

460nm-488nm 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 range of 460nm-488nm, 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
- Interference Exposure



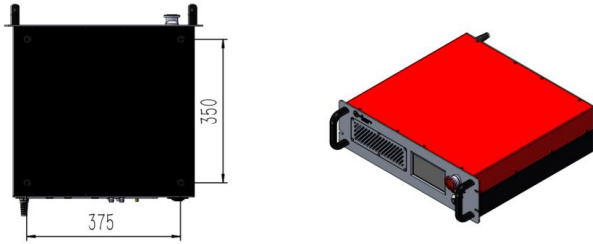
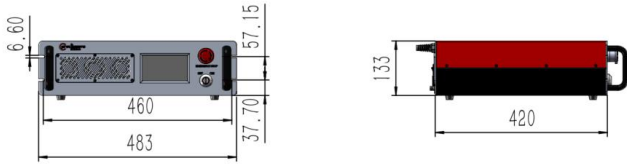
Specification			
Partnumber	FL-SF-X-Y ⁽¹⁾ -CW		
Wavelength Optional Range	460-488nm		
Frequently Used Central Wavelengths	460nm, 480nm, 488nm		
Linewidth ⁽²⁾ (100 us integration)	<40kHz		
Operation Mode	Continuous		
Output Power	>50mW	>1W	>3W >6W
Beam Waist Diameter	1±0.15 mm		
Beam Waist Location Relative to Output Window (m)	Output window within ±0.5m		
Beam Divergence (Full Angle)	<1mrad		
Beam Ellipticity	0.9-1.1		
Pointing Stability (μrad)	<15μrad	<50μrad	
Beam Quality	TEM ₀₀ , M ² <1.3		
Polarization	Linear, >20dB		
Power Stability	<0.75% @3hours, RMS		
Relative Intensity Noise	<0.2%(RMS, 10Hz-10MHz integration)		
Cooling	Air Cooling	Water Cooling	
Warm-up Time			
Cold Start	<2 hours		
From Standby	<30 minutes		
Dimensions & Weights			
Laser Controller Dimensions	≤483mm x 420mm x 133mm (50mW)	≤483mm x 520mm x 132mm (1W,3W,6W)	
Laser Head Dimensions	≤466mm x 133mm x 52mm(50mW)	≤253mm x 455mm x 118.5mm (1W,3W,6W)	
Chiller Dimensions	NA	≤58cm x 29cm x 52cm	
Chiller Weight	≤25kg		
Cable Length between Controller and Head	Fiber length>1.5m		
Operating Environment & Power Supply			
Temperature (No condensation conditions)	15-30 °C (Air Cooling)	15-35 °C (Water Cooling)	
Power Supply	100V-240V, AC, 50/60Hz		
Communication	RS422		

(1) X is the laser wavelength in nm, Y is the laser power in W, for example, 460 nm with an output power of 1 W: FL-SF-460-1-CW.

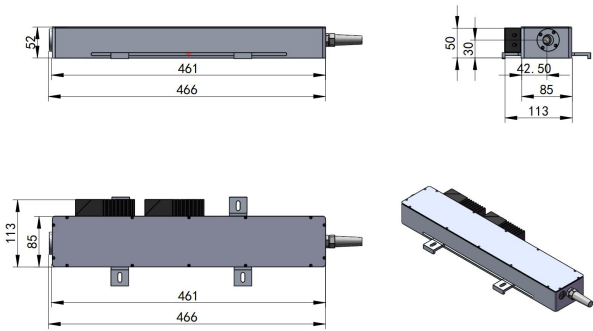
(2) Fiber delay self-heterodyne beat frequency measurement

Air Cooling Version Dimension (Power: 50mW)

Laser Controller



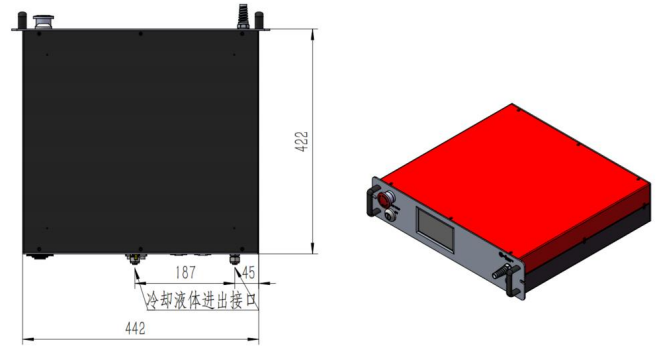
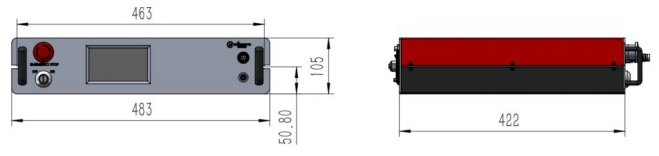
Laser Head



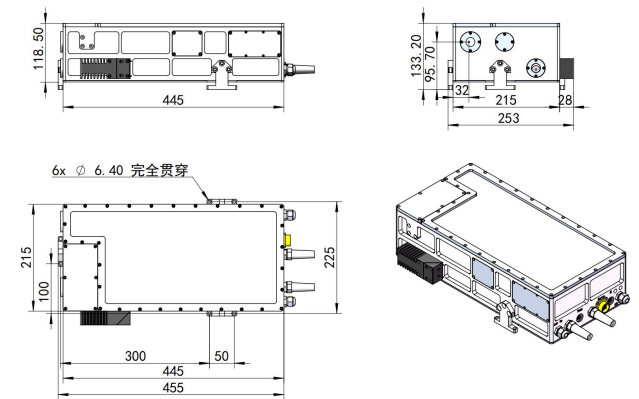
The controller and the output head are connected by a non-detachable optical fiber, the length of the optical fiber is > 1.5 meters

Water Cooling Version Dimensions (Power: 1W)

Laser Controller



Laser Head



The controller and output head are connected by a detachable cable, the cable length is > 1.5 meters



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

