

313nm narrow linewidth laser

Based on widely tunable seed lasers, fiber laser amplification and efficient frequency conversion technology, PreciLasers can provide 313nm narrow linewidth laser with wide tuning, high frequency stability, long lifetime and excellent beam quality.

Features

- Narrow linewidth
- High Power
- Excellent beam quality
- High power stability

Applications

- Interference exposure
- wafer measurement
- precision measurement



optical parameters				
Part Number	FL-SF-313-XX ⁽¹⁾ -CW			
Central wavelength	313.00nm			
Output power	0.3W	1W	1.5W	2W
Linewidth ⁽²⁾ (100us integration time)	< 40kHz			
Power Stability (3 Hours RMS)	< 0.75%			
Output Mode	Spatial collimation output, diameter 0.7mm-1mm			
Polarization extinction ratio	> 20dB, Linear polarization			
Beam quality	TEM ₀₀ , M ² < 1.3			
Cooling method	Air Cooling		Water Cooling	

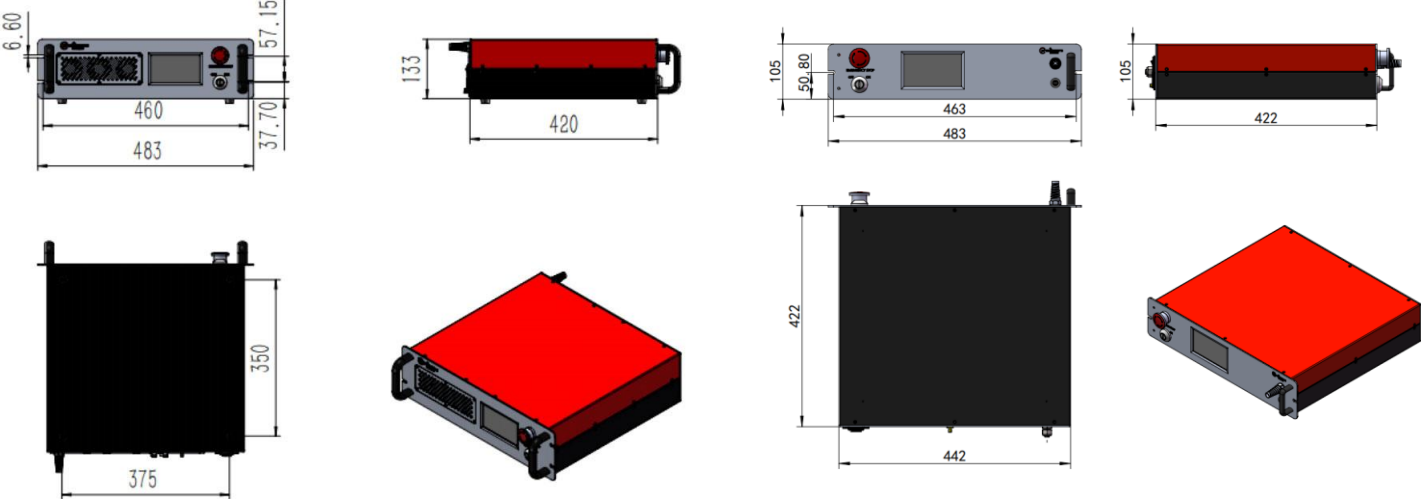
(1) XX laser power, in W, for example, Output power0.3W: FL-SF-313-0.3-CW ,Output power1W: FL-SF-313-1-CW

(2) Fiber-delay self-heterodyne beat frequency method measurement

Options	
AOM option	Adding AOM and VCO drive between seed and amplifier enables 500kHz tuning bandwidth and > ±5MHz tuning range

