IRADION
Ceramic Core CO_2 Lasers

ETERNITY SERIES

CERAMIC CO_2 LASER

Iradion **Eternity 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 Eternity	E25	E30	E40
Rated Optical Power (W)	25	30	40
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	10.2, 10.6	10.2, 10.6
Rise Time (µs)	<90		
Power Stability, Fan	<± 5%		
Polarization	Random		
Cooling	Fan		
Input power / Heat Load (Watts)	580	580	720
Input Voltage, Current	48V / 12A	48V / 12A	48V / 15A
Frequency Range (kHz)	0.1 -140 kHz		
Operating Temperature ˚C (˚F)	5 - 40 (40 - 104)		
Operating Humidity	Non-Condensing		
Shipping Temperature ˚C (˚F)	-10 - 60 (14 - 140)		
Weight (kg / lbs.)	9 / 20		
Dimensions L x W x H (mm)	323.8 x 174.0 x 138.4		

*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 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

APPLICATIONS

- Cutting/perforating
- Marking/coding
- Engraving/etching
- Wire Stripping
- Fiber optic splicing
- Medical surgery

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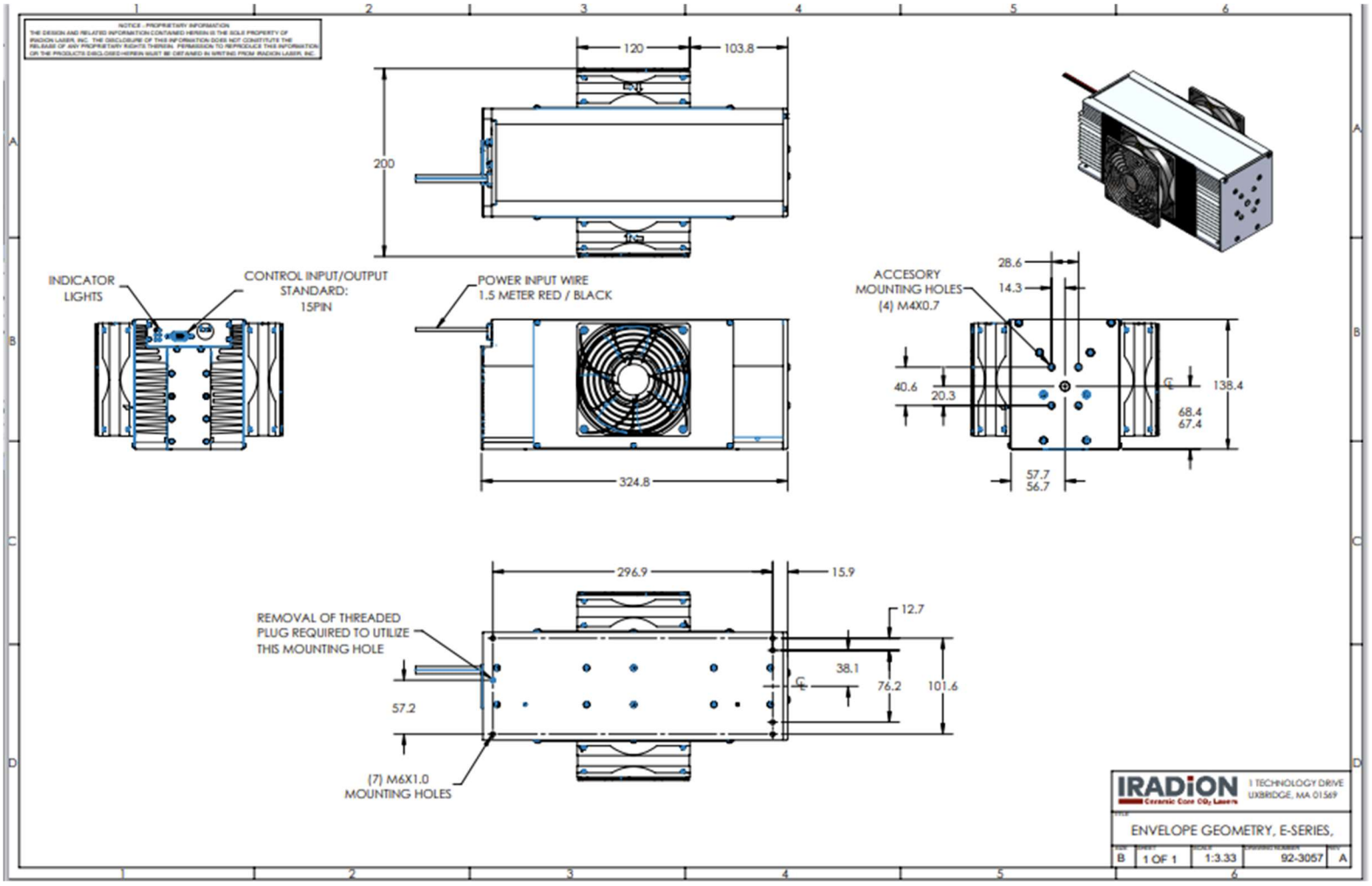
MECHNICAL DIMENSIONS:



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

Patents: US 7460577 B2, US 8295319 B2

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