

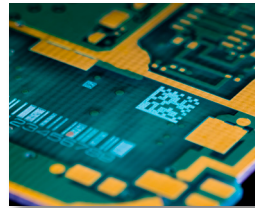
32-1 CO₂ LASER - DATA SHEET

Ultra compact laser with 5 Watts of average power for precise marking and coding applications



High performance CO₂ laser engineered for easy integration and mounting onto compact industrial systems

- The only industrial 5 Watt CO₂ laser with an integrated RF to ensure a minimal form factor
- Easily fits into tight spaces and onto weight-sensitive marking and coding systems
- Outstanding maximum operating environment temperature (up to 40° C) ensures reliable operation in a wide range of conditions



The perfect ultra-compact, low-power CO₂ laser source for PCB marking and coding applications.

Versatile low-power CO₂ laser source that delivers clean, consistent results on a variety of materials.



The 32-1 shown side-by-side with the 48-1 laser. The 32-1 is 34% smaller and 22% lighter than the 48-1.

NOVANTA'S SMALLEST LASER

At a fraction over 284 mm (11 inches) long and only 71 mm (2.8 inches) wide, the 32-1 is Novanta's smallest laser. Engineered for compact laser processing systems, the 32-1 easily fits into desk-top sized models. At 3.18 kg (7 lbs.) the 32-1 adds minimal weight, maintains portability, and can easily be integrated into small systems. Built to operate reliably, the ultra compact 32-1 delivers a high quality laser beam in the most demanding conditions.

RECOMMENDED APPLICATIONS



The perfect ultra-compact, low-power CO₂ laser source for PCB marking and coding applications.



Easily applies permanent alpha numeric codes, barcodes, text, and expiration dates to a variety of packaging materials that will not smear or rub off.



Apply permanent marks, text, and codes to variety of parts (both big and small) for faster, easier tracking.

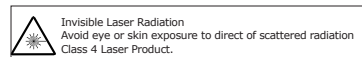
32-1 CO₂ LASER - SPECIFICATIONS

Output Specifications	
Wavelength	10.6 μm
Output Power ¹	>5 W
Power Stability (cold start) ²	±15%
Beam Quality (M ²)	<1.2
Beam Diameter ³	2.5 mm ± 0.5 mm
Divergence (full angle)	≤ 8.0 mrad
Ellipticity	<1.2
Polarization	Random
Rise Time	<150 μs
Operating Frequency	0 - 25 kHz
Power Supply	
DC Input Voltage	30 VDC
Maximum Current	4.0 A
Cooling	
Maximum Heat Load	150 W
Minimum Flow Rate	150 CFM, 2 required (air)
Environmental	
Operating Ambient Temperatures	5 - 40° C
Maximum Humidity	≤80% RH, non-condensing
Physical	
Dimensions (LxWxH) mm (inches)	284 x 71 x 106 (11.2 x 2.8 x 4.2)
Weight kg (lbs.)	3.18 kg (7.0 lbs.)

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

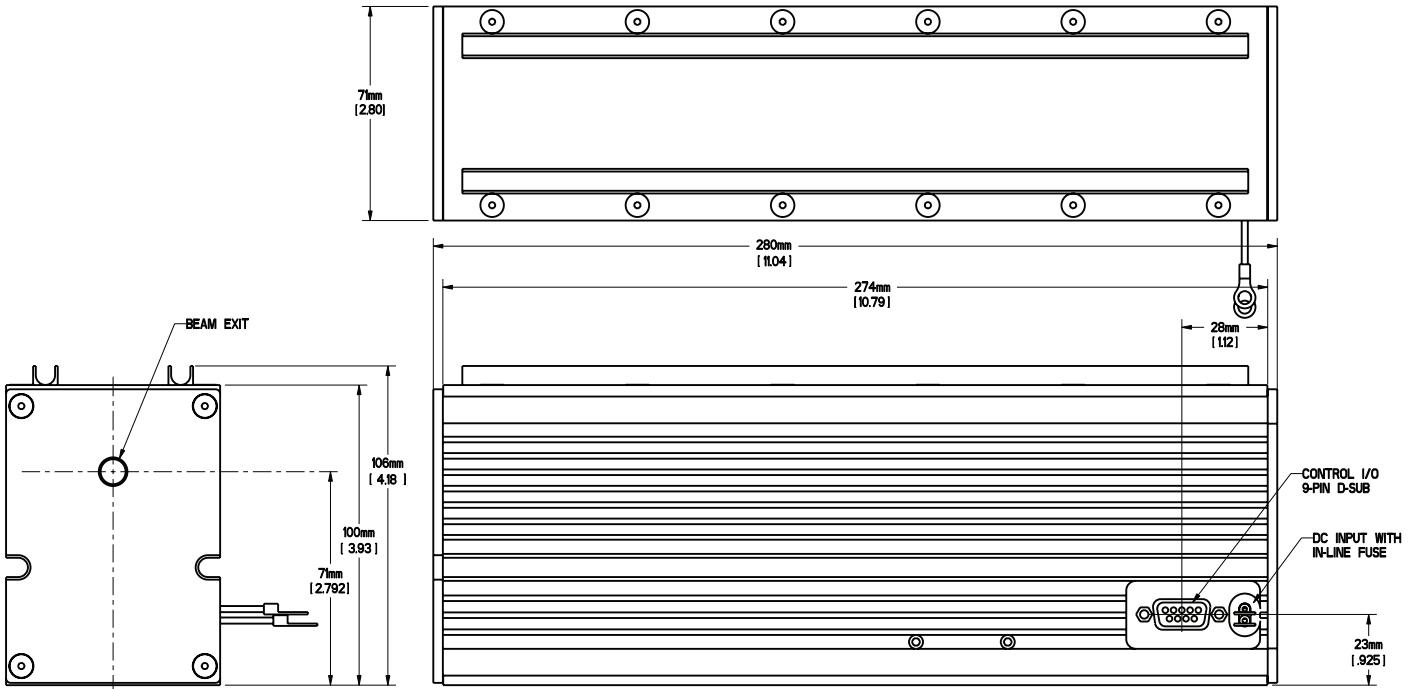
2 - Measured from cold start as $3(P_{max}-P_{min})/(P_{max}+P_{min})$

3 - Measured 1/e² diameter at laser output.



32-1 CO₂ LASER - Outline and Mounting Illustrations

dimensions are in mm (inches)



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