

# Iradion® E Series

Ceramic CO2 Lasers, Model E40/E30/E25



The **Iradion E** laser series combines the exceptional performance of a monolithic ceramic resonator with the latest RF design into a single integrated package. The result is a compact, efficient, and powerful laser with fast rise and fall time and great optical characteristics.

<b>Feature</b>	<b>Benefit</b>
Pure ceramic	No contamination, no leaks
Low thermal expansion	Enhanced laser stability
Fast driver electronics	Quick rise and fall time
High efficiency	Air cooled up to 40 Watts
30% fewer parts	Higher reliability
Adjustable power <1 Watt to MAX	Flexibility
Long lifetime	No need to ever refill tube
OEM configurations available	Optimized for your application

### Options available:

- Beam Expander
- Laser Diode Pointer

## Specifications:

E Series Model	E25	E30	E40
Rated Optical Power (Watts)	25	30	40
Mode Quality (M <sup>2</sup> )	≤1.2	≤1.2	≤1.2
Beam Ellipticity	<1.2:1	<1.2:1	<1.2:1
Beam Diameter (mm) 1/e <sup>2</sup> @0m	2.3+/-0.3	2.3+/-0.3	2.3+/-0.3
Beam Divergence (mrad, full angle)	8+/-1	8+/-1	8+/-1
Wavelength (μm)	9.3	10.6 / 10.2	10.6 / 10.2
Rise Time (μs)	< 90	< 90	< 90
Power Stability from Cold (%)	+/-7 % from cold, guaranteed +/-5% after 3-15 mins typical	+/-6 % from cold, guaranteed +/-5 % after 3-15 mins typical	+/-6 % from cold, guaranteed +/-5 % after 3-15 mins typical
Polarization	Random	Random	Random
Cooling	Air or Fan	Air or Fan	Air or Fan
Flow Rate (air)	140CFM x2	140CFM x2	150CFM x2
Input Power (Watts)	720	580	720
Input Voltage / Current	48V / 15A	48V / 12A	48V / 15A
Weight (kg / lbs)	9/20	9/20	9/20

Specifications are subject to change without notice

## Laser Interface:

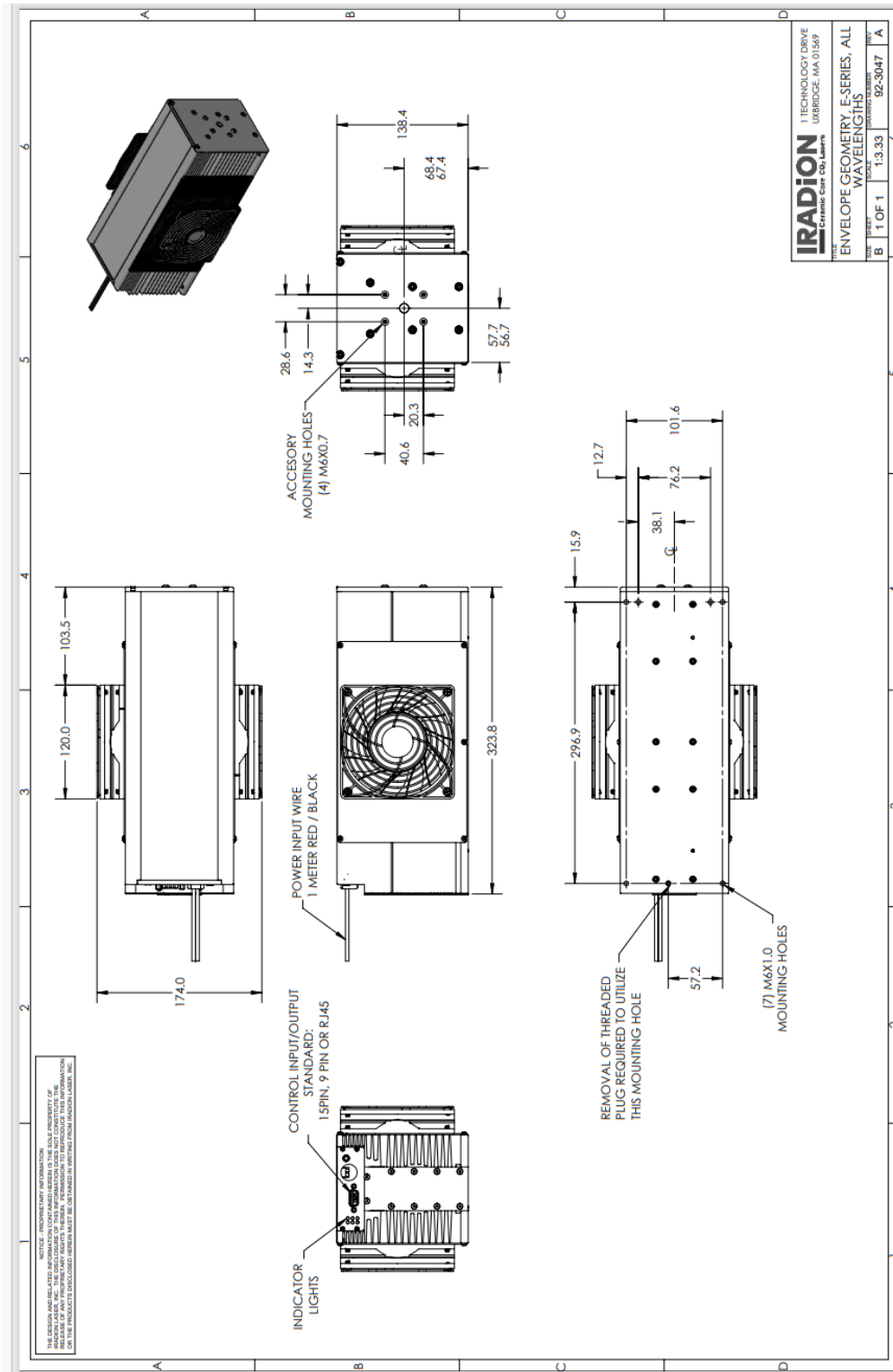
Connectors	15 pin D	RJ45	D9
Fire Command	Yes	Yes	Yes
Interlock	Yes	Yes	No
Fault Signal	Yes	Yes	Yes
RS232 Comm*	Yes	Yes	No
Ready Signal	Yes	No	Yes
Key Switch Control	Yes	No	No
Forward RF Signal	Yes	No	No
Reflected RF Signal	Yes	No	No
Lase Light Signal	Yes	No	Yes
Temperature Warn	Yes	No	Yes

## Indicator lights:

LASE      ● ● FAULT IN  
 IN'LOCK   ● ● TEMP  
 READY     ● ● POWER

\* The laser control card can be monitored via RS232 communications.

A variety of signals, laser information, and the temperature can be interfaced to your host controller



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**Patents: US 7460577 B2**  
**US 8295319 B2**



Invisible Laser Radiation  
 Avoid eye Skin exposure to  
 direct or scattered radiation.  
 Class 4 Laser Product.



**www.Iradian.com**