

Iradian® Infinity

Ceramic CO₂ Lasers

MADE in USA



Specifications

Model	Infinity 50	Infinity 60	Infinity 80	Infinity 100	Infinity 120
Rated Optical Power (Watts)	50	60	80	100	120
Mode Quality (M ²)	≤ 1.2	≤ 1.2	≤ 1.2	≤ 1.2	≤ 1.2
Beam Ellipticity	< 1.2:1	< 1.2:1	< 1.2:1	< 1.2:1	< 1.2:1
Beam Diameter (mm) 1/e ²	2.5	2.5	2.5	2.5	2.5
Beam Divergence (mR, full angle)	<7	<7	<7	<7	<7
Wavelength (μM)	9.3., 10.2, 10.6	9.3., 10.2, 10.6	10.2, 10.6	10.2, 10.6	10.2, 10.6
Rise Time (μS)	<75	<75	<75	<75	<75
Power Stability, Fan Cooled (% from cold)	<± 5 %	<± 5 %	<± 5 %	<± 5 %	<± 5 %
Power Stability, Water Cooled (% from cold)	<± 3 %	<± 3 %	<± 3 %	<± 3 %	<± 3 %
Polarization	Random	Random	Random	Random	Random
Cooling	Air or Water	Air or Water	Air or Water	Air or Water	Air or Water
Input power (Watts)	640	960	1200	1400	1400
Input Voltage / Current	32V / 20A	40V / 24A	45V / 24A	50V / 28A	50V / 28A
Weight (Kg / Lbs.)	14.7 / 32.4	14.7 / 32.4	14.7 / 32.4	14.7 / 32.4	14.7 / 32.4

*Water Cooled Only

Power ratings for the air cooled version are derated above 25°C
Specifications are preliminary and subject to change without notice.

Laser Interface

Connectors	15 pin D	RJ45
Fire command	Yes	Yes
Interlock	Yes	Yes
Fault signal	Yes	Yes
RS232 comm*	Yes	Yes
Ready signal	Yes	No
Key Switch control	Yes	No
Forward RF sig.	Yes	No
Reflected RF sig.	Yes	No
Lase Light signal	Yes	No
Temperature Warn	Yes	No

*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.

Indicator lights:

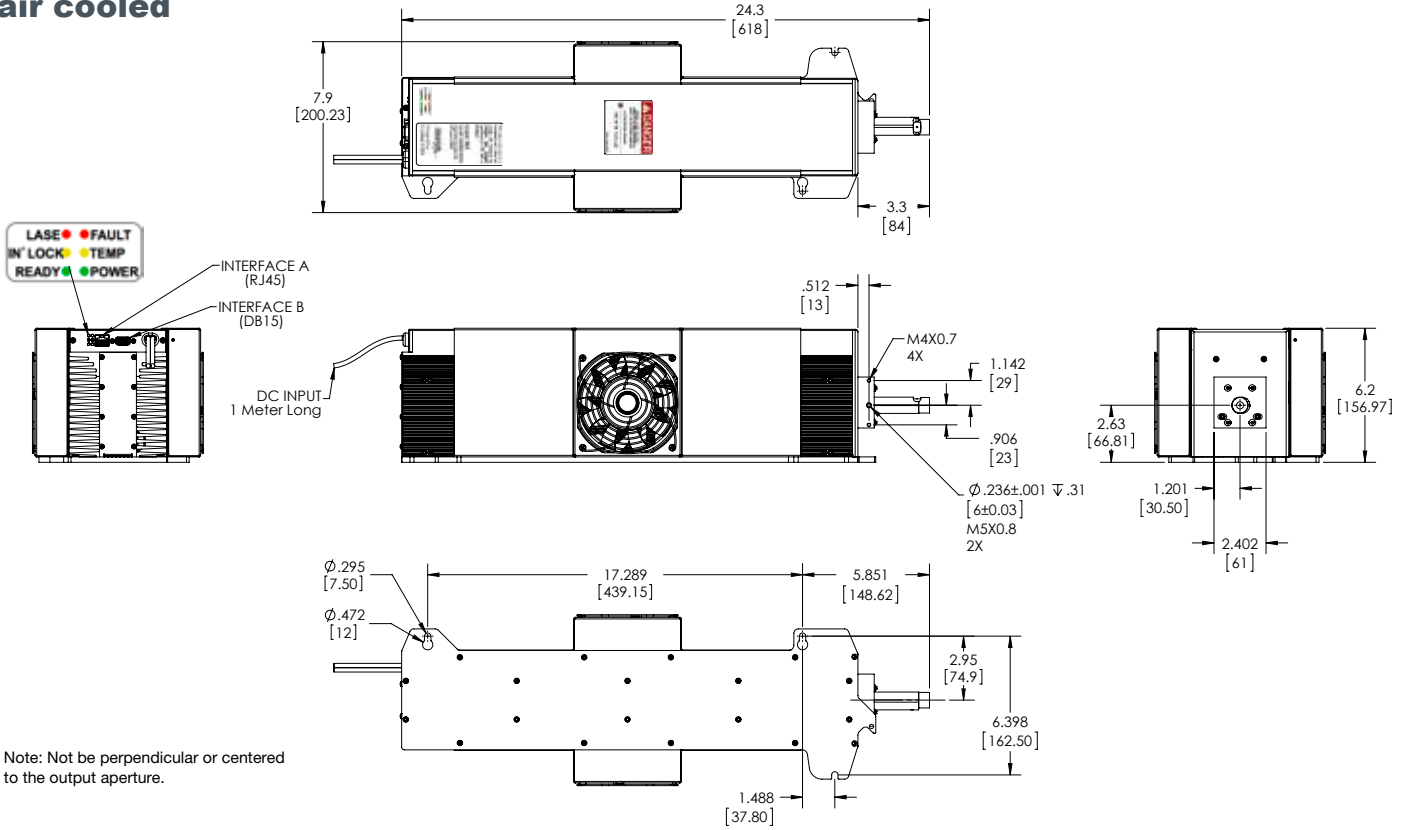
LASE ● ● FAULT
IN LOCK ● ● TEMP
READY ● ● POWER

