



## Narrow Linewidth Laser (2200-4800nm)

Based on high-power, low-noise fiber lasers amplification and frequency-difference technology, Precilasers can provide high-power, narrow linewidth laser output with a wavelength ranging from 2200 to 4800 nm.

### Features

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

### Applications

- Remote Sensing
- Laser Spectrum
- Gas Detection

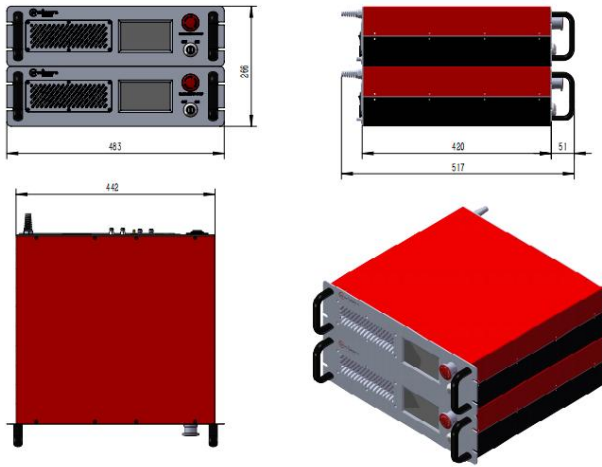


Specification			
Part Number	FL-SF-XXXX-YY-CW <sup>(1)</sup>		
Wavelength Range	2200-4800nm		
Typical Wavelength	2245nm	2923nm	3432nm
Operation Mode	CW		
Output Power	> 0.1W	> 0.5W	> 1.5W
Thermal Tuning Range	> 240GHz, Never Mode-hop	> 180GHz, Never Mode-hop	> 240GHz, Never Mode-hop
Output Mode	Free Space Output		
Beam Diameter	0.7-1.0mm		
Linewidth <sup>(2)</sup> (100us)	< 20kHz		
PER	> 20dB		
Power Stability	< 0.75%@3hours, RMS		
Beam Quality	$M^2 < 1.1$		
PZT Frequency Tuning Range	> 3GHz		
PZT Frequency Tuning Bandwidth	> 5kHz		
Fast Frequency Tuning Range	> 1GHz		
Fast Frequency Tuning Bandwidth	> 1MHz		
AOM Tuning Range (Optional)	> $\pm 5$ MHz		
AOM Tuning Bandwidth (Optional)	> 500kHz		
RIN	< 0.08% (RMS,10Hz-100MHz)		
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		

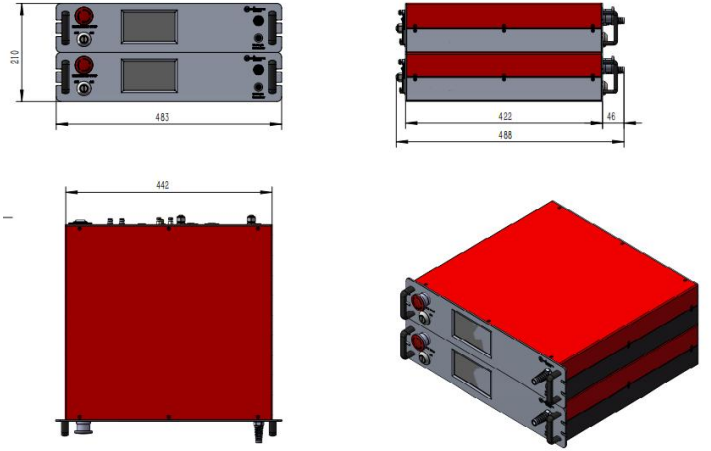
(1)XXXX is the laser center wavelength, YY is the laser power, for a 0.1W 3432nm laser,the partnumberis FL-SF-3432-0.1-CW

(2)Measured by self-hetrodyne method

