

# CO<sub>2</sub> LASERS»

Air & Water-Cooled

# ULCR-100

## FEATURES

- Air and water-cooled options
- Integrated RF supply
- Temperature warning output
- Temperature cutoff to prevent damage to laser
- Fault indicator LED
- Low profile mounting plate
- Excellent power stability
- Quiet operation
- Ability to retrofit to current 100-watt CO<sub>2</sub> installations
- Manufactured with proven ULS technology
- Class IV configurations available
- RoHS compliant



## LASER SPECIFICATIONS\*

Rated Power**	100 W
Wavelength	10.6μm
Power Stability	±5% after 15 minutes of CW operation
M <sup>2</sup>	1.3 ± 0.2
Beam Size (Near Field) <sup>†</sup>	4 ± 1mm
Beam Divergence (Full Angle)	5 ± 1 mrad
Polarization	Cross-polarized
Pointing Stability	200 μrad
Optical Pulse Rise or Fall Time	120 ± 40 μs
Optical Delay Time	38 ± 10 μs
Optical Modulation	100% up to 5KHz
Modulation Signal Type	0-5 VDC

## LASER SPECIFICATIONS\*

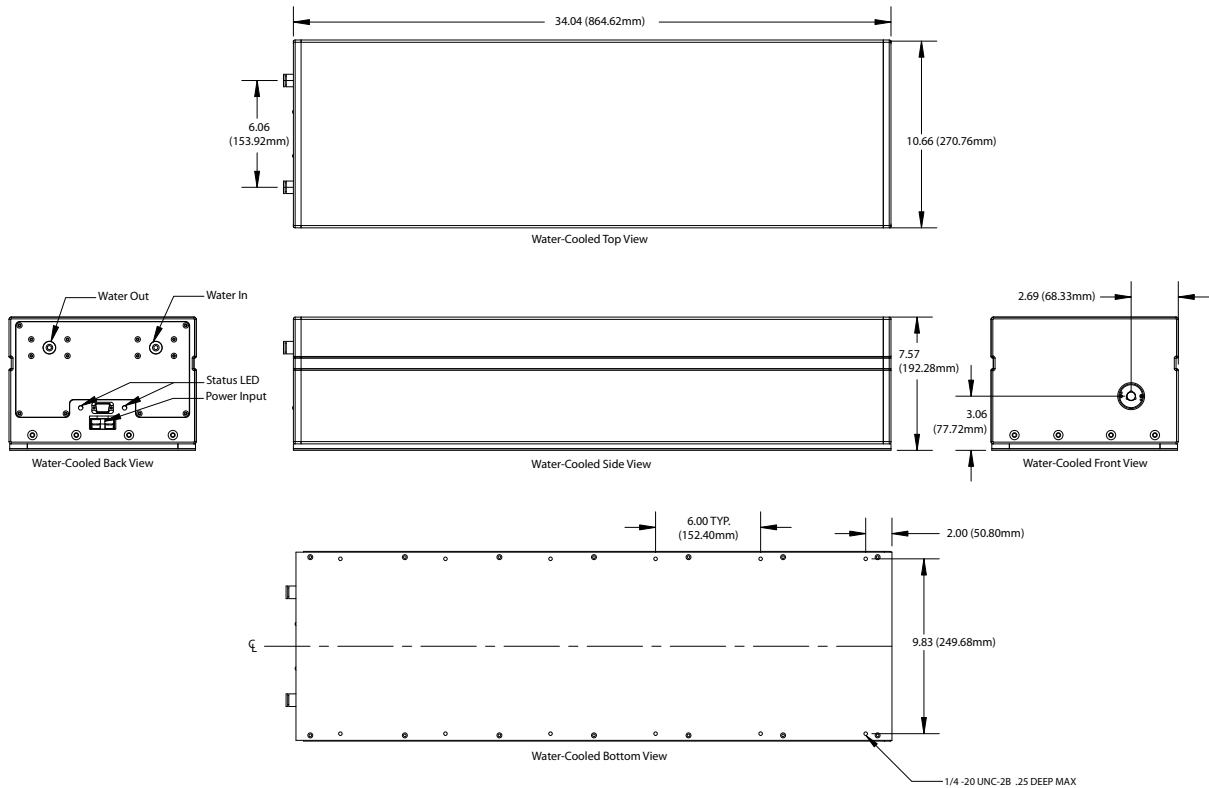
Cooling	Integrated Air/Water
Weight (Air-cooled)	82 lbs (37.1 kg) - Class IV
Dimensions	see rear panel
<i>Environmental</i>	
Ambient Temperature <sup>††</sup>	50-95°F (10-35°C)
Relative Humidity	<90% (non-condensing)
<i>Power Requirements</i>	
DC Input Voltage	48 VDC
RMS Current (CW, with fan)	36 A

