### New vi30+CO2 Laser

Industry leading laser with more than 30 Watts of average power for marking, engraving, and ablating applications

### Next gen high performance CO<sub>2</sub> laser engineered for seamless integration into high-speed industrial equipment

- Gen2 design provides excellent thermal management to deliver stable, high power output and crisp beam quality for precise processing
- Fast rise/fall times enable high speed engraving, marking, and coding applications for high-volume manufacturers and processors
- Multiple cooling options for greater integration flexibility while maintaining optimal performance
- Uniform results from machine start through laser warm-up with excellent power stability
- Large dynamic range for marking and coding a wide variety of materials with stable power output, even at low duty cycles
- Compact, lightest 30W CO<sub>2</sub> laser available, easily fits into tight spaces and onto weight sensitive systems



### **New 2 Year Warranty**

Synrad provides 2-year standard warranty service for the vi30+ through a network of Synrad Service Centers (SSC) and Synrad Authorized Service Centers (SAC). Standard warranty service is performed by Laser Service Specialists using Synrad approved parts.

### Specifications

Output Specifications			
Wavelength	9.3 µm	10.2 µm	10.6 µm
Output Power <sup>1</sup>	>20 W	>25 W	>30 W
Power Stability <sup>2</sup> (typical, after 3 min.)	<u>+</u> 5% <u>+</u> 3%		
Beam Quality (M <sup>2</sup> )	<u>&lt;</u> 1.2		
Beam Diameter <sup>3</sup>	2.5 mm <u>+</u> 0.5 mm		
Divergence (full angle)	<7.0 mrad		
Ellipticity	<1.2		
Polarization	Linear (Horizontal)		
Rise Time	<100 µs		
Operating Frequency	0 - 100 kHz		
Power Supply			
DC Input Voltage	48 VDC		
Maximum Current	10 A		
Cooling			
Maximum Heat Load	480 W		
Maximum Chassis Temperature	60° C		
Minimum Flow Rate	140 CFM, 2 required (air)		
Environmental			
Operating Ambient Temperature	15 - 40° C		
Maximum Humidity	95%, non-condensing		
Physical			
OEM Air Cooled Dimensions (LxWxH) mm (inches)	427 x 89 x 139 (16.8 x 3.5 x 5.5)		
Weight kg (lbs)	6.5 (14.3)		

 Power level guaranteed for 2 year from date of shipment, regardless of operation hours, within recommended coolant flow rate and temperature range.
Measured as ±(P<sub>max</sub>-P<sub>min</sub>)/(P<sub>max</sub>+P<sub>min</sub>)

3 - Measured 1/e<sup>2</sup> diameter at laser output.

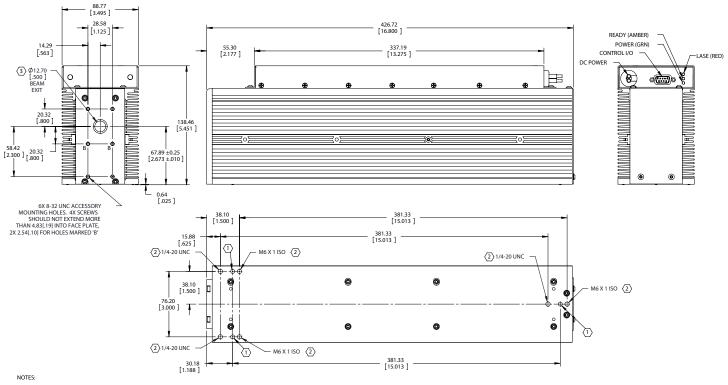




## vi30+CO2 Laser

### Technical Illustrations dimensions are in mm (inches)

Outline and mounting drawings for tall, wide, and water-cooled models are available on the Synrad website at: https://www.synrad.com/products/lasers/vi-series.



1 HARDENED BALL MOUNTING POINT, 3X (Ø.1875 BALL BEARING).

2 THIS MOUNTING HOLE PATTERN USED FOR BOTTOM ACCESS FASTENING.

 $\langle \overline{3} \rangle$  BEAM PATH MAY NOT BE CENTERED OR PERPENDICULAR TO FACE PLATE APERTURE.

### Recommended Applications



100 kHz pulse frequency for accurate raster image scanning at high speeds.



Powerful, accurate laser output that can be used on a wide variety of materials.

# Coding

Small footprint, light weight, and high resolution imagery engineered to fit a wide variety of automated manufacturing systems.

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