# **Diamond J-3**

## RF Excited OEM Industrial CO<sub>2</sub> Laser

Coherent Diamond J-3 Series are sealed, pulsed  $CO_2$  lasers offering average power greater than 250 Watts in a fully integrated and compact package. The unique pulsing characteristics derived from its slab discharge design enable the J-3 Series laser to reach peak powers well in excess of 750 W in contrast to CW modulated lasers. The J-3 Series lasers are available in 10.6  $\mu$ m, 10.2  $\mu$ m, and 9. 4  $\mu$ m, and can be operated with pulsed repetition rates up to 200 kHz with fast pulse rise and fall times. This combination of wavelength selection, high peak power and fast rise and fall times, together with pow er on demand and excellent beam quality makes the J-Series an ideal laser for a wide range of materials processing applications.

The J-3 Series is part of the J-Series family spanning a power range from 150 W to greater than 500 W. The J-Series family is built on a common platform with common mechanical, electrical, and optical interfaces, common software, and a common service and support strategy. All J-Series lasers offer proactive maintenance capability enabled by the integrated yet field serviceable RF power supply design and overall systems monitoring using Coherent's field proven full suite of on-board diagnostics.



## **FEATURES**

- Wide operating power range
- High peak power >750 W
- Pulse frequency from single-shot to 200 kHz
- Fast rise-and-fall time
- Outstanding beam quality
- · Excellent power stability
- Low-cost OEM configuration
- Integrated but removable RF power supply
- Compact design
- Equipped with on-board internet-accessible diagnostics