www.iradionlaser.com

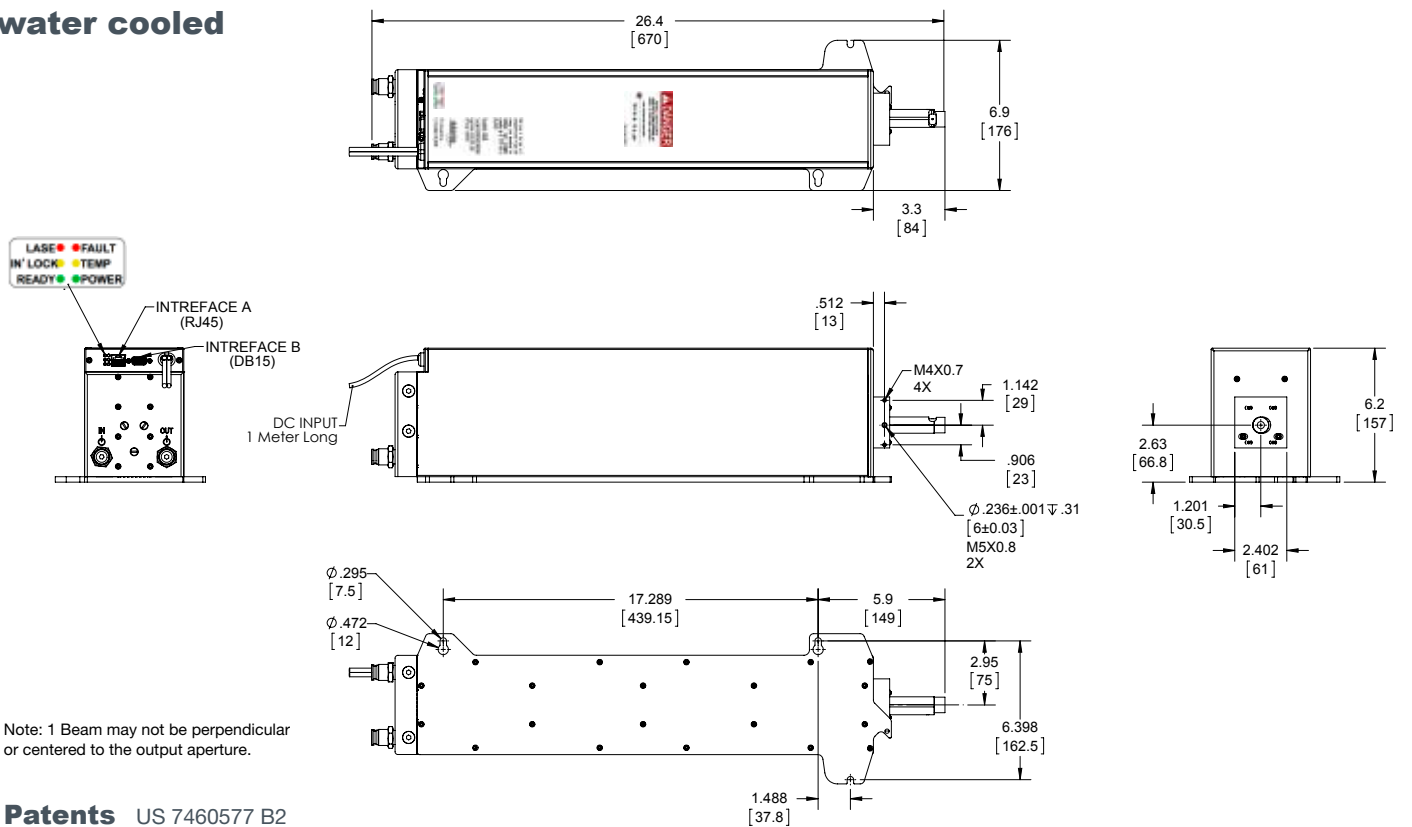
IRADION
Ceramic Core CO₂ Lasers

Dimensions

air cooled



water cooled



Patents US 7460577 B2
 US 8295319 B2
 PN 92-3013 B

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

RoHS

IRADION
 Ceramic Core CO₂ Lasers