\* These specifications are subject to change without notice. \*\* Output power is guaranteed to exceed this level for the duration of ULS warranty regardless of use. <sup>†</sup> Near field approximately 150mm from output coupler. <sup>††</sup> At temperatures below 50°F [10°C] operation may be intermittent and there is a potential for damage to the power supply and optics.

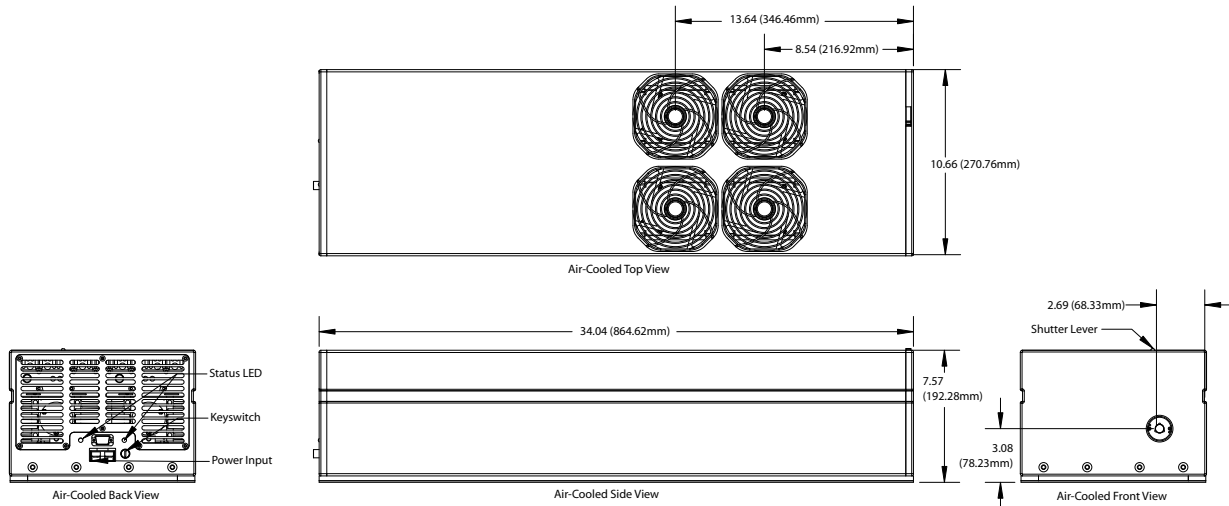
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## ≡ INTEGRATED COOLING CONFIGURATION (WATER-COOLED SHOWN BELOW)



## ≡ CLASS IV CONFIGURATION (AIR-COOLED SHOWN BELOW)



Note: For mounting provisions see Water-Cooled Bottom View above.

These OEM lasers are components intended for integration into OEM equipment and as such do not comply with the Federal regulations (21 CFR Subchapter J) as administered by the Center for Devices and Radiological Health. Purchaser acknowledges that it is his responsibility to obtain compliance with all CDRH and other applicable domestic and/or international safety standards. Protected under U.S. patents 5,661,746; 5,754,575; 5,867,517; 5,881,087; 5,894,493; 5,901,167; 5,982,803; 6,181,719; 6,983,001. Other U.S. and international patents pending. ©2008 All rights reserved. Universal Laser Systems logo and name are registered trademarks of Universal Laser Systems, Inc.

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