



Compass 315M

CW Green Lasers

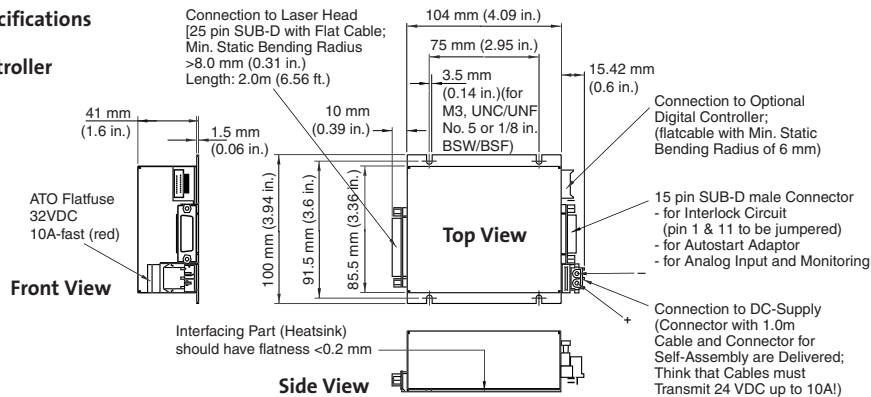
Features

- Highest performance and output power
- Best laser beam parameters
- Proven reliability
- Highest unit-to-unit consistency
- Unsurpassed lifetime

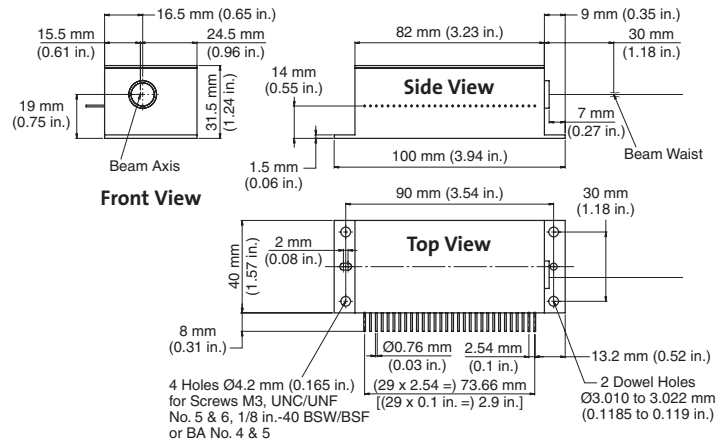


Mechanical Specifications

Analog Controller



Laser Head



Superior Reliability & Performance

Compass™ 315M

CW Green Lasers

Specifications

Wavelength (nm)	532			
Output Power ¹ (mW)	20	50	100	150
Spatial Mode	TEM ₀₀			
Circularity of Beam	>95%, <1.1:1	>95%, <1.1:1	>95%, <1.1:1	>90%, <1.15:1
Beam Diameter @1/e ² (mm)	0.32	0.32	0.32	0.34
Beam Divergence (mrad)	<2.2			
Pointing Stability (μrad/°C)	<6			
Noise (10 Hz to 1 GHz)(rms)	<0.25%			
Long-Term Power Stability (over 8 hours)	<±2%			
Warm-Up Time (min.)	<10			
Polarization Ratio	100:1, vertical			
Static Alignment Tolerances ²				
Beam Position (mm)	±0.1			
Beam Angle (mrad)	±0.5			

Environmental Specifications

Operating Voltage ³ (VDC)	+12 to +28
Power Consumption (W)	<150 (typically 40)
Maximum Laser Head Baseplate Temperature for Conductive Cooling	55°C (131°F) 45°C (113°F) ⁴
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Dimensions (L x W x H)	
Laser Head	100 x 40 x 31.5 mm (4.0 x 1.6 x 1.3 in.)
Analog Controller	100 x 129 x 41 mm (4.0 x 5.1 x 1.6 in.)
Heatsink (optional)	155 x 58 x 40 mm (6.1 x 2.3 x 1.6 in.)
Power Supply (optional)	255 x 126 x 36 mm (10 x 4.6 x 1.4 in.)
Cable—Laser Head to Controller	2 m (6.6 ft.)
Weights	
Laser Head	0.33 kg (0.73 lbs.)
Analog Controller	0.38 kg (0.83 lbs.)
Heatsink (optional)	0.50 kg (1.1 lbs.)
Power Supply (optional)	1.66 kg (3.66 lbs.)
Cable—Laser Head to Controller	0.52 kg (1.15 lbs.)

Measurement Tools

Detector	FieldMax-TO
Sensor	OP-2VIS

¹ Output power is variable via analog controller or optional digital controller. Specifications are valid for nominal power. Recommended power range is 60-100% of nominal power.

² Static alignment tolerances are relative to fitting holes in base plate.

³ The power supply must meet the following requirements.

DC Voltage +12V to +28V
Power 150W
Ripple <5% peak-to-peak

⁴ For Compass 315M-150 only.

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 Compass 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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