



480nm Widely Tunable Laser

Based on widely tunable seed lasers, fiber laser amplification and high-efficiency frequency conversion technology, Precilasers can provide widely tunable 480nm narrow linewidth lasers with high frequency stability, long lifetime and excellent beam quality.

Features

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

Applications

- Precision Measurement
- Quantum Computing



Specification		
Partnumber	FL-SF-480-xx ⁽¹⁾ -CW	
Center Wavelength	480nm	
Operation Mode	Continuous	
Output Power	>0.8W	
Linewidth ⁽²⁾ (100 us integration)	<150kHz	
Long Term Power Stability	<0.75% @3hrs, RMS	
Tuning Range	>5nm	
PZT Tuning Range	>3GHz	
PZT Tuning Bandwidth	>5kHz	
Current Tuning Range	>1GHz	
Current Tuning Bandwidth	>1MHz	
Output Mode	Spatial collimation output, diameter0.6-1mm	
Beam Quality	TEM ₀₀ , M ² <1.3	
Polarization Extinction Ratio	>20dB,Linear	
Cooling	Air Cooling	Water Cooling

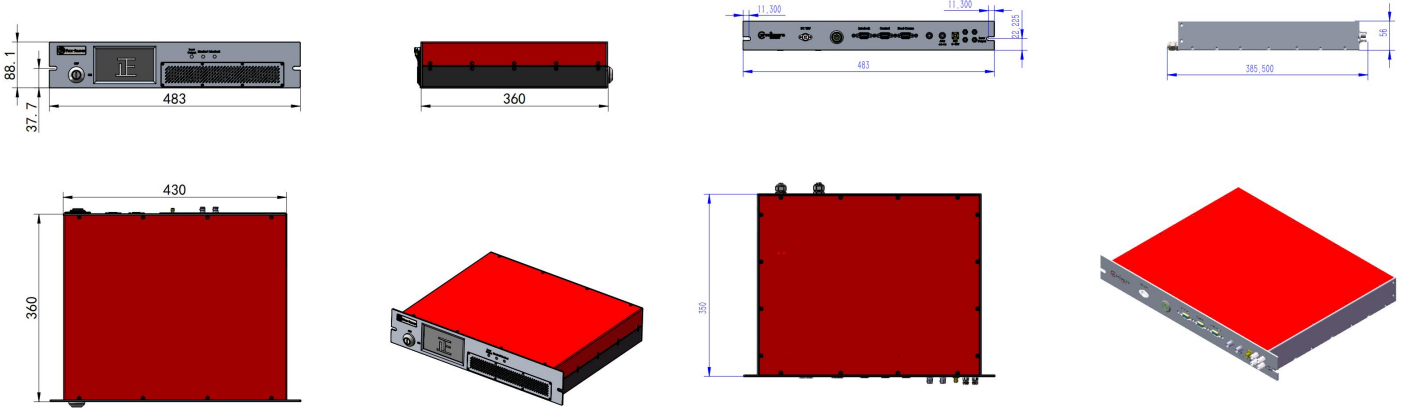
(1) XX laser power, in W, for example, output power 0.8 W: FL-SF-480-0.8-CW.

(2) Fiber delay self-heterodyne beat frequency measurement

Other Parameters	
Temperature	15-30°C
Power Consumption	<350W
Power Supply	100V-240V, AC, 50Hz

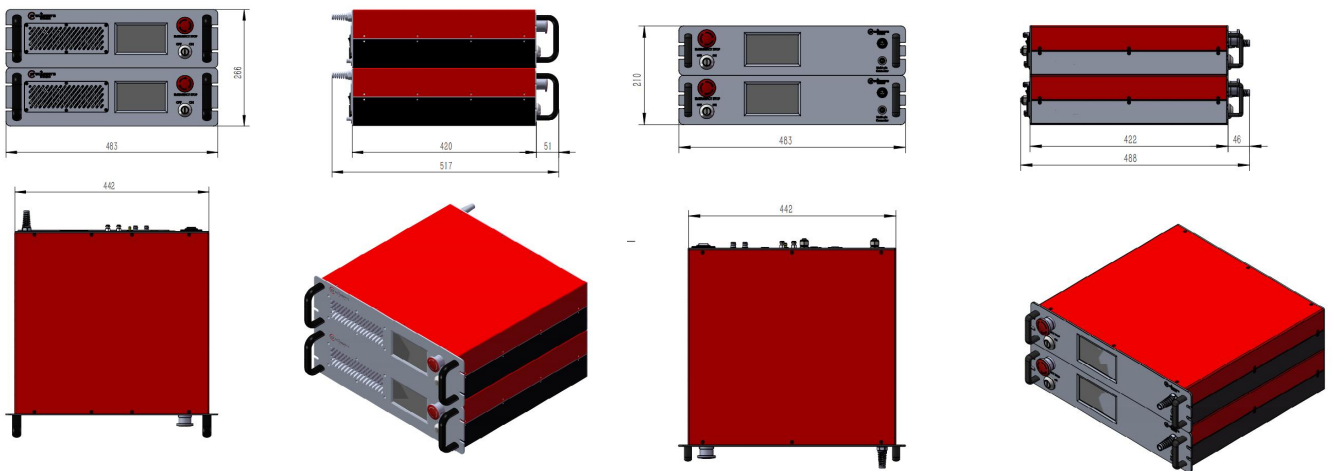
❖ Product Dimensions

This system includes a 1um seed laser for wide stripe writing, which can be provided by the customer or by frequency-accurate laser. Please refer to the seed manual for specific dimensions.