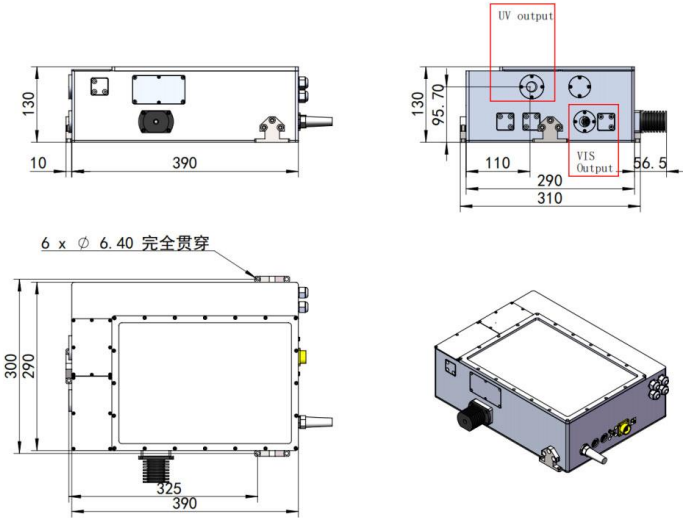
Other parameters		
Cooling method	Air Cooling	Water Cooling
Working temperature	15-25°C	
Supply electricity	100V-220V, AC, 50Hz	

❖ Product Dimensions



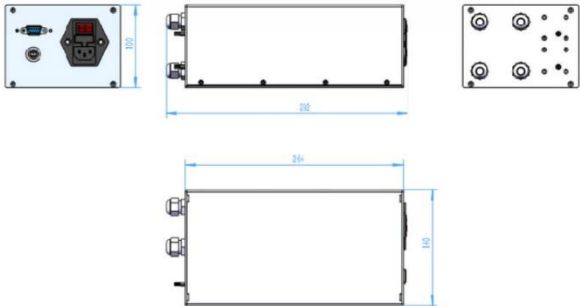
Product Dimensions-water-cooled

Amplifier Chassis - Air Cooled



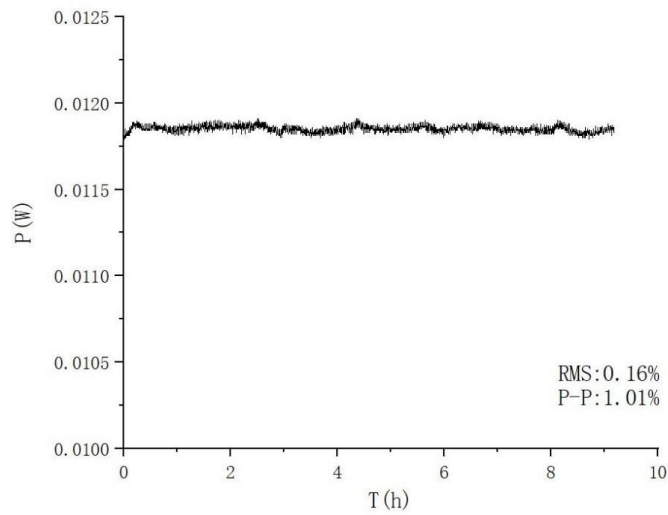
Laser Head Dimensions

Frequency Lock Module Dimensions

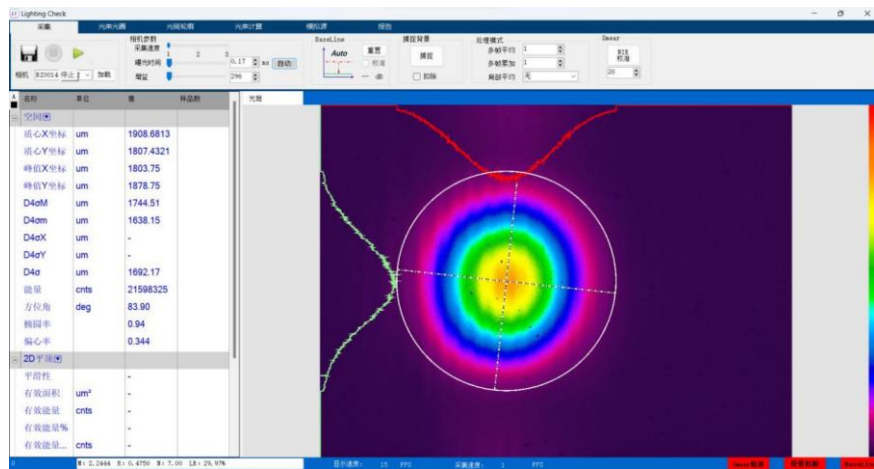


Air Pump Dimensions

❖ Performance index test (typical value)



Power stability test chart:RMS=0,16%,10h




Light spot test chart



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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