

# CO<sub>2</sub> LASERS

Air & Water-Cooled

# ULR-40

## FEATURES

- Air and water-cooled options
- Class 4 configurations available
- Integrated RF supply
- TTL output temperature warning LED
- Fault indicator LED
- Low profile mounting plate
- Excellent power stability
- Quiet operation
- Manufactured with proven ULS technology
- Alternate wavelengths available
- RoHS compliant



## LASER SPECIFICATIONS\*

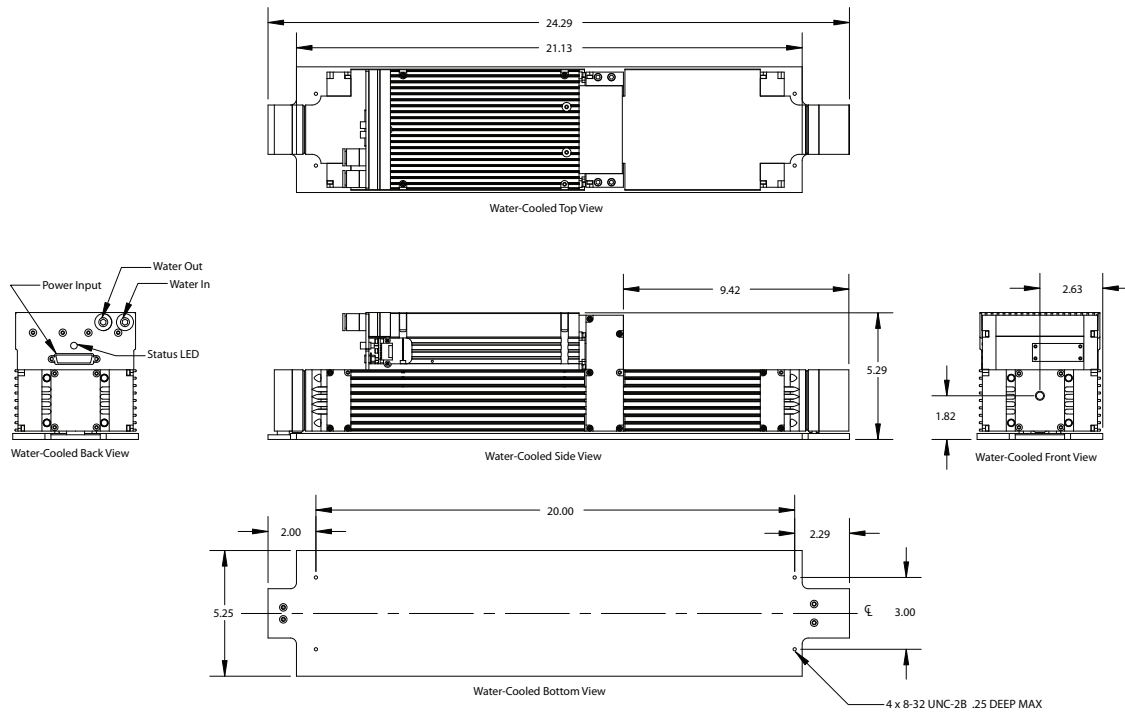
Rated Power**	40 W
Wavelength	10.6 $\mu$ m or 9.3 $\mu$ m
Power Stability	$\pm$ 5% after 15 minutes of CW operation
M <sup>2</sup>	1.3 $\pm$ 0.2
Beam Size (Near Field) <sup>†</sup>	4 $\pm$ 1mm
Beam Divergence (Full Angle)	5 $\pm$ 1 mrad
Polarization	Linear
Pointing Stability	200 $\mu$ rad
Optical Pulse Rise or Fall Time	120 $\pm$ 40 $\mu$ s
Optical Delay Time	38 $\pm$ 10 $\mu$ s
Optical Modulation	100% up to 5KHz
Modulation Signal Type	TTL Compatible

