



**ACCESS LASER**  
Member of the TRUMPF Group



## AL20-G-WC

Access Laser's AL20G is a low power and stable grating tuned CO<sub>2</sub> laser perfect for scientific and high precision applications. With a minimum of 55 tunable lines from 9.2μm to 10.8μm, for matching specific material fluence, leading edge OEMs will choose the AL20G.



### Dimensions & Weight

Laser Weight	19.5 lbs
Dimensions (L x W x H, inch)	25.22 x 3.94 x 5.32
RF Driver Weight	7 lbs

### Specifications

#### Laser Power

#### DC Power Requirements

Wavelength (μm)	9.2 to 10.8	Supply Voltage	28VDC
CW Power (W)	8	Electronic PWM Parameters	Frequency up to 100KHz, Duty Cycle 0-100%
<sup>2</sup> Peak Power (W)	8		
<sup>1</sup> Power Stability (±%)	5		

#### Beam Characteristics

#### Heat & Cooling

Beam Waist Diameter (mm)	2.4	Heat Dissipation	< 500W
Waist Location	Output Coupler	Cooling Requirement	Water Cooled
<sup>2</sup> Mode Quality (M <sup>2</sup> )	<1.2	Working Temperature (°C)	5 to 40
Full Div. Angle (mrad)	5.5		

#### Optical Parameters

Polarization	>100:1 Fixed Linear Vertical
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Notes	Water Cooling	Options Available
<sup>1</sup> Power Stability calculated in CW at thermal equilibrium $\pm \frac{(P_{max} - P_{min})}{(P_{max} + P_{min})}$	Min Flow Rate: 3.8 lpm (1 gpm)	Real Time Power Monitoring
<sup>2</sup> Beam specifications measured at $\frac{1}{e^2}$	Recommended Flow Rate: 9.5 lpm (2.5 gpm)	Stabilization to $\pm 1\%$ with Line Tracker
	Max Pressure: 10 bar (150 psi)	<sup>13</sup> CO <sub>2</sub> & C <sup>18</sup> O <sub>2</sub> Isotope Gas Fills
	Required Chiller Stability of $\pm 0.1$ °C	Selective 10.3μm, 9.6μm and 9.3μm optics
	Storage Temperature Range: 5-50 °C	Water Cooling options available
All measurements taken at the strongest line.		
Guarantee for minimum of 55 lines over the 9R, 9P, 10R, 10P bands.		
Specific power at defined lines cannot be guaranteed for standard orders		
		All are specifications are subject to change without notice.