## **APPLICATIONS**

- Converting
- Drilling
- Cutting
- Scribing
- Engraving
- Marking



Wavelength (μm)         9.36 ±0.05         10.25 ±0.1         10.6 ±0.4           Output Power? (W)         ≥250         ≥226         ≥250           Power Range³ (W)         10 to 250         10 to 225         10 to 250           Typical Peak Power⁴ (W)         ≥750         ≥750           Power Stability⁵s (%)         ±6         ■           Mode Quality (M²)         ±1.2         ■           Beam Waist Diameter®³ at 1/e² (mm)         7.0 ±1.0         8.5 ±1.0         8.5 ±1.0           Full-Angle Beam Divergence³ (mrad)         ≤2.4         ≤2.0         ≤2.0           Typical Polarization (parallel to baseplate)         Linear ≥100:1         ■           Beam Elipticity®²         ≥0.83, ≤1.2         ■           Pulse Frequency (kHz)         Single-shot to 200         ■           RF Excitation Pulse Width Range (µsec)         2 to 1000         ■           Duty Cycle Limit (%)         ≤60         ■         ■           Fall Time⁴ (µs)         ≤60         ■         ■         ■           Weight         45 kg (99.27 lbs.)         ■         ■         ■           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)         ■         ■         ■         ■         ■ <t< th=""><th>Specifications<sup>1</sup></th><th>Diamond J-3-9.4</th><th>Diamond J-3-10.2</th><th>Diamond J-3-10.6</th></t<>	Specifications <sup>1</sup>	Diamond J-3-9.4	Diamond J-3-10.2	Diamond J-3-10.6
Power Range³ (W)         10 to 250         10 to 225         10 to 250           Typical Peak Power⁴ (W)         ≥750         ≥750           Power Stability²⁵ (%)         ±6         ±6           Mode Quality (M²)         < 1.2	Wavelength (μm)	9.36 ±0.05	10.25 ±0.1	10.6 ±0.4
Typical Peak Power⁴ (W) ≥750  Power Stability²⁵ (%) ±6  Mode Quality (M²) < 1.2  Beam Waist Diameter⁴² at 1/e² (mm) 7.0 ±1.0 8.5 ±1.0 8.5 ±1.0  Full-Angle Beam Divergence² (mrad) ≤2.4 ≤2.0 ≤2.0  Typical Polarization (parallel to baseplate) Linea ≥100:1  Beam Elipticity⁴² ≥0.83, ≤1.2  Pulse Frequency (kHz) Single-shot to 200  RF Excitation Pulse Width Range (μsec) 2 to 1000  Duty Cycle Limit (%) ≤60  Fall Time⁴ (μs) ≤60  Weight 45 kg (99.27 lbs.)  Dimensions (L x W x H) 1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)  Electrical Power Requirements  DC Input Voltage (VDC) 48 ±1%  Continous DC Input Current⁴ (A) ≤200 for ≤6 ms  Coolant  Heat Load (kW) ≤4.5  Dynamic Coolant Flow Rate (l/min.) ≤5.7  Coolant Setpoint Temperature Range 21 to 25 °C (69.8 to 77 °F)  Coolant² Anti-Corrosion Treated Water  Coolant Maximum Static Pressure (kPa) 827 (120 psi)  Environmental Conditions  Ambient Temperature  5°C to 45°C (41 to 113°F)	Output Power <sup>2</sup> (W)	≥250	≥225	≥250
Power Stability²₅ (%)         ±6           Mode Quality (M²)         <1.2	Power Range <sup>3</sup> (W)	10 to 250	10 to 225	10 to 250
Mode Quality (M²)         <1.2	Typical Peak Power⁴ (W)	≥750		
Beam Waist Diameter® at 1/e² (mm)         7.0 ±1.0         8.5 ±1.0         8.5 ±1.0           Full-Angle Beam Divergence? (mrad)         ≤2.4         ≤2.0         ≤2.0           Typical Polarization (parallel to baseplate)         Linear ≥100:1           Beam Elipticity®?         ≥0.83, ≤1.2           Pulse Frequency (kHz)         Single-shot to 200           RF Excitation Pulse Width Range (μsec)         2 to 1000           Duty Cycle Limit (%)         ≤60           Fall Time⁴ (μs)         ≤60           Weight         45 kg (99.27 lbs.)           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)           Electrical Power Requirements         DC Input Voltage (VDC)           DC Input Voltage (VDC)         48 ±1%           Continous DC Input Current⁴ (A)         ≤200 for ≤6 ms           Coolant         ≤200 for ≤6 ms           Coolant         Feb (Limit)         ≤4.5           Dynamic Coolant Flow Rate (I/min.)         ≤5.7           Coolant Setpoint Temperature Range         21 to 25 °C (69.8 to 77 °F)           Coolant Temperature Stability (max.)         ±1.0 °C (±0.18 °F)           Coolant Differential Pressure® (kPa)         103 (15 psi) at 5.7 I/min. (1.5 ppm)           Coolant Maximum Static Pressure (kPa)         827 (120 psi)	Power Stability <sup>2,5</sup> (%)	±6		
