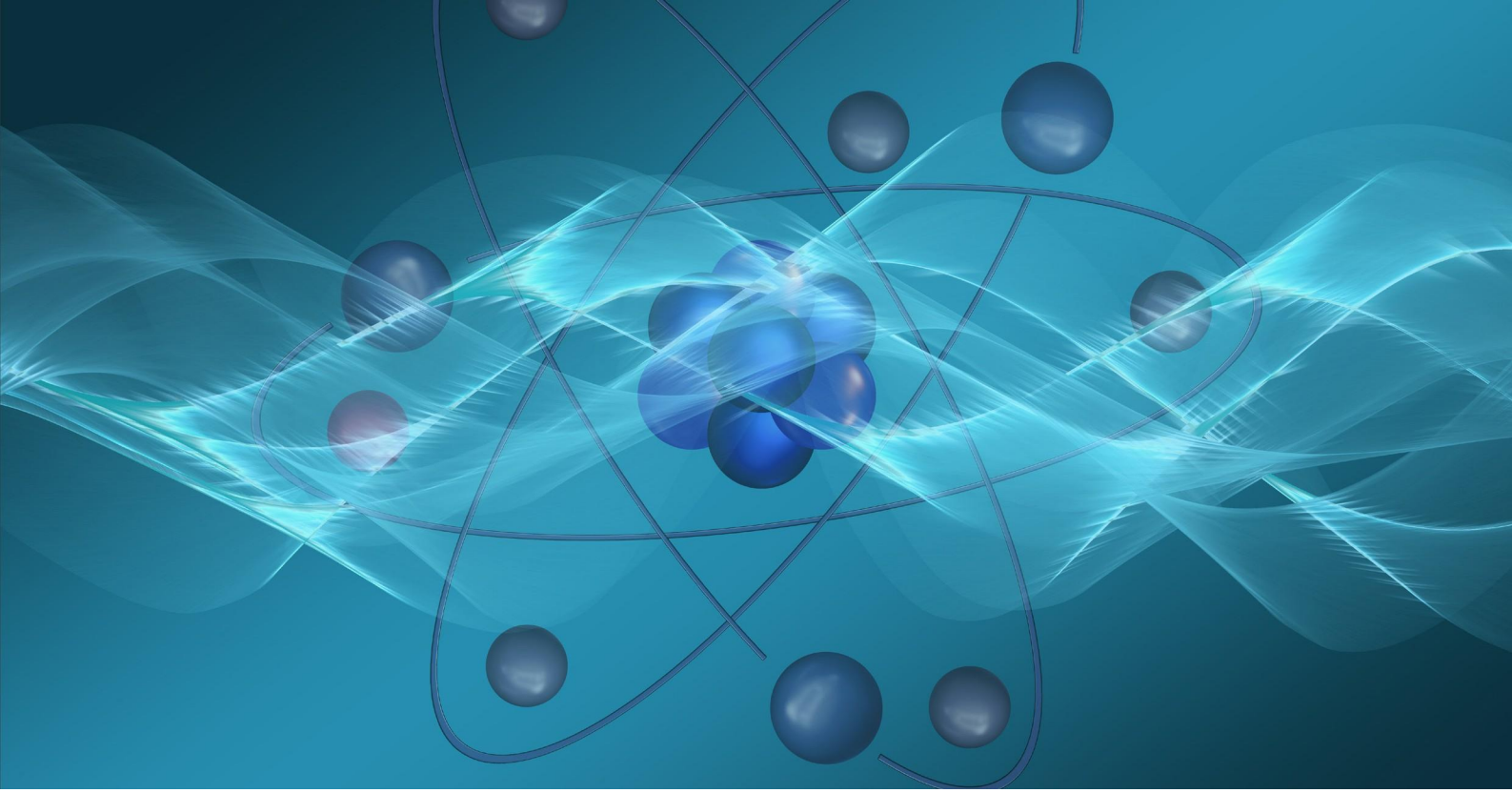


508-513nm Narrow Linewidth Laser

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 Linewidth: <20kHz
- Low Intensity Noise
- High Power
- Excellent Beam Quality
- Never Mode-hop
- Resistant to High and Low Temperature and Vibration Working Environment

应用

- Optical Lattices, Atomic Cooling and Trapping
- Solid-state Lasers, Dye Lasers, etc.
- Laser Medical Treatment
- Solar Cell Processing

