

## 1544nm Frequency Stabilized Laser

Based on Precilasers' narrow-linewidth 1544nm laser and all-fiber acetylene frequency-stabilized module, the 1544nm frequency-stabilized laser can output narrow-linewidth laser output with good long-term stability, which can be applied to fields such as industrial precision measurement.

### Features

- Narrow Linewidth
- Linear Polarization
- High Power
- Active Power Stabilization
- Excellent Beam Quality
- Never Mode-hop
- Resistant to high and low temperature and vibration working environment

### Application

- Precision Measurement



Specification		
Partnumber	FL-SF-1544-XX <sup>(1)</sup> -SAS	
Center Wavelength	1544nm <sup>(2)</sup>	
Output Power	>10mW	>100mW
Linewidth (100us integral) <sup>(3)</sup>	<2kHz	
Frequency Stability	Acetylene frequency stabilization, <2MHz@10hrs	
Long Term Power Stability	<0.75% @3hrs, RMS	
PZT Tuning Range	>3GHz	
PZT Tuning Bandwidth	>5kHz	
Output Mode	Single-mode polarization-maintaining fiber output, FC/APC connector	
Beam Quality	$M^2 < 1.1$	
Polarization Extinction Ratio	>20dB, Linear polarization	
Cooling	Air Cooling	

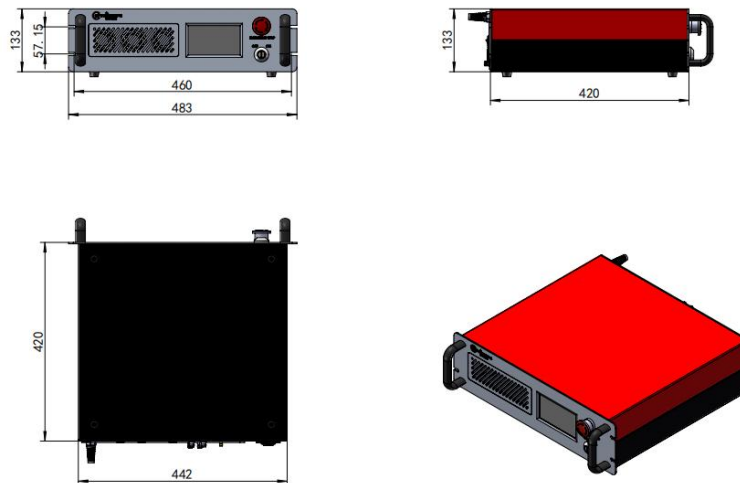
(1) X: laser power, unit W, for example, output power 0.1W: FL-SF-1544-0.1-CW,

(2) For other center wavelengths, please email us.

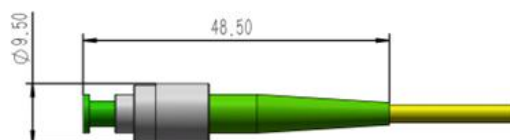
(3) Tested based on fiber delay interferometer

Other Parameters	
Temperature	15-30°C(No condensation conditions)
Power Supply	100-240v, AC, 50/60Hz

## ❖ Product Dimensions

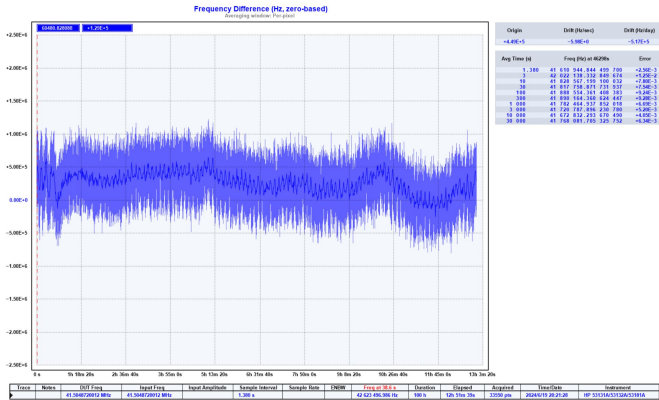


Air-cooled product size

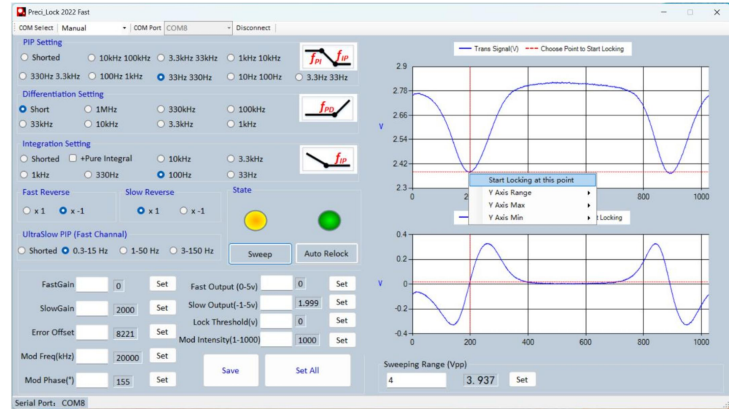


Polarization-maintaining fiber output size

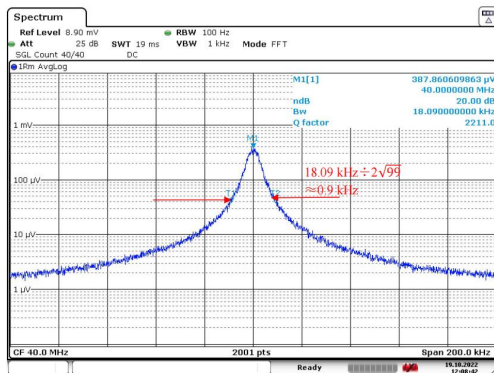
## ❖ Performance(typical value)



Frequency stability measurement, peak-to-peak 1.5MHz@13hrs, 2 frequency-stabilized lasers beat frequency



Frequency stabilization interface, can lock to different absorption peaks



Line width test, beat frequency line width is 0.9kHz



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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**