Full-Angle Beam Divergence* (mrad)         ≤2.4         ≤2.0         ≤2.0           Typical Polarization (parallel to baseplate)         Linear ≥100:1           Beam Elipticity**         ≥0.83, ≤1.2           Pulse Frequency (kHz)         Single-shot to 200           RF Excitation Pulse Width Range (µsec)         2 to 1000           Duty Cycle Limit (%)         ≤60           Fall Time* (µs)         ≤60           Weight         45 kg (99.27 lbs.)           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)           Electrical Power Requirements         DC Input Voltage (VDC)           Continous DC Input Current* (A)         ≤100           Peak Current (A)         ≤200 for ≤6 ms           Coolant         Heat Load (kW)         ≤4.5           Dynamic Coolant Flow Rate (I/min.)         ≥5.7           Coolant Setpoint Temperature Range         21 to 25 °C (69.8 to 77 °F)           Coolant Temperature Stability (max.)         ±1.0 °C (±0.18 °F)           Coolant*         Anti-Corrosion Treated Water           Coolant Differential Pressure* (kPa)         827 (120 psi)           Environmental Conditions         827 (120 psi)           Ambient Temperature         5°C to 45°C (41 to 113°F)	Mode Quality (M <sup>2</sup> )	<1.2		
Typical Polarization (parallel to baseplate)  Beam Elipticity <sup>6,7</sup> Pulse Frequency (kHz)  RF Excitation Pulse Width Range (μsec)  Duty Cycle Limit (%)  Fall Time <sup>4</sup> (μs)  Weight  Dimensions (L x W x H)  Electrical Power Requirements  DC Input Voltage (VDC)  Continous DC Input Current <sup>8</sup> (A)  Peak Current (A)  Coolant  Heat Load (kW)  Dynamic Coolant Flow Rate (I/min.)  Coolant Setpoint Temperature Range  Coolant Temperature Stability (max.)  Coolant Differential Pressure¹ (kPa)  Anti-Corrosion Treated Water  Coolant Maximum Static Pressure (kPa)  Elictrical Power Requirements  DC Input Voltage (VDC)  48 ±1%  ≤200 for ≤6 ms  Coolant  ±1.0 °C (±0.18 °F)  Coolant Temperature Stability (max.)  21 to 25 °C (69.8 to 77 °F)  Coolant Differential Pressure¹ (kPa)  Environmental Conditions  Ambient Temperature  5°C to 45°C (41 to 113°F)	Beam Waist Diameter <sup>6,7</sup> at 1/e <sup>2</sup> (mm)	7.0 ±1.0	8.5 ±1.0	8.5 ±1.0
Beam Elipticityer7         ≥0.83, ≤1.2           Pulse Frequency (kHz)         Single-shot to 200           RF Excitation Pulse Width Range (μsec)         2 to 1000           Duty Cycle Limit (%)         ≤60           Fall Time⁴ (μs)         ≤60           Weight         45 kg (99.27 lbs.)           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)           Electrical Power Requirements         DC Input Voltage (VDC)           Continous DC Input Current⁴ (A)         ≤100           Peak Current (A)         ≤200 for ≤6 ms           Coolant         Ed.5           Dynamic Coolant Flow Rate (I/min.)         ≥5.7           Coolant Setpoint Temperature Range         21 to 25 °C (69.8 to 77 °F)           Coolant Temperature Stability (max.)         ±1.0 °C (±0.18 °F)           Coolant⁴         Anti-Corrosion Treated Water           Coolant Differential Pressure¹⁰ (kPa)         103 (15 psi) at 5.7 I/min. (1.5 gpm)           Coolant Maximum Static Pressure (kPa)         827 (120 psi)           Environmental Conditions         5°C to 45°C (41 to 113°F)	Full-Angle Beam Divergence <sup>7</sup> (mrad)	≤2.4	≤2.0	≤2.0
