



297-302nm Narrow Linewidth Laser

Based on single frequency seed laser, fiber laser amplification and high efficiency frequency conversion technology, Precilasers can provide narrow linewidth lasers with a maximum output of 1W, high frequency stability, long lifetime and excellent beam quality.

Features

- Narrow Linewidth
- High Power
- Excellent Beam Quality
- Never Mode-hop

Applications

- Quantum Precision Measurement
- Quantum Computing



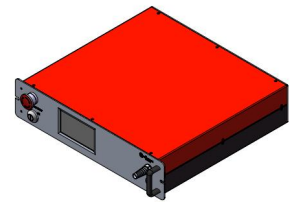
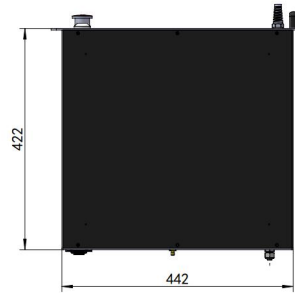
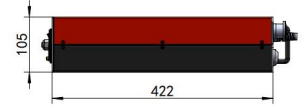
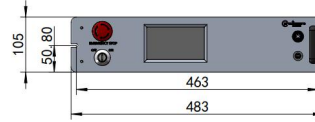
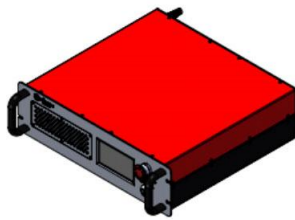
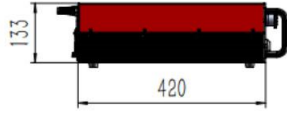
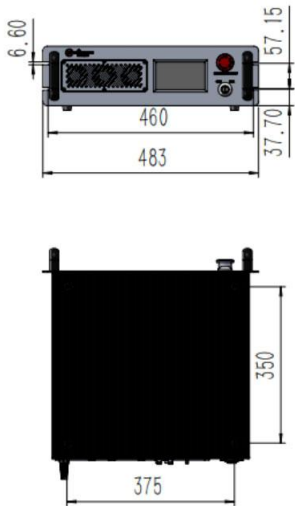
Specification			
Partnumber	FL-SF-XX-YY ⁽²⁾ -CW		
Typical Wavelength	297nm, 302nm		
Output Power	0.1W	0.5W	1W
Linewidth ⁽²⁾ (100 us integration)	< 60kHz		
Monitor optical output power @594nm/604nm	> 3mW		
Tuning range (Never mode-hop)	> 300GHz		
PZT Tuning Range	> 3GHz		
PZT Tuning Bandwidth	> 5kHz		
Current Tuning Range	> 500MHz		
Current Tuning Bandwidth	> 1MHz		
Power Stability (3 Hours RMS)	< 1%		
Output Mode	Spatial collimation output, diameter 0.8mm-1.2mm		
Polarization Extinction Ratio	> 20dB, Linear, Vertical		
Beam Quality	TEM ₀₀ , M ² < 1.3		
Cooling	Air Cooling	Water cooling	

(1) WW: laser wavelength, XX: laser power, unit: W. For example, a 302nm laser with an output power of 1W: FL-SF-302-1-CW,
(2) Measurement of fiber delay by self-heterodyne beat frequency method

Options	
Wide Tuning Option	By replacing the wide-tuning seed laser, ±0.5nm@302nm wide tuning is achieved

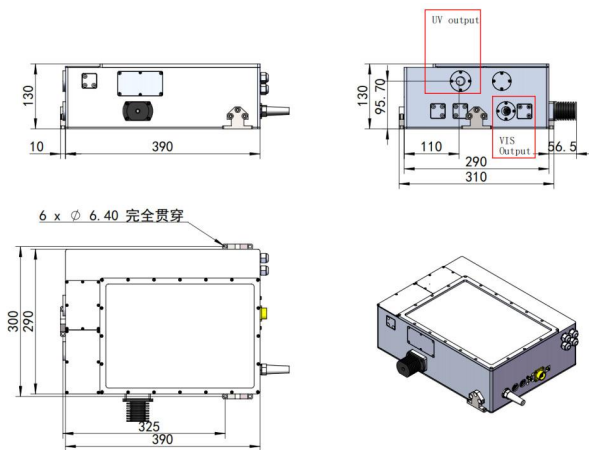
Other Parameters		
Cooling	Air Cooling	Water cooling
Temperature	15-30°C	
Power Supply	100V-220V, AC, 50Hz	

