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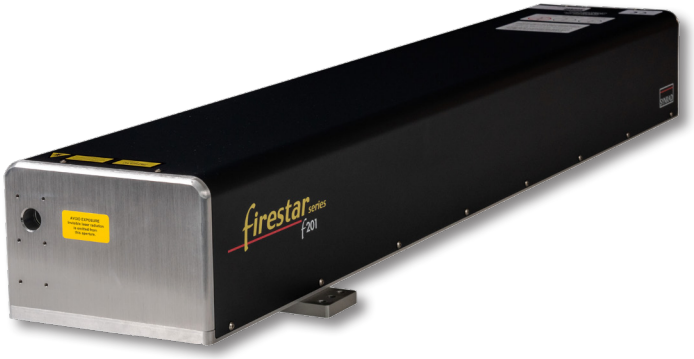
f201 CO_2 LASER - DATA SHEET

Robust, reliable laser with more than 200 Watts of average power for high speed cutting and drilling applications



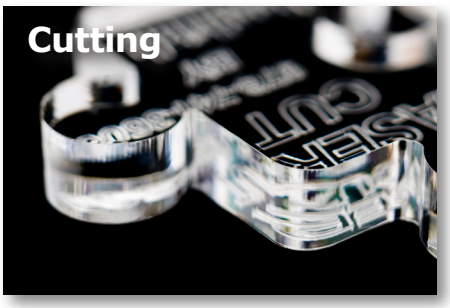
High performance CO_2 laser engineered with excellent power and divergence stability for demanding industrial environments

- Excellent power stability for kiss-cutting multi-layer material, scoring and perforating flexible packaging material, and thin film welding
- Fully integrated laser/RF design minimizes size and weight; perfect for mounting on robotic arms, high speed cutting systems, or full integration onto flatbed cutting systems
- Simple interfaces to water-cooling and control signals, with three point Metric/English mounting system minimizes integration time for OEMs and system integrators
- Standard gas purge to maintain internal optic integrity even in harsh environments, and water cooling for higher electronic component efficiency and longer lifetime

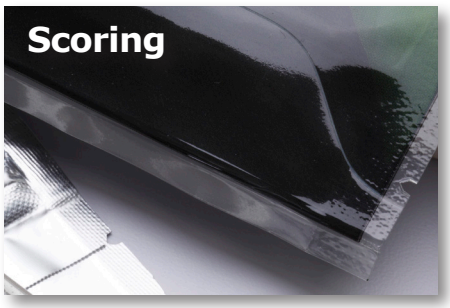
HIGH SPEED LABEL KISS-CUTTING

The 10.2 µm wavelength configuration expands the range of target materials to include polypropylene based films, commonly used for adhesive labels. The f201 has excellent power output and stability that provide consistently high quality results run after run. The f201 now offers a wider range of laser processing capabilities for OEMs and integrators building high-speed labeling and packaging systems.

RECOMMENDED APPLICATIONS



The f201 excels at acrylic cutting, delivering smooth, polished edges in a single pass. Digital control, exceptional power and divergence stability enable detailed cuts, with change-on-the-fly capability.



200 Watts average laser power delivers precise scoring at high speed, perfect for flexible packaging production lines. Digital control enables on-the-fly changes, reducing production downtimes associated with traditional die pattern change-overs.

Cut and seal edges of the newest high tech fabrics with the f201. Add strategically placed surface treatments for breathe-ability, ventilation, or heat retention, all with the same system.

f201 CO_2 LASER - SPECIFICATIONS

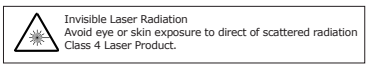
Output Specifications		
Wavelength	10.2 µm	10.6 µm
Output Power[1]	>200 W	
Power Stability (typical, after 3 min.)	±5%	
Power Stability (cold start)[2]	±7%	
Beam Quality ($M^{2)}$	<1.3	
Beam Diameter[3]	4.5 mm + 0.1 mm	
Divergence (full angle)	4.0 mrad ± 0.2 mrad	
Ellipticity	<1.3	
Polarization	Linear (Horizontal)	
Rise Time	<150 µs	
Operating Frequency	0 - 100 kHz	
Power Supply		
DC Input Voltage	96 VDC	
Maximum Current	36 A	
Cooling		
Maximum Heat Load	4000 W	
Coolant Temperature	18 - 22° C (water)	
Minimum Flow Rate	2.0 GPM, <60 PSI	
Environmental		
Operating Ambient Temperatures	15 - 40° C	
Maximum Humidity	95%, non-condensing	
Physical		
Dimensions (LxWxH) mm (inches)	1229 x 279 x 165 (48.4 x 11.0 x 6.5)	
Weight kg (lbs.)	43.5 kg (96 lbs.)	