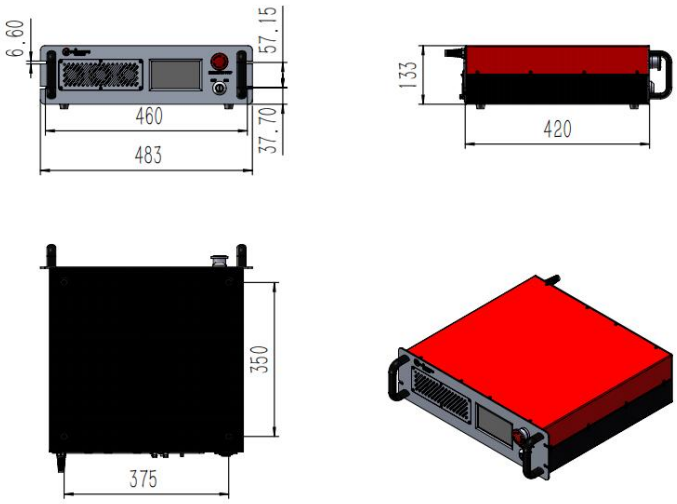
precilasers 频准激光

Specification				
Partnumber	FL-SF-X-Y-CW(1)			
Selectable Center Wavelength	508-513nm			
Common Wavelengths	509nm			
Operation Mode	Continuous			
Output Power	> 0.5W (2)	> 1W	> 2.5W	> 30W
Tuning Range (Temperature) (3)	> 0.35nm，Continuous without mode hop			
Output Mode	Spatial collimation output, diameter0.6-1.0mm			
Linewidth (4) (100us integration time)	< 20kHz			
Polarization Extinction Ratio	> 20dB			
Power Stability (3 Hours RMS)	< 0.75%			
Beam Quality	M^2 < 1.1			
PZT Fast Tuning Range	> 3GHz			
PZT Fast Tuning Bandwidth	> 5kHz			
AOM Tuning Bandwidth (Option)	> 500kHz			
AOM Tuning Range (Option)	> ±5MHz			
RIN Relative Intensity Noise (10Hz-100MHz, RMS)	< 0.06%			
Cooling	Air Cooling/Water Cooling			Water Cooling
Operating Environment & Power Supply				
Temperature	15-30℃（Air Cooling）		15-35℃（Water Cooling）	
Communication	RS422			
Power Supply	100-240V， 50/60Hz			

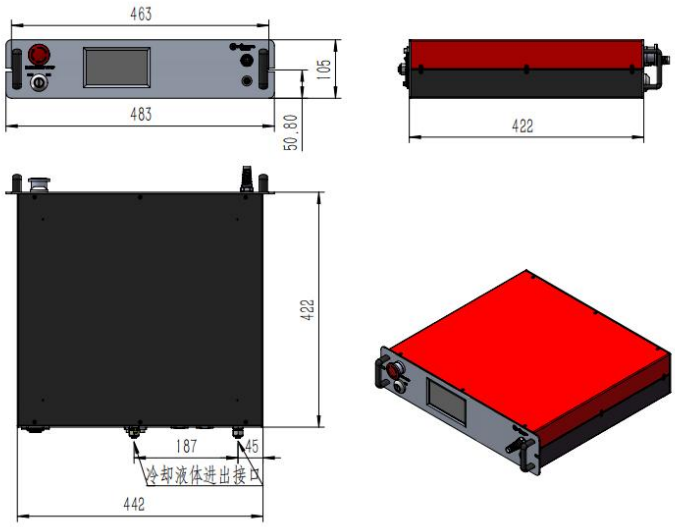
(1) X is the center wavelength in nm, Y is the laser power in W, for example, 509nm output power > 1W: FL-SF-509-1-CW.
(2) Power ≤ 0.5W. Available single-mode polarization-maintaining fiber output, FC/APC connector.
(3) The wide tuning option supports a wavelength tuning range of >5nm.
(4) Fiber delay self-heterodyne beat frequency method measurement.

❖ Product Dimensions

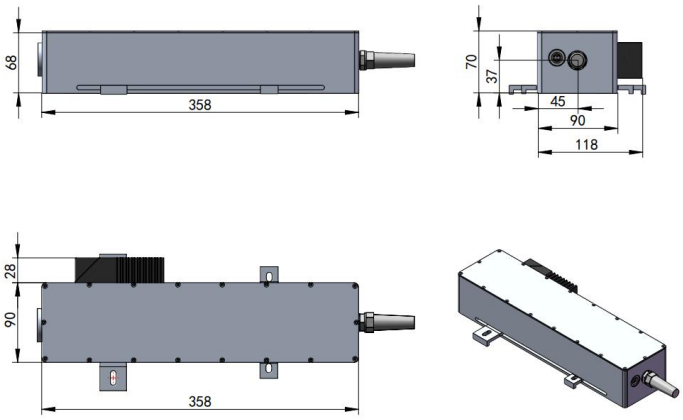
Air Cooling Version Dimensions



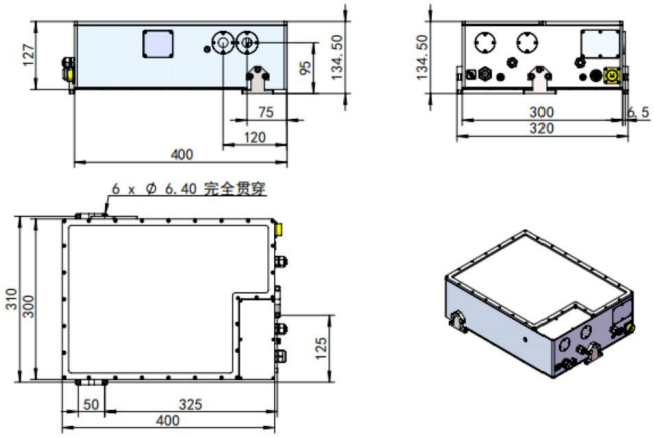
Water Cooling Version Dimensions



Laser head dimensions (power ≤ 2.5W)



Laser head dimensions (power 30W)



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⚠ Laser Hazard

Visible or invisible laser radiation, avoid eye or skin exposure to direct, reflected or filtered radiation.

CLASS 4 Laser Products