



MATRIX 1064 CW

Solid-State, Continuous-Wave Lasers

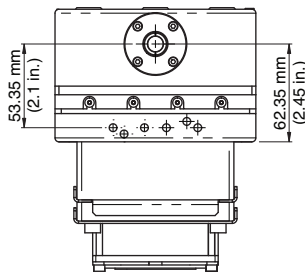


Features

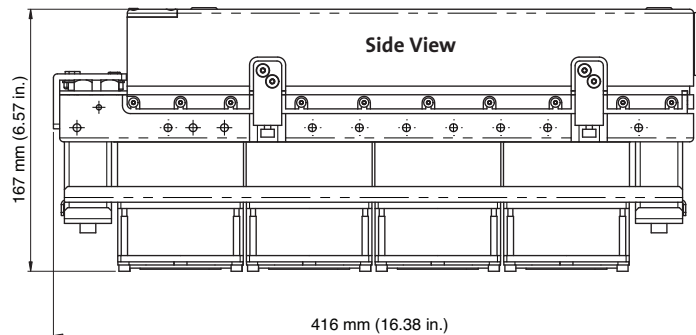
- Superior optical performance
- PermAlign™ solder-bonded optics technology for permanent optimal alignment and ultra-robustness
- AAA™ (Aluminum-free Active Area) pump diodes for unmatched lifetime
- Robot-assisted, clean room built and hermetically sealed
- Compact, air-cooled design for easy OEM integration (water-cooling optional)
- Best reliability, lifetime and unit-to-unit consistency

Mechanical Specifications

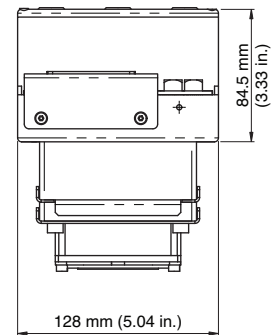
Laser Head



Front View



Side View



Rear View



Top View

Superior Reliability & Performance

MATRIX™ 1064 CW

Solid-State, Continuous-Wave Lasers

System Specifications

	1064-10-CW
Nominal Output Power (W)	10
Recommended Power Range (W)	2 to 10
Divergence (mrad)(full angle at 10W)	<2.7
Beam Waist (μm)(full width at 1/e ² intensity at 10W)	680 ±70
Beam Quality	M ² <1.2/TEM ₀₀
Polarization	Linear >100:1/vertical
Waist Ellipticity	0.9 to 1.1
Noise (rms)(10 Hz to 100 kHz)	<1%
Power Stability (in light loop)(over 8 hours)	±2%
Maximum Heat Load of Laser Head (W)	<300
Temperature Range of Laser Head Base Plate (°C)	15 to 50

Environmental Specifications

Temperature	
Operating	15°C to 40°C
Non-operating	-20°C to 50°C
Altitude	
Operating	0 to 10,000 ft.
Non-operating	0 to 45,000 ft.
Relative Humidity (non-condensing)	
Operating	0 to 90%
Non-Operating	0 to 95%
Shock	
Operating	1g/6 ms EN 60068-2-6
Non-Operating	25g/6 ms EN 60068-2-6

Power Supply Specifications

External Control	RS-232 interface
Input Power Requirements	
Input Voltage	90 to 240 VAC, 50 to 60 Hz
Input Power	750 VA (max.)/350 VA (typ.)

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 MATRIX 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

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