



## 658-720nm Narrow Linewidth Laser

Based on high-power, low-noise fiber lasers amplification and sum-frequency technology, Precilasers can provide high-power, narrow linewidth laser output with a wavelength ranging from 658 to 720 nm.

### Key Features

- Narrow Linewidth
- Low RIN
- High Power
- Power Stability:  $<0.75\%_{rms}$ , 3hrs
- Excellent Beam Quality ( $M^2 < 1.1$ )
- Mode-Hopping Free
- High Temperature And Vibration Resistance

### Application

- Quantum Simulation



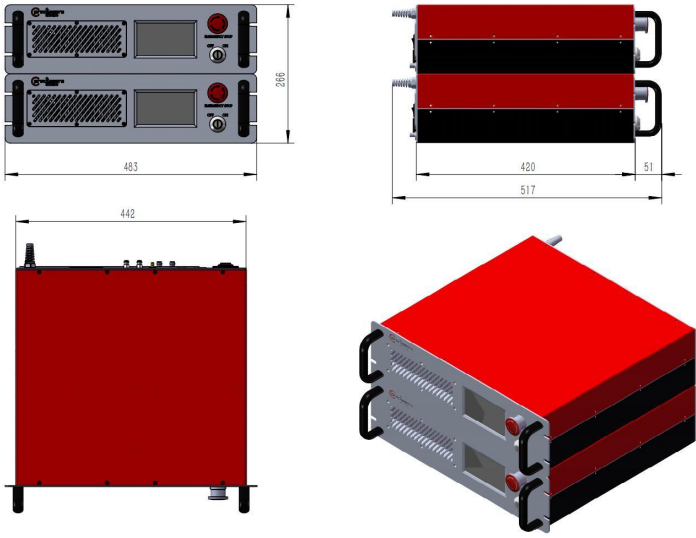
Specification				
Partnumber	FL-SF-XXXX-YY-CW <sup>(1)</sup>			
Wavelength Range	658-720nm			
Typical Wavelength	671nm, 689nm, 698nm, 707nm			
Operation Mode	CW			
Output Power	> 0.5W	> 2W	> 5W	> 8W
Thermal Tuning Range	> 0.2nm, Never Mode-hop			
Output Mode	Free Space Output			
Beam Diameter	0.7-1.0mm			
Linewidth <sup>(2)</sup> (100us)	< 20kHz			
PER	> 20dB			
Power Stability	< 0.75%@3hours, RMS			
Beam Quality	M <sup>2</sup> < 1.1			
PZT Frequency Tuning Range	> 3GHz			
PZT Frequency Tuning Bandwidth	> 5kHz			
AOM Tuning Range (Optional)	> ±5MHz			
AOM Tuning Bandwidth (Optional)	> 500kHz			
RIN	< 0.08% (10Hz-100MHz, RMS)			
Cooling	Air Cooling/Water Cooling			

Operating Environment & Power Supply	
Temperature	15-30 °C (Air Cooling) or 15-35 °C (Water Cooling)
Power Supply	100V-240V, AC, 50/60Hz
Communication	RS422

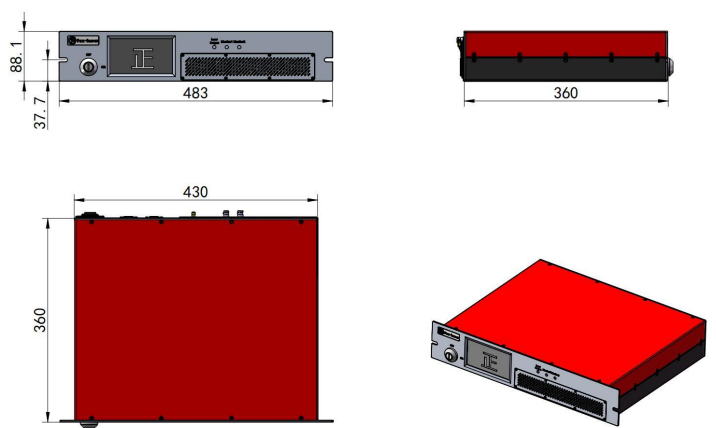
(1)XXXX is the laser center wavelength, YY is the laser power, for a 0.5W 689nm laser,the partnumberis FL-SF-689-0.5-CW

