



RAPID

High-Power Industrial Picosecond Laser

Features

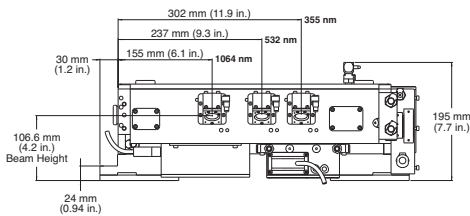
- 6W at 1064 nm and 1000 kHz
- Pulse on demand
- Burst mode
- High beam quality $M^2 < 1.3$
- Superior beam parameter and pointing stability across the complete PRF range
- Industry approved
- Low maintenance



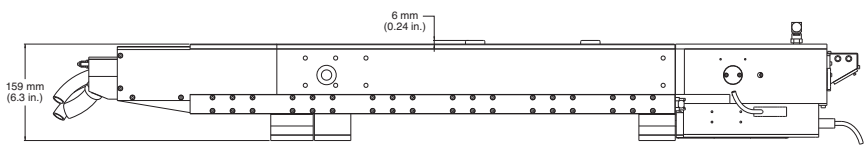
Mechanical Specifications

Laser Head

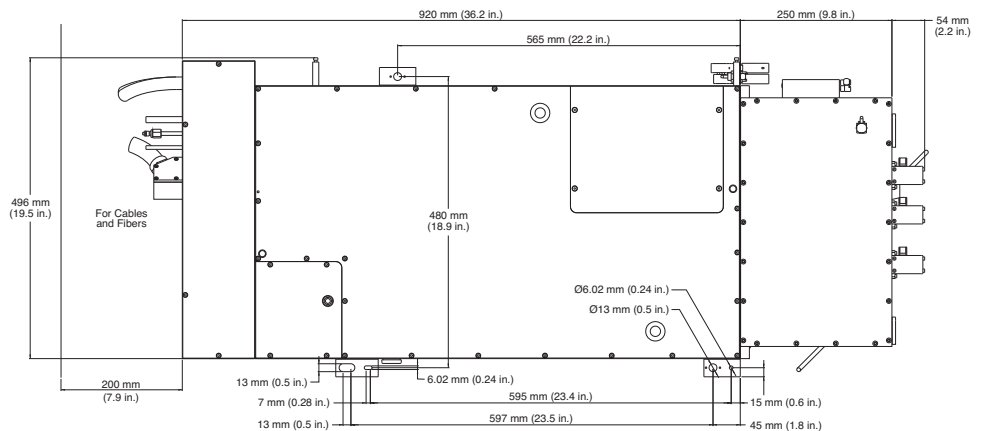
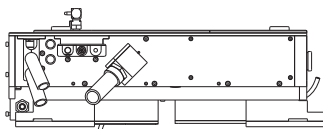
Front View



Side View



Rear View



Top View

Superior Reliability & Performance

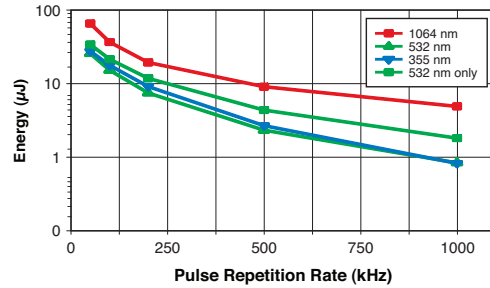
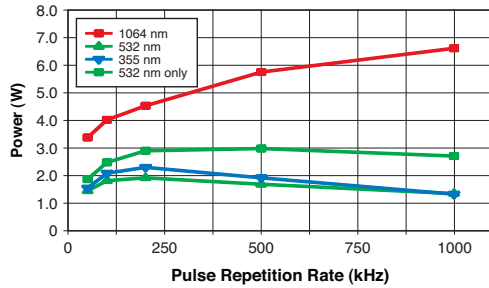
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System Specifications

Wavelength (nm)	1064 nm (532 nm and 355 nm optional)			
Pulse Repetition Rate (kHz)	0 to 1000			
Spatial Mode	TEM ₀₀ (M ² <1.3)			
Pulse Duration (ps)	<10			
Pulse-to-Pulse Energy Stability (% rms)	<1 at 1064 nm and 500 kHz			
Average Power Stability over 8 hours (% rms)	<1 at 1064 nm and 500 kHz			
Polarization Ratio	>>100:1			
Beam Divergence, Full Angle (mrad)	<2			
Beam Circularity (%)	>85			
Beam-Pointing Stability in Full PRF Range (μrad/°C)	<50			
Electric Supply	100 to 230 VAC/50 to 60 Hz			
Beam Diameter	~1000 μm at 1064 nm			
Bore-Sight Accuracy	±0.5 mm and <5 mrad			
Warm-Up Time (minutes)	<40 from chiller start			
Repetition Rate (kHz)	Average Power (W)			
	1064 nm	532 nm only	355 nm	532 nm
100	3	2	1.2	1.4
200	5	2.2	1.5	1.5
500	5	2.5	1.3	1.3
1000	6	2	1	1
Repetition Rate (kHz)	Pulse Energy (μJ)			
	1064 nm	532 nm only	355 nm	532 nm
100	40	20	12	14
200	25	11	7.5	7.5
500	10	5	2.6	2.6
1000	6	2	1	1

Typical Data



Coherent follows a policy of continuous product improvement. Specifications are subject to change without notice.

Coherent offers a limited warranty for all RAPID 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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