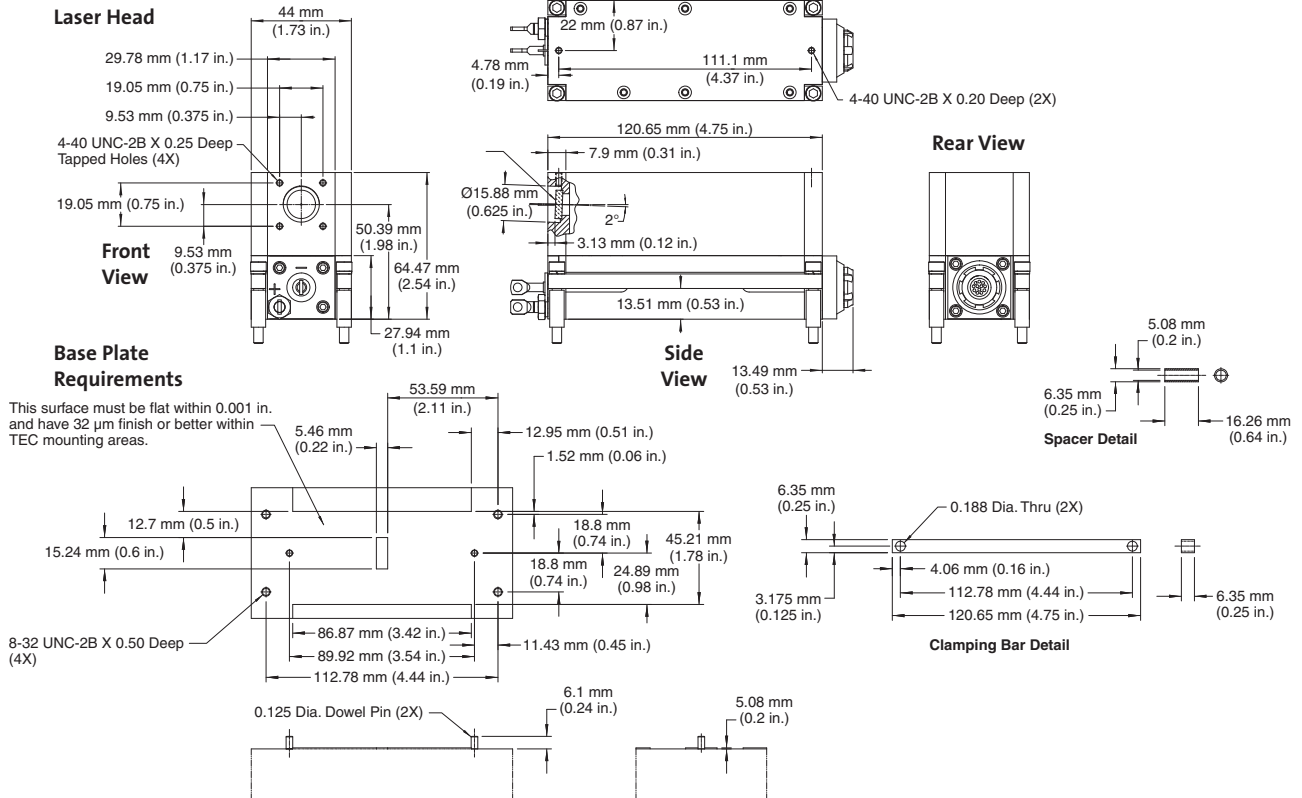
High-Power Optically Pumped Semiconductor Powered CW Laser



Features

- OPSSL reliability
- Compact, efficient design
- Modulation rate to >50 kHz
- Ability to deliver high output powers at unique wavelengths
 - 1W and 2W at 460 nm
 - 1W and 2W at 480 nm
 - 3W, 5W and 8W at 532 nm
 - 3W and 5W at 577 nm
- Low heat load for ease of integration

Mechanical Specifications



Superior Reliability & Performance

Genesis™ Taipan™ 460/480/532/577 M

High-Power Optically Pumped Semiconductor Powered CW Laser

Optical Specifications¹

Wavelength (nm)	460 ±3	480 ±3	532 ±3	577 ±3
Output Power (W)	1, 2	1, 2	3, 5, 8	3, 5
Bandwidth (nm)	<0.5			
Beam Waist Dimensions (mm)				
Horizontal Size ² (FW, 1/e ² , mm)	0.17	0.17	0.17	0.14
Vertical Size ² (FW, 1/e ² , mm)	0.13	0.13	0.13	0.12
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			
M ²				
Horizontal	<6			
Vertical	<4			
Pointing Stability ⁴ (μrad/°C)	<30			
Noise				
10 Hz to 10 MHz ² (% rms)	<1	<1	<1, 0.5, 0.5	<0.5
10 Hz to 5 kHz (% peak-to-peak)	<10			
Polarization Ratio	>100:1, horizontal			
Direct Modulation ⁵	Available			

Utility and Environmental Requirements

Operating Diode Current (A)	<22.5, <27	<22.5, <27	<25, <33, 38	<30, 33
Maximum Diode Current (A)	<27, <32	<27, <32	<30, <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			

Measurement Tools

Meter	FieldMax™-TO
Sensor	PM10

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 Air cooling available with appropriate heat sink and fans.

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.



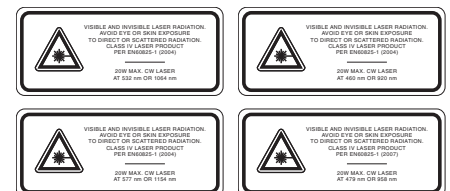
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U.S. Patent No. 5,991,318
 U.S. Patent No. 6,167,068
 U.S. Patent No. 6,285,702
 U.S. Patent No. 6,438,153
 U.S. Patent No. 6,683,901
 U.S. Patent No. 7,180,928

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