(2)Measured by self-hetrodyne method

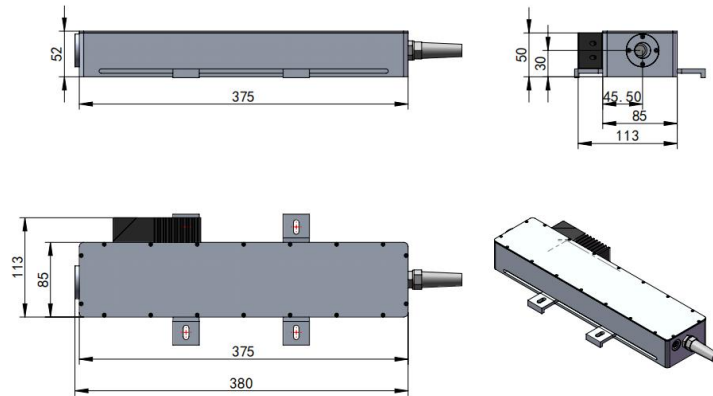
### Air Cooling Control Unit Dimension



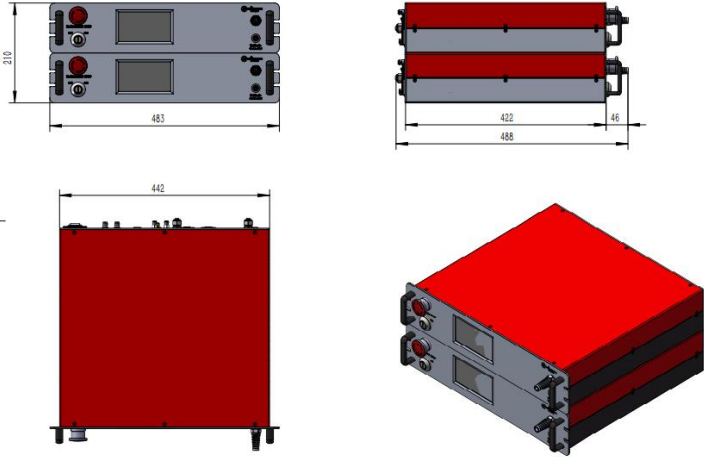
### Tm-Doped Fiber DFB Seed Laser (Air Cooling)



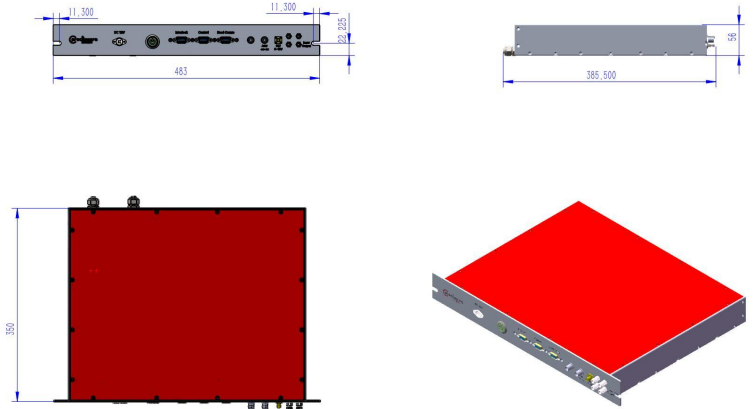
### Laser Head Output Dimension



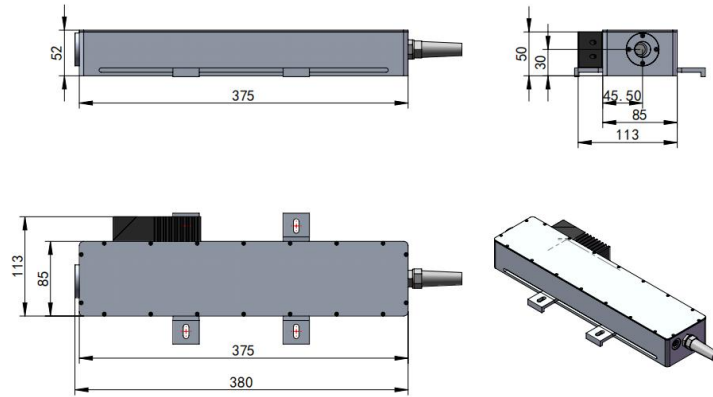
### Water Cooling Control Unit Dimension



### Tm-Doped Fiber DFB Seed Laser (Water Cooling)




### Laser Head Output Dimension



ShanghaiPrecilasersTechnologyCo.,Ltd.  
 Floor2,Building2,No.1918,XupanRoad, JiadingDistrict,Shanghai  
 021-59160265

[info@precilasers.com](mailto:info@precilasers.com)      [www.precilasers.com](http://www.precilasers.com)



⚠ DANGER

VISIBLE AND INVISIBLE LASER RADIATION  
 AVOID EYE OR SKIN EXPOSURE TO  
 DIRECT OR SCATTERED RADIATION  
 CLASS 4 LASER PRODUCT