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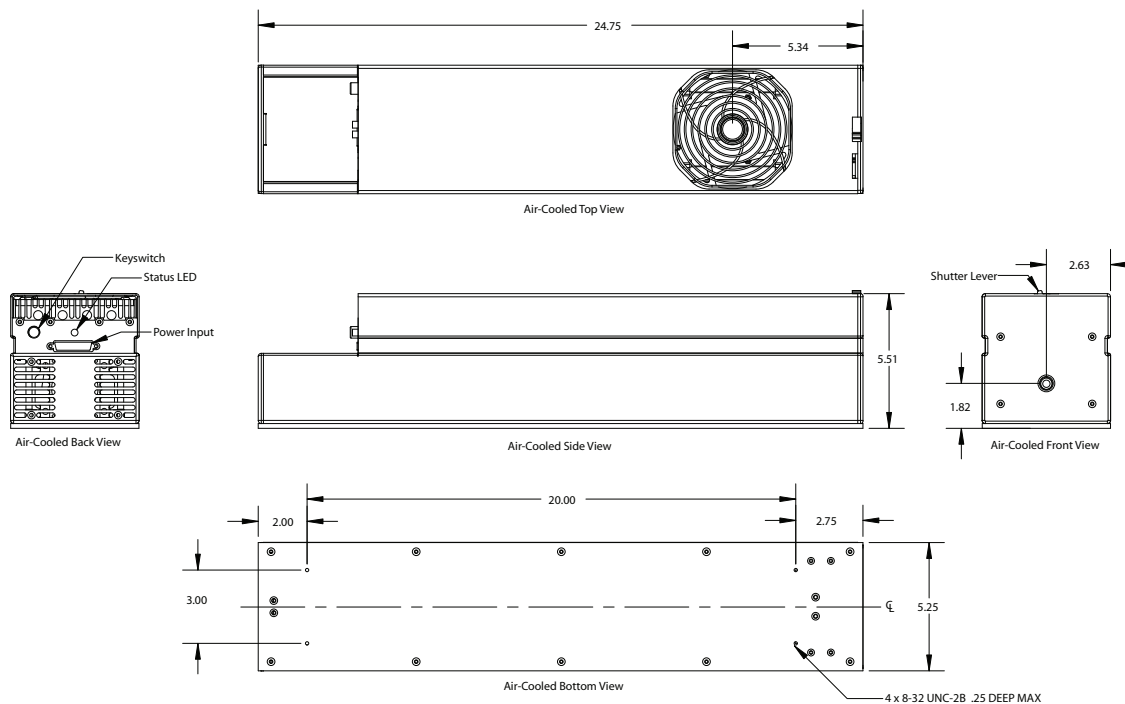
Cooling	Integrated Air/Water
Weight (Air-cooled)	25 lbs (11.3 kg) - Class IV
	19 lbs (8.62 kg) - OEM
Dimensions	see rear panel
<i>Environmental</i>	
Ambient Temperature <sup>††</sup>	50-95°F (10-35°C)
Relative Humidity	<90% (non-condensing)
<i>Power Requirements</i>	
DC Input Voltage	48 VDC
RMS Current (CW, with fan)	12 A

\*These specifications are subject to change without notice. \*\*Output power is guaranteed to exceed this level for a period of 15 months from date of purchase, 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.

## ≡ BASIC CONFIGURATION (WATER-COOLED SHOWN BELOW)



## ≡ INTEGRATED COOLING/CLASS 4 CONFIGURATIONS (CLASS IV AIR-COOLED SHOWN BELOW)



070-6503-00-A REV0609

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.

WARNING: UNIVERSAL LASER SYSTEMS PRODUCTS ARE NOT DESIGNED, TESTED, INTENDED OR AUTHORIZED FOR USE IN ANY MEDICAL APPLICATIONS, SURGICAL APPLICATIONS, MEDICAL DEVICE MANUFACTURING, OR ANY SIMILAR PROCEDURE OR PROCESS REQUIRING APPROVAL, TESTING, OR CERTIFICATION BY THE UNITED STATES FOOD AND DRUG ADMINISTRATION OR OTHER SIMILAR GOVERNMENTAL ENTITIES. FOR FURTHER INFORMATION REGARDING THIS WARNING CONTACT UNIVERSAL LASER SYSTEMS OR VISIT [WWW.ULSINC.COM](http://WWW.ULSINC.COM).