Pulse Frequency (kHz)         Single-shot to 200           RF Excitation Pulse Width Range (μsec)         2 to 1000           Duty Cycle Limit (%)         ≤60           Fall Time⁴ (μs)         ≤60           Weight         45 kg (99.27 lbs.)           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)           Electrical Power Requirements         Electrical Power Requirements           DC Input Voltage (VDC)         48 ± 1%           Continous DC Input Current® (A)         ≤100           Peak Current (A)         ≤200 for ≤6 ms           Coolant         ±4.5           Dynamic Coolant Flow Rate (I/min.)         ≥5.7           Coolant Setpoint Temperature Range         21 to 25 °C (69.8 to 77 °F)           Coolant Temperature Stability (max.)         ±1.0 °C (±0.18 °F)           Coolant®         Anti-Corrosion Treated Water           Coolant Differential Pressure® (kPa)         103 (15 psi) at 5.7 I/min. (1.5 ppm)           Coolant Maximum Static Pressure (kPa)         827 (120 psi)           Environmental Conditions         5°C to 45°C (41 to 113°F)	Typical Polarization (parallel to baseplate)	Linear ≥100:1		
RF Excitation Pulse Width Range (μsec)       2 to 1000         Duty Cycle Limit (%)       ≤60         Fall Time⁴ (μs)       ≤60         Weight       45 kg (99.27 lbs.)         Dimensions (L x W x H)       1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)         Electrical Power Requirements       20 Input Voltage (VDC)         Continous DC Input Current⁴ (A)       ≤100         Peak Current (A)       ≤200 for ≤6 ms         Coolant       48 ± 1%         Heat Load (kW)       ≤4.5         Dynamic Coolant Flow Rate (I/min.)       ≥5.7         Coolant Setpoint Temperature Range       21 to 25 °C (69.8 to 77 °F)         Coolant Temperature Stability (max.)       ±1.0 °C (±0.18 °F)         Coolant Differential Pressure¹⁰ (kPa)       103 (15 psi) at 5.7 I/min. (1.5 gpm)         Coolant Maximum Static Pressure (kPa)       827 (120 psi)         Environmental Conditions         Ambient Temperature       5°C to 45°C (41 to 113°F)	Beam Elipticity <sup>6,7</sup>	≥0.83, ≤1.2		
Duty Cycle Limit (%)         ≤60           Fall Time⁴ (μs)         ≤60           Weight         45 kg (99.27 lbs.)           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)           Electrical Power Requirements         200 for sequirements           DC Input Voltage (VDC)         48 ±1%           Continous DC Input Current⁵ (A)         ≤100           Peak Current (A)         ≤200 for ≤6 ms           Coolant         4.5           Dynamic Coolant Flow Rate (I/min.)         ≥5.7           Coolant Setpoint Temperature Range         21 to 25 °C (69.8 to 77 °F)           Coolant Temperature Stability (max.)         ±1.0 °C (±0.18 °F)           Coolant Differential Pressure¹⁰ (kPa)         103 (15 psi) at 5.7 I/min. (1.5 gpm)           Coolant Maximum Static Pressure (kPa)         827 (120 psi)           Environmental Conditions         5°C to 45°C (41 to 113°F)	Pulse Frequency (kHz)	Single-shot to 200		
Fall Time⁴ (μs)         ≤60           Weight         45 kg (99.27 lbs.)           Dimensions (L x W x H)         1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)           Electrical Power Requirements         DC Input Voltage (VDC)         48 ± 1%           Continous DC Input Current³ (A)         ≤100           Peak Current (A)         ≤200 for ≤6 ms           Coolant         Heat Load (kW)         ≤4.5           Dynamic Coolant Flow Rate (I/min.)         ≥5.7           Coolant Setpoint Temperature Range         21 to 25 °C (69.8 to 77 °F)           Coolant Temperature Stability (max.)         ±1.0 °C (±0.18 °F)           Coolant Differential Pressure¹⁰ (kPa)         103 (15 psi) at 5.7 I/min. (1.5 gpm)           Coolant Maximum Static Pressure (kPa)         827 (120 psi)           Environmental Conditions         5°C to 45°C (41 to 113°F)	RF Excitation Pulse Width Range (µsec)	2 to 1000		