❖ Product Dimensions

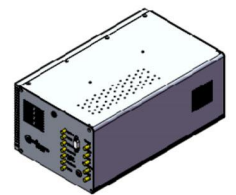
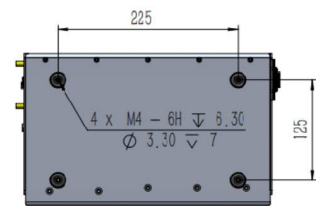
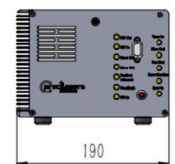


Chassis Dimensions-Water cooling

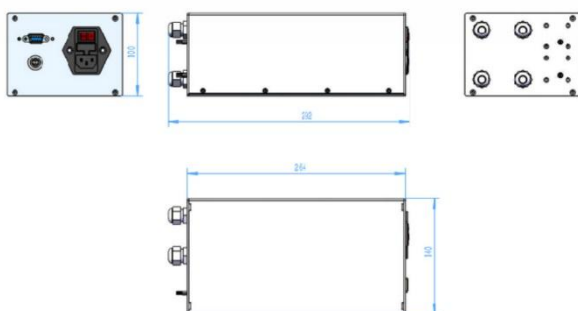
Chassis Dimensions-Air Cooling



Laser Head

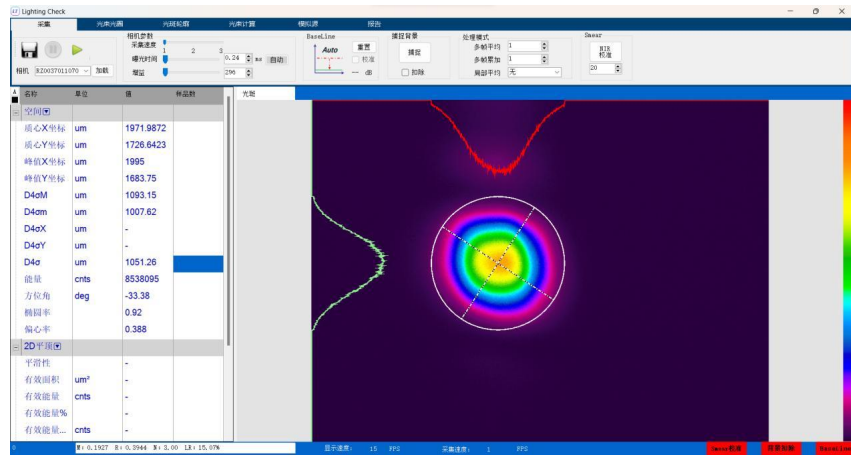
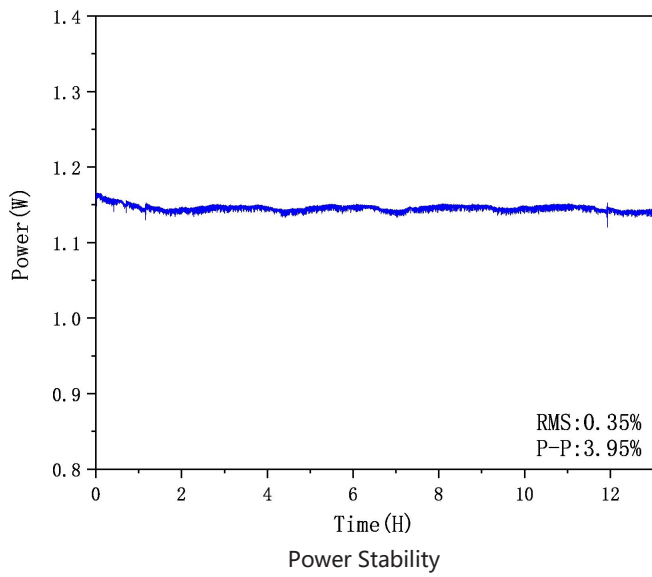


Frequency Lock Module



Air Pump
Dimensions

❖ Performance(typical value)



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