1 - Power level guaranteed for 1 year from date of shipment, regardless of operation hours, within recommended coolant flow rate and temperature range.

2 - Measured from cold start as ±(Pmax-Pmin)/(Pmax+Pmin)

3 - Measured 1/e2 diameter at laser output.

Please see the manual for the full list of specifications and associated measurement conditions.



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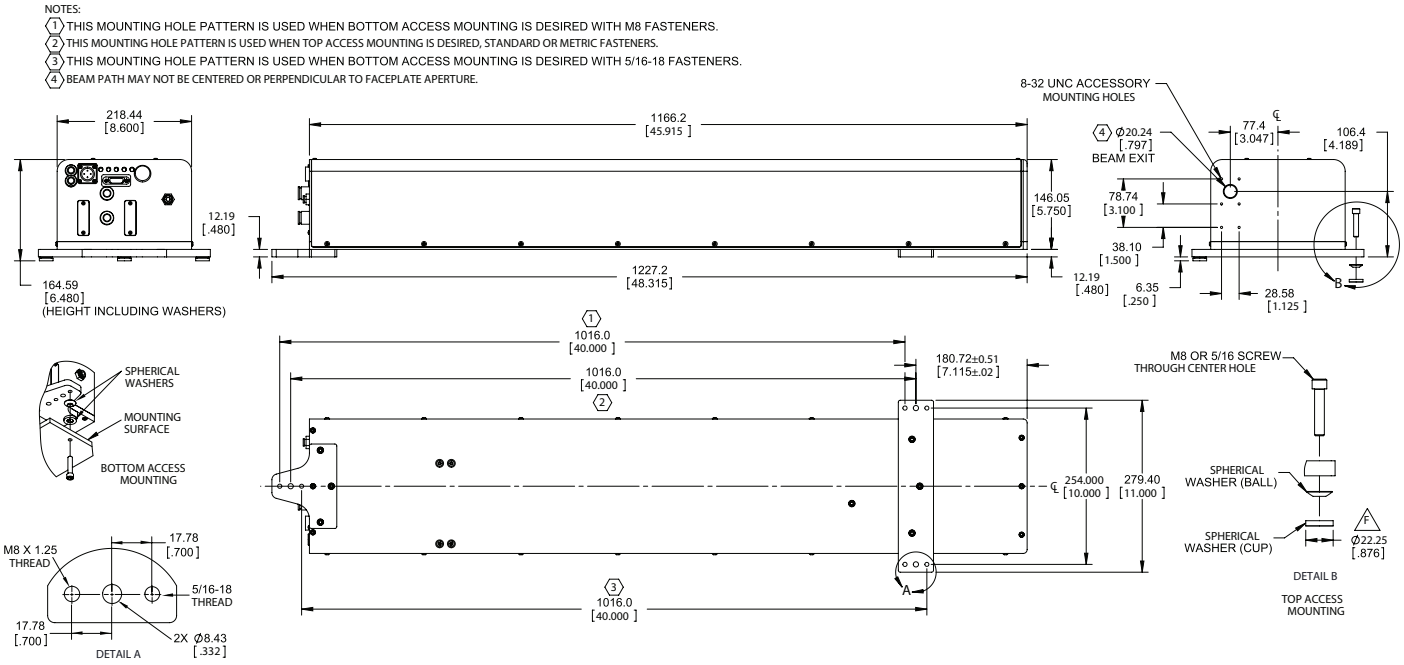
f201 CO_2 LASER - Outline and Mounting Illustrations

dimensions are in mm (inches)



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