Weight       45 kg (99.27 lbs.)         Dimensions (L x W x H)       1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)         Electrical Power Requirements         DC Input Voltage (VDC)       48 ±1%         Continous DC Input Current® (A)       ≤100         Peak Current (A)       ≤200 for ≤6 ms         Coolant          Heat Load (kW)       ≤4.5         Dynamic Coolant Flow Rate (I/min.)       ≥5.7         Coolant Setpoint Temperature Range       21 to 25 °C (69.8 to 77 °F)         Coolant Temperature Stability (max.)       ±1.0 °C (±0.18 °F)         Coolant®       Anti-Corrosion Treated Water         Coolant Differential Pressure¹o (kPa)       103 (15 psi) at 5.7 I/min. (1.5 gpm)         Coolant Maximum Static Pressure (kPa)       827 (120 psi)         Environmental Conditions       5°C to 45°C (41 to 113°F)	Duty Cycle Limit (%)	≤60		
Dimensions (L x W x H)       1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)         Electrical Power Requirements       48 ±1%         DC Input Voltage (VDC)       48 ±1%         Continous DC Input Current³ (A)       ≤100         Peak Current (A)       ≤200 for ≤6 ms         Coolant          Heat Load (kW)       ≤4.5         Dynamic Coolant Flow Rate (I/min.)       ≥5.7         Coolant Setpoint Temperature Range       21 to 25 °C (69.8 to 77 °F)         Coolant Temperature Stability (max.)       ±1.0 °C (±0.18 °F)         Coolant¹9       Anti-Corrosion Treated Water         Coolant Differential Pressure¹o (kPa)       103 (15 psi) at 5.7 I/min. (1.5 gpm)         Coolant Maximum Static Pressure (kPa)       827 (120 psi)         Environmental Conditions       5°C to 45°C (41 to 113°F)	Fall Time <sup>4</sup> (μs)	≤60		
Electrical Power Requirements  DC Input Voltage (VDC)  Continous DC Input Current <sup>8</sup> (A)  Peak Current (A)  Coolant  Heat Load (kW)  Dynamic Coolant Flow Rate (I/min.)  Coolant Setpoint Temperature Range  Coolant Temperature Stability (max.)  Coolant Differential Pressure¹o (kPa)  Coolant Maximum Static Pressure (kPa)  Environmental Conditions  Ambient Temperature  48 ±1%  48 ±1%  5100  48 ±100  51	Weight	45 kg (99.27 lbs.)		
DC Input Voltage (VDC)  Continous DC Input Current® (A)  Peak Current (A)  Sequence of ms  Coolant  Heat Load (kW)  Dynamic Coolant Flow Rate (I/min.)  Coolant Setpoint Temperature Range  Coolant Temperature Stability (max.)  Coolant®  Coolant®  Anti-Corrosion Treated Water  Coolant Differential Pressure® (kPa)  Coolant Maximum Static Pressure (kPa)  Environmental Conditions  Ambient Temperature  5°C to 45°C (41 to 113°F)	Dimensions (L x W x H)	1064.1 x 198.1 x 227.6 mm (41.89 x 7.8 x 8.96 in.)		
Continous DC Input Current® (A) ≤100   Peak Current (A) ≤200 for ≤6 ms   Coolant Heat Load (kW)   Bynamic Coolant Flow Rate (I/min.) ≥5.7   Coolant Setpoint Temperature Range 21 to 25 °C (69.8 to 77 °F)   Coolant Temperature Stability (max.) ±1.0 °C (±0.18 °F)   Coolant® Anti-Corrosion Treated Water   Coolant Differential Pressure¹⁰ (kPa) 103 (15 psi) at 5.7 I/min. (1.5 gpm)   Coolant Maximum Static Pressure (kPa) 827 (120 psi)   Environmental Conditions   Ambient Temperature 5°C to 45°C (41 to 113°F)	Electrical Power Requirements			
Peak Current (A) ≤200 for ≤6 ms   Coolant Heat Load (kW) ≤4.5   Dynamic Coolant Flow Rate (I/min.) ≥5.7   Coolant Setpoint Temperature Range 21 to 25 °C (69.8 to 77 °F)   Coolant Temperature Stability (max.) ±1.0 °C (±0.18 °F)   Coolant® Anti-Corrosion Treated Water   Coolant Differential Pressure¹⁰ (kPa) 103 (15 psi) at 5.7 I/min. (1.5 gpm)   Coolant Maximum Static Pressure (kPa) 827 (120 psi)   Environmental Conditions   Ambient Temperature 5°C to 45°C (41 to 113°F)	DC Input Voltage (VDC)	48 ±1%		
Coolant         Heat Load (kW)       ≤4.5         Dynamic Coolant Flow Rate (I/min.)       ≥5.7         Coolant Setpoint Temperature Range       21 to 25 °C (69.8 to 77 °F)         Coolant Temperature Stability (max.)       ±1.0 °C (±0.18 °F)         Coolant9       Anti-Corrosion Treated Water         Coolant Differential Pressure¹o (kPa)       103 (15 psi) at 5.7 I/min. (1.5 gpm)         Coolant Maximum Static Pressure (kPa)       827 (120 psi)         Environmental Conditions       5°C to 45°C (41 to 113°F)	Continous DC Input Current <sup>8</sup> (A)	≤100		
