

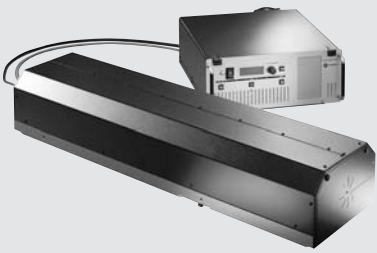


# Paladin Advanced 532

## Mode Locked Laser

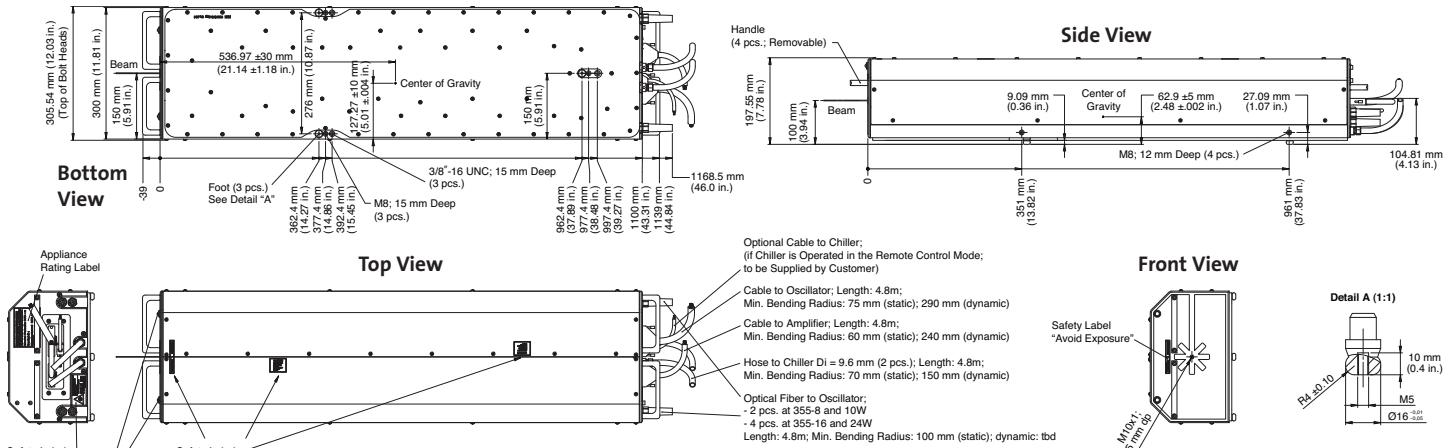
### Features

- 20W at 532 nm
- PermAlign™ solder-bonded optics technology for permanent optimal alignment and ultra-robustness
- Aluminum-free Active Area (AAA™) pump diodes for industry-leading lifetime
- Cleanroom-built and hermetically sealed for long-term reliability
- Compact and modular laser design for easy integration
- Smart power supply for complete hands-free operation
- Highest efficiency

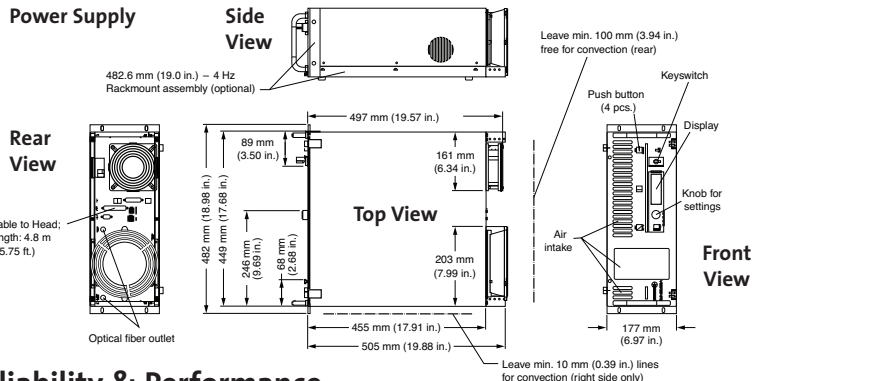


### Mechanical Specifications

#### Laser Head



#### Power Supply



Superior Reliability & Performance

# Paladin™ Advanced 532

## Mode Locked Laser

### System Specifications

#### Paladin Advanced 532-20000

Wavelength (nm)	532
Output Power <sup>1</sup> (W)	20
Repetition Rate (MHz)	80 ±1
Pulse Length (ps)	>10
Spatial Mode	TEM <sub>00</sub>
M <sup>2</sup>	<1.2
Beam Diameter (mm)	1 ±15%
Beam Divergence (μrad)	0.65 ±15%
Beam Ellipticity	0.85 to 1.15
Pointing Stability (μrad/°C)	<20
Polarization	linear >100:1, vertical
Noise (10 Hz to 2 MHz)	<1% (rms)
Long-term Power Stability	<±2%
Maximum Warm-up Time	
From Standby (minutes)	<15
From Cold Start (hours)	<1
Static Alignment Tolerances <sup>2</sup>	
Beam Position (mm)	<±0.5 (x,y)
Beam Angle (mrad)	<±2.5

### Utility and Environmental Requirements

Operating Voltage	90 to 230 VAC, 50 to 60 Hz		
Power Consumption	<b>Maximum</b>	<b>Operation (typical)</b>	<b>Standby (typical)</b>
Power Supply	1000 VA	500 VA	200 VA
Chiller	1000 VA	500 VA (22°C ambient)	500 VA (22°C ambient)
Ambient Temperature <sup>3</sup>			
Operating Conditions	15 to 35°C (59 to 95°F)		
Non-Operating Conditions	-25 to 60°C (-13 to 140°F)		
Dimensions (W x H x L)			
Laser Head	305 x 200 x 1100 mm (12 x 7.9 x 43.3 in.) +300 mm for fibers & connectors		
Power Supply	482 x 177 x 505 mm (19 x 7 x 19.9 in.), 19 in., rack-mountable		
Chiller	482 x 177 x 560 mm (19 x 7 x 22 in.), 19 in., rack-mountable		
Pump Fiber's Length	5m (16.4 ft.)		
Weights			
Laser Head	50 kg (110 lbs.)		
Power Supply	30 kg (66 lbs.)		
Chiller	38 kg + 3 liters coolant (84 lb. + 0.7 gal.)		

<sup>1</sup> Fixed power.

<sup>2</sup> Relative to laser mount.

<sup>3</sup> Head temperature is stabilized to ±0.5 35°C by the chiller.

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 Paladin Advanced 532 lasers. For full details of this warranty coverage, please refer to the Service section at [www.Coherent.com](http://www.Coherent.com) or contact your local Sales or Service Representative.



[www.Coherent.com](http://www.Coherent.com)

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