



Applied Manufacturing Technologies, Inc.

Tel: (714) 630-9530

Toll Free: (888) 634-1143

Website: [www.amtecinc.com](http://www.amtecinc.com)

E-Mail: [sales@amtecinc.com](mailto:sales@amtecinc.com)

## CO<sub>2</sub> Laser - Specifications

	C-20	C-60+	C-70A
<b>Output Characteristics</b>			
Wavelength (µm)	9.24 to 9.35 / 10.11 to 10.31		10.55 to 10.63
Optical Output Power (W)	13 / 20	60	70
Power Stability (%)	±10	±4	±5
Mode Quality (M2)	<1.2		<1.3
<b>Beam Characteristics</b>			
Beam Size (mm)	1.8 ±0.2		3.6 ±0.5 at output aperture
Beam Divergence (mrad)	7.5 ±0.5		<5
Polarization	>100 to 1 (fixed linear, parallel to width)		
Operating Frequency and Duty Cycle	0 to 200 kHz, 0 to 100% DC		
Ingress Protection Rating (IP)	NA	IP 65	
Input Power	48 VDC, 11.5 A		48 VDC, 20 A
<b>Operating Conditions</b>			
Cooling	Air	Air	Water
Coolant			Distilled water with 25 to 35% Dow Frost*
Coolant Flow Rate			>3.8 lpm (1.0 gpm)
Maximum Coolant Pressure			7 kg/cm <sup>2</sup> (100 psig)
Max. Pressure Differential (at 1.0 gpm)			3.2 bar (46 psig)
Coolant Temperature			15 to 30°C (59 to 86°F)
Heat Dissipation (W)	<575	<1200	<1200
Maximum Case Temperature	<60°C (140°F)		
<b>Operating Environment</b>			
Temperature	5 to 40°C (41 to 104°F)	5 to 40°C (41 to 104°F) 5 to 45°C (41 to 113°F)	5 to 40°C (41 to 113°F)
Humidity	Non-Condensing		
<b>Physical Characteristics</b>			
Weight	6.6 kg (14.5 lbs)	10 kg (22 lbs)	10.2 kg (22.5 lbs.)
Dimensions	395 x 93 x 155 mm	667 x 93 x 155 mm	604.9 x 92.5 x 154.5 mm
	(15.5 x 3.7 x 6.1 in.)	(26.2 x 3.7 x 6.1 in.)	(23.8 x 3.64 x 6.08 in.)

Foot notes:

1 All specifications are subject to change without notice.

2 Power measured at 25°C and derated by 1%/C for higher laser head temperatures.