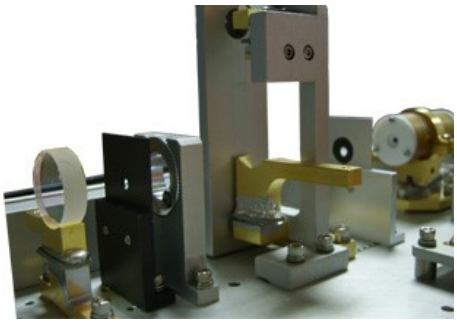
AVIA Solid-State Q-Switched Laser
Coherent Avia 532-30, Avia 532-38, Avia 532-45

Laser Innovations offers sales, service and support for your Coherent Avia Laser System. We service all of the 532nm Avia Laser Systems as well as the 355nm Avia Laser Systems. We even support older Avia Systems discontinued by Coherent.



Verdi V2
Verdi V5
Verdi V6
Verdi V8
Verdi V10
Verdi V12
Verdi V18

Viper V5
Viper V8
Viper V10

Specifications:

AVIA LASER

	AVIA 532-30[1]	AVIA 532-38[2]	AVIA 532-45[3]
Wavelength	532 nm		
Output Power	≥ 30W	≥ 38W	43W @ 90 kHz 45W @ 120 kHz 41W @ 150 kHz 37W @ 180 kHz
Output Power Stability (average over 8 hours)	< ±2%		

Pulse

Repetition Rate Nominal Optimized	Single Shot to 300 kHz 120 to 150 kHz 120 kHz
Pulse Width	< 60 ns
Pulse-to-Pulse Energy Stability	< 5% rms 1σ

Beam

Divergence, Full Angle (ref. baseplate temp.)	< 0.4 mrad

Spatial Mode	TEM_{00} (M^2 < 1.3)	
Pointing Drift (ref. baseplate temp.)	< 25 µrad/°C	
Polarization Ratio	> 100:1 Horizontal	
$1/e^2$ Beam Diameter	3.5 ± 0.35 mm	
Circularity	> 85%	
Bore-sight Accuracy (ref. mounting features on head)	±1 mm & ±10 mrad	
Beam Exit Location (XY ref. bottom/left baseplate)	5.46 x 5.02 in (138.68 x 127.51 mm)	

Operating Conditions

Warm-up time (typical) Stand-By Cold Start	 < 15 min < 40 min	
Ambient Temperature During operation Power off, short term	 +15°C to +35°C -25°C to +65°C	 +10°C to +30°C -25°C to +65°C
Relative Humidity (non-condensing)	10 to 80%	
Cooling - Power Supply	Air-Cooled	
Cooling - Laser Head Flow Rate, recommended Temperature, recommended	 Water-cooled 1.5 to 2.0 gal/min (5.7 to 7.6 l/min)	Water-cooled 1.5 to 2.0 gal/min (5.7 to 7.6 l/min) 18°C to 22°C
Heat Load (max) Laser Head Power Supply	 800W 400 W	 900W 800 W

Electrical

Voltage (auto-ranging) Single-Phase, 3-Wire	100 to 240 VAC	
Frequency (auto-ranging)	50 to 60 Hz	
Power Consumption	800 to 1300 W	900 to 1700 W

Mechanical

Weight Laser Head Power Supply	 110 lb (50 kg) 55 lb (25 kg)
Umbilical Length	15 ft (4.6 m)
Dimensions, approx. for shipping (LxWxH) Laser Head (w/o umbilical) Power Supply	 50 x 11 x 12 in (127 x 28 x 31 cm) 22 x 20 x 10 in (56 x 51 x 26 cm)

[1] All tests measured at 120 kHz and an output power of 30 W, unless specified otherwise.
[2] All tests measured at 120 kHz and an output power of 38 W, unless specified otherwise.
[3] All tests measured at 120 kHz and an output power of 45 W, unless specified otherwise.

Specifications are for reference only and do not constitute warranty specifications on serviced lasers by Laser Innovations.

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