

vi30 CO₂ Laser

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

Next gen high performance CO₂ laser engineered for seamless integration into high-speed industrial equipment

- Gen2 tube 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
- 30W continuous power for faster throughput
- Industry best maximum operating environment temperature ensures reliable operation in a wide range of conditions
- Compact, lightest 30W CO₂ laser available, easily fits into tight spaces and onto weight sensitive systems



Gen2 Tube Design

The vi30 architecture features the new Gen2 tube design for lower thermal resistance to deliver more power from a compact package. The vi30's stable, accurate beam creates detailed application results, and ensures proper marking depth without external correction optics. Throughput speed has also been improved with fast rise/fall times, especially useful in high-speed, high-volume coding applications.



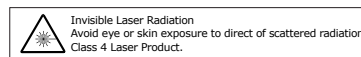
Specifications

Output Specifications			
Wavelength	9.3 μm	10.2 μm	10.6 μm
Output Power ¹	>20 W	>25 W	>30 W
Power Stability (cold start) ²	±7%	±5%	
Power Stability (typical, after 3 min.)	±5%	±3%	
Beam Quality (M ²)	≤1.2		
Beam Diameter ³	2.5 mm ± 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	500 W		
Coolant Temperature	45° 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)		

1 - Power level guaranteed for 1 year from date of shipment, regardless of operation hours, within recommended coolant flow rate and temperature range.

2 - Measured from cold start as $\pm(P_{max} - P_{min}) / (P_{max} + P_{min})$

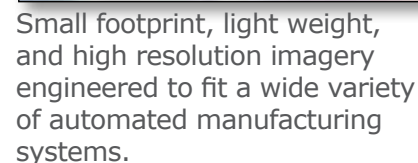
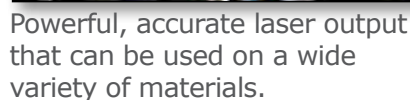
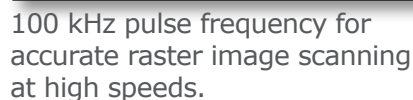
3 - Measured 1/e² diameter at laser output.



SYNRAD

A Novanta Company

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>.



Novanta Japan Co., Ltd.
4666 Ikebe-cho Tsuzuki-ku
Yokohama Kanagawa 224-0053 Japan
P +81 3 5753 2462
F +81 3 5753 2467
sales-japan@synrad.com

SYNRAD
A Novanta Company