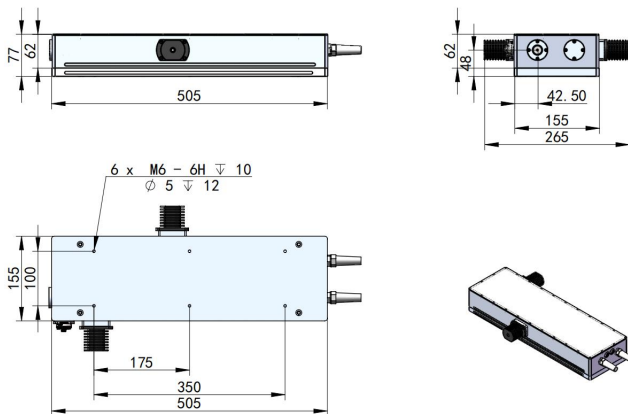
Seed Laser Dimensions - Air Cooled

Seed Laser Dimensions - Water Cooled



Amplifier chassis - air cooling

Amplifier Chassis - Water Cooling

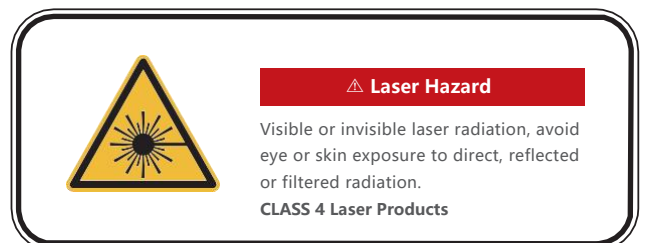


Laser head

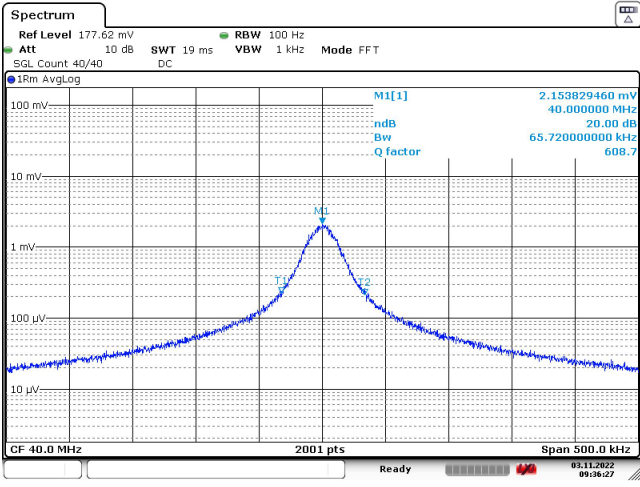


Shanghai Precilasers Technology Co., Ltd.
 📍 Floor 2, Building 2, No. 1918, Xupan Road, Jiading District, Shanghai
 📞 021-59160265

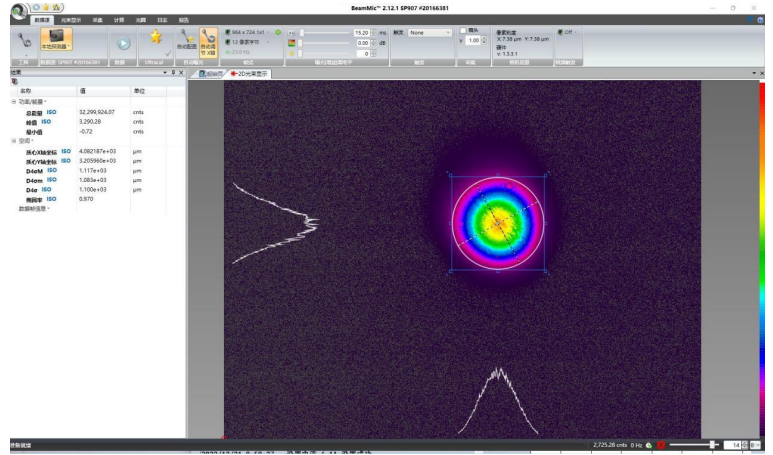
www.precilasers.com info@precilasers.com



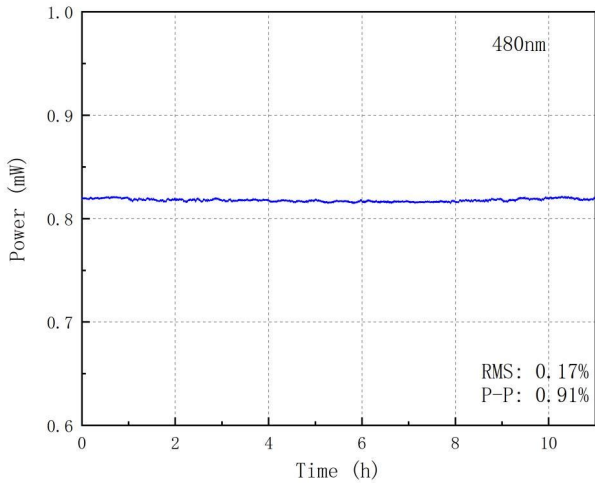
❖ Performance (typical value)



Tm seed linewidth, <math>< 5\text{ kHz}</math>



0.8W beam quality



Power stability test



Shanghai Precilasers Technology Co., Ltd.
 📍 Floor 2, Building 2, No. 1918, Xupan Road, Jiading District, Shanghai
 📞 021-59160265

www.precilasers.com info@precilasers.com

⚠ Laser Hazard

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

CLASS 4 Laser Products

