IRADION
Ceramic Core CO_2 Lasers

INFINITY 9.3 HS SERIES

CERAMIC CO_2 LASER

Iradion **Infinity 9.3 HS Series** patented laser design hermetically seals the CO_2 laser gas in a monolithic ceramic core resonator, and energizes it with the latest RF electronics. The compact, integrated package achieves exceptional performance and long-term reliability.

SPECIFICATIONS:

Model Infinity	i50HS	i60HS	i80HS	i100HS
Rated Optical Power (W)	50	60	80	100
Mode Quality (M^2)	≤ 1.2			
Beam Ellipticity	< 1.2:1			
Beam Diameter (mm), $1/e^2$ @ 0m	2.5 ±0.5			
Beam Divergence (mrad, Full angle)	<7			
Wavelength (µm)	9.3	9.3	9.3	9.3
Rise Time (µs)	<40			
Power Stability after 5 min. Fan (Water)	<±4% (<±1.5%)			
Polarization	Linear			
Cooling	Fan / Water			
Input power / Heat Load (Watts)	900	1000	1125	1500
Input Voltage, Current	36V / 25A	40V / 25A	45V / 25A	48V / 30A
Frequency Range (kHz)	0.1 - 140			
Operating Temperature ˚C (˚F)	5 - 40 (40 - 104)			
Operating Humidity	Non-Condensing			
Shipping Temperature ˚C (˚F)	-10 - 60 (14 - 140)			
Weight (kg / lbs.)	14.7 / 32.4			
Dimensions L x W x H (mm)	618.00 x 200.23 x 156.97			

*Power Stability is measured after 5 minutes warmup.
Specifications are typical and subject to change without notice

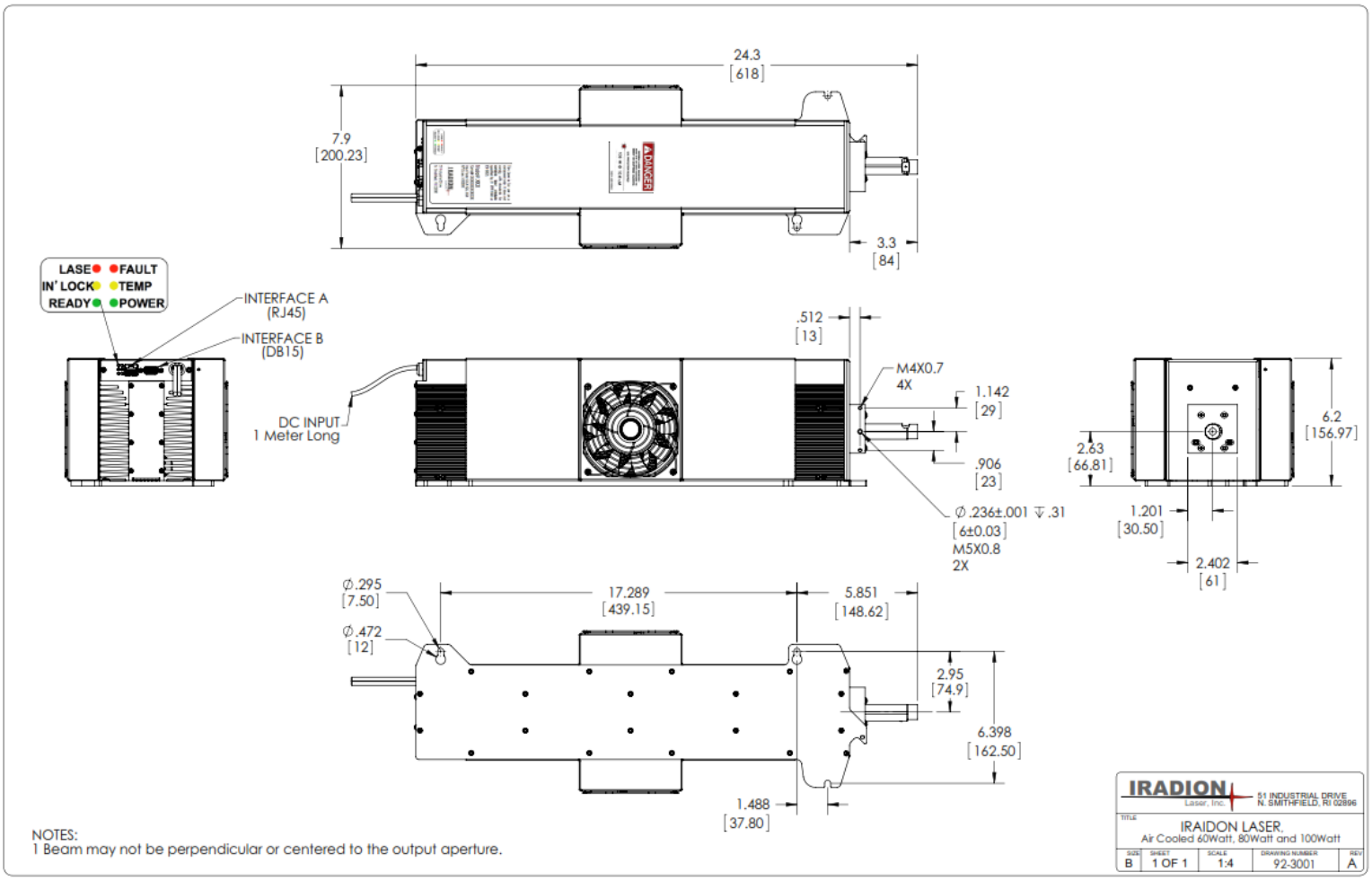
FEATURES & BENEFITS

- Patented Ceramic Core Design - excellent beam quality
- Aluminum Oxide Ceramic - no leakage or metal contamination
- Low Thermal Expansion - enhanced laser power and beam pointing stability
- Expanded Power Stability - consistent from 2% to maximum power
- 30% Fewer Laser Components - higher reliability
- Good Pulsing Characteristics – short rise and fall times
- Fast Driver Electronics - single-chip design, reliable, efficient and state of the art
- 9.3 Micron Wavelength – high speed processing of labels, optical films, etc.

APPLICATIONS

- Kiss Cutting
- Perforating Films
- Marking/Coding
- Engraving/Etching
- Ablation
- Many more…

MECHNICAL DIMENSIONS:



***Note the drawing above is of an Infinity Fan cooled laser.**

Patents: US 7460577 B2, US 8295319 B2
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