Heat Load (kW) ≤4.5  Dynamic Coolant Flow Rate (I/min.) ≥5.7  Coolant Setpoint Temperature Range 21 to 25 °C (69.8 to 77 °F)  Coolant Temperature Stability (max.) ±1.0 °C (±0.18 °F)  Coolant9 Anti-Corrosion Treated Water  Coolant Differential Pressure¹⁰ (kPa) 103 (15 psi) at 5.7 I/min. (1.5 gpm)  Coolant Maximum Static Pressure (kPa) 827 (120 psi)  Environmental Conditions  Ambient Temperature 5°C to 45°C (41 to 113°F)	Peak Current (A)	≤200 for ≤6 ms		
Dynamic Coolant Flow Rate (I/min.)       ≥5.7         Coolant Setpoint Temperature Range       21 to 25 °C (69.8 to 77 °F)         Coolant Temperature Stability (max.)       ±1.0 °C (±0.18 °F)         Coolant9       Anti-Corrosion Treated Water         Coolant Differential Pressure¹o (kPa)       103 (15 psi) at 5.7 I/min. (1.5 gpm)         Coolant Maximum Static Pressure (kPa)       827 (120 psi)         Environmental Conditions       5°C to 45°C (41 to 113°F)	Coolant			
Coolant Setpoint Temperature Range  21 to 25 °C (69.8 to 77 °F)  Coolant Temperature Stability (max.)  Environmental Conditions  21 to 25 °C (69.8 to 77 °F)  21 to 25 °C (69.8 to 77 °F)  Anti-Corrosion Treated Water  Anti-Corrosion Treated Water  103 (15 psi) at 5.7 l/min. (1.5 gpm)  827 (120 psi)  Environmental Conditions  Ambient Temperature  5°C to 45°C (41 to 113°F)	Heat Load (kW)	≤4.5		
Coolant Temperature Stability (max.)  Coolant  Anti-Corrosion Treated Water  Coolant Differential Pressure¹o (kPa)  Coolant Maximum Static Pressure (kPa)  Environmental Conditions  Ambient Temperature  \$\text{\$\exitit{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\	Dynamic Coolant Flow Rate (I/min.)	≥5.7		
Coolant <sup>9</sup> Anti-Corrosion Treated Water  Coolant Differential Pressure <sup>10</sup> (kPa) 103 (15 psi) at 5.7 l/min. (1.5 gpm)  Coolant Maximum Static Pressure (kPa) 827 (120 psi)  Environmental Conditions  Ambient Temperature 5°C to 45°C (41 to 113°F)	Coolant Setpoint Temperature Range	21 to 25 °C (69.8 to 77 °F)		
Coolant Differential Pressure¹o (kPa)  Coolant Maximum Static Pressure (kPa)  Environmental Conditions  Ambient Temperature  103 (15 psi) at 5.7 l/min. (1.5 gpm)  827 (120 psi)  5°C to 45°C (41 to 113°F)	Coolant Temperature Stability (max.)	±1.0 °C (±0.18 °F)		
Coolant Maximum Static Pressure (kPa)  Environmental Conditions  Ambient Temperature  827 (120 psi)  827 (120 psi)  5°C to 45°C (41 to 113°F)	Coolant <sup>9</sup>	Anti-Corrosion Treated Water		
Environmental Conditions  Ambient Temperature 5°C to 45°C (41 to 113°F)	Coolant Differential Pressure <sup>10</sup> (kPa)	103 (15 psi) at 5.7 l/min. (1.5 gpm)		
Ambient Temperature 5°C to 45°C (41 to 113°F)	Coolant Maximum Static Pressure (kPa)	827 (120 psi)		
	Environmental Conditions			
Relative Humidity¹¹ (non-condensing) (%) ≤95	Ambient Temperature	5°C to 45°C (41 to 113°F)		
	Relative Humidity <sup>11</sup> (non-condensing) (%)	≤95		
Altitude ≤2000 m (6500 ft.)	Altitude	≤2000 m (6500 ft.)		

#### Notes:

- All specifications apply when the product is operated in accordance with the guidelines defined in the operators manual. Measured at 10 kHz PRF, max. duty cycle after a 30 second warm-up from cold start.
- 2.
- 3. Output stability specification may not be met at lowest power or at acoustic resonances.
- 4. Measured for a 100 µs pulse width at 1 kHz repetition frequency.
- 5. Measured as ±(Pmax-Pmin)/2Pmax.
- Measured at typical waist location ~1.4 m from the laser output. 6.
- 7. Measured at 10 kHz PRF, 18% duty cycle.
- At 10 kHz PRF, maximum duty cycle operation.
- See manual for details.
- 10. This differential pressure is from system input to output and do es not include the pressure drop from chiller fittings and the supply and return hose.
- 11. Do not operate at or below dew point.



#### **Mechanical Specifications**

#### Diamond J-3



