

GEM Select 50

Specialty CO₂ Waveguide Laser



Features

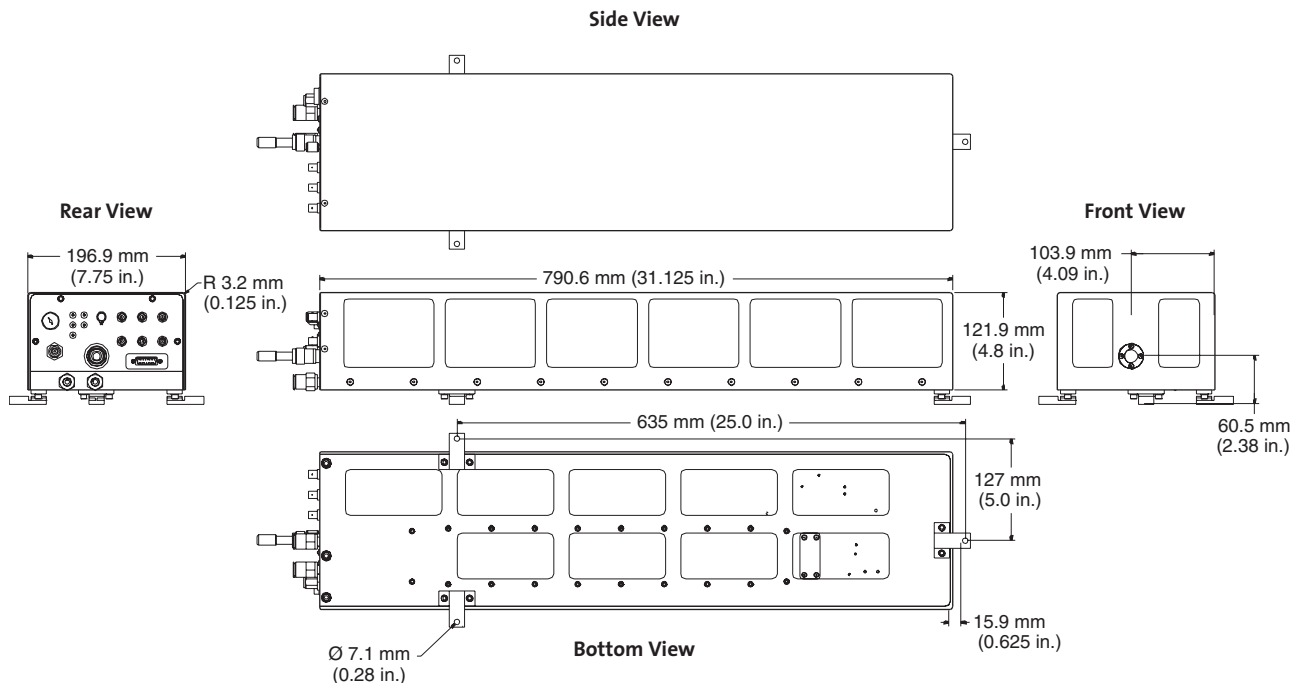
- Compact Size and Lightweight
- Outstanding Beam Quality and Stability
- Permanently Sealed-Off Operation; No Gas Consumption
- Rugged, Field-Proven Design
- All-Metal Seals for Long Life
- Fixed Linear Polarization
- Variable Output Power

Options

- PZT Cavity Tuning
- Tunable or Fixed Wavelength
- Full-Range 9 μm Operation
- Autonomous Frequency/Amplitude Control
- External Modulation Input
- Internal Pointer

Mechanical Specifications

Laser Head



Superior Reliability & Performance

GEM™ Select 50

Specialty CO₂ Waveguide Laser

System Specifications¹	Output Power (W)	>50
	Wavelength (μm)	10.6 nominal
	Mode Quality	TEM ₀₀
	Polarization	Fixed Linear
	Beam Diameter (mm, 1/e ²)	1.7 ±0.2
	Beam Divergence (mrad)	8.3 ±0.6
	Power Stability (%)	±3
Input Specifications²	Electrical	200 to 240 VAC, 50 to 60 Hz, <8A
	Cooling	Water +25% Dow Frost ³ 1.5 GPM / 20°C ±5°C
Physical Specifications	Weight (Laser Head)	18.14 kg (40 lbs.)
	Physical Dimensions (L x W x H)	791 x 197 x 171 mm (31.125 x 7.75 x 6.75 in.)

¹ Performance depends on operating conditions, configuration used, and may vary from system to system.

² Other cooling and power options are available. Contact your nearest Coherent sales representative.

³ Dow Frost is a trademark of the Dow Chemical Company.

Specifications are subject to change without notice. Protected under U.S. patents: 4,363,126, 4,443,877, 4,787,090.
Licensed by PATLEX Corp. under U.S. patent 4,704,583.

Coherent, Inc. warrants to the original purchaser for a period of one year from the date of delivery that the GEM Select 50 is free from defects in material and workmanship. The warranty does not apply to any unit damaged by accident, abuse or operation in a manner inconsistent with the procedures and specifications outlined in the manual supplied with the laser.



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