



## 508-513nm Narrow Linewidth Laser

Based on high-power, low-noise ytterbium-doped fiber amplification and frequency doubling technology, high-power narrow-linewidth laser output with any central wavelength in the range of 508-513nm is achieved.



### Features

- Narrow Line Width: <20kHz
- Low Intensity Noise
- High Power
- Excellent Beam Quality
- Never Mode Hop

### Applications

- Solid-state lasers,
- dye lasers, etc
- Laser Medical Treatment
- Solar cell processing
- Optical lattices, atomic cooling and trapping

Specification				
Part Number	FL-SF-X-Y-CW <sup>(1)</sup>			
Wavelength Range	508-513nm			
Typical Wavelength	509nm			
Operation Mode	CW			
Output Power	> 0.5W <sup>(2)</sup>	> 1W	> 2.5W	> 30W
Thermal Tuning Range <sup>(3)</sup>	> 0.35nm, Never Mode-hop			
Output Mode	Free Space Output, 0.6-1.0mm			
Linewidth <sup>(4)</sup> (100us)	< 20kHz			
PER	> 20dB			
Power Stability	< 0.75%			
Beam Quality	M <sup>2</sup> < 1.1			
PZT Frequency Tuning Range	> 3GHz			
PZT Frequency Tuning Bandwidth	> 5kHz			
AOM Tuning Range (Optional)	> 500kHz			
AOM Tuning Bandwidth (Optional)	> ±5MHz			
RIN	< 0.06%			
Cooling	Air Cooling/Water Cooling			Water Cooling
Operating Environment & Power Supply				
Temperature	15-30 °C (Air Cooling) or 15-35 °C (Water Cooling)			
Power Supply	100-240V, 50/60Hz			
Communication	RS422			

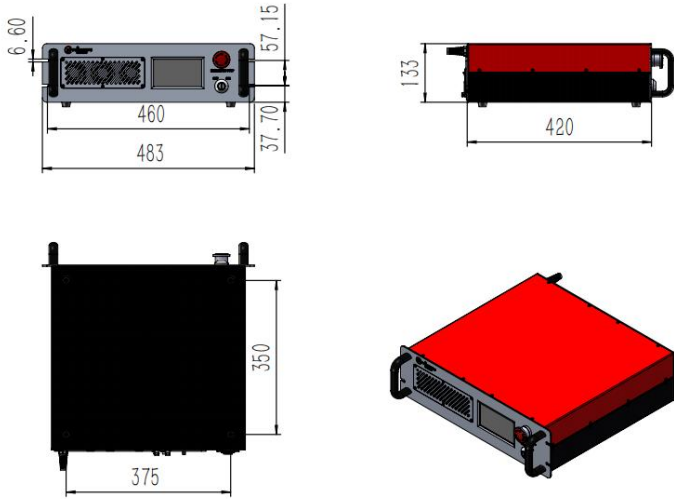
(1)X is the center wavelength in nm, Y is the laser power in W, for example, 509nm output power > 1W: FL-SF-509-1-CW

(2)Power ≤ 0.5W. Single-mode polarization-maintaining fiber output, FC/APC connector available.

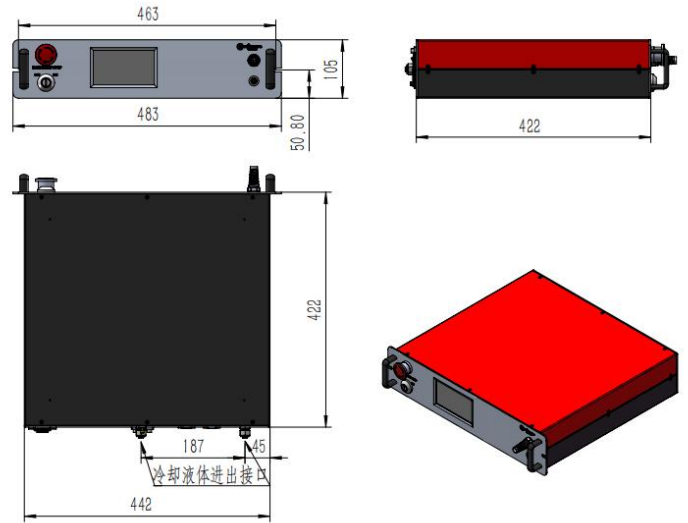
(3)The wide tuning option supports wavelength tuning ranges >5nm.

(4)Fiber Delay Self-Heterodyne Beat Frequency Measurement.

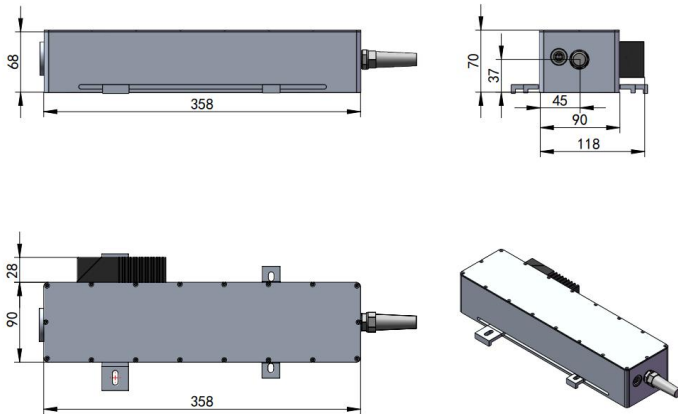
### Air Cooling Control Unit Dimension



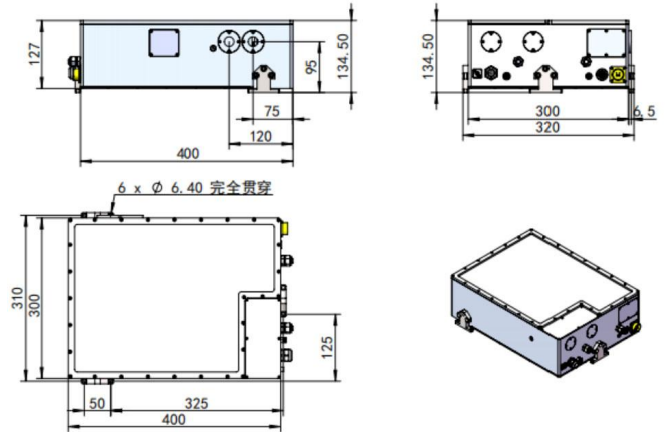
### Water Cooling Control Unit Dimension



### Laser Head Output Dimension (power ≤ 2.5W)



### Laser Head Output Dimension (power ≤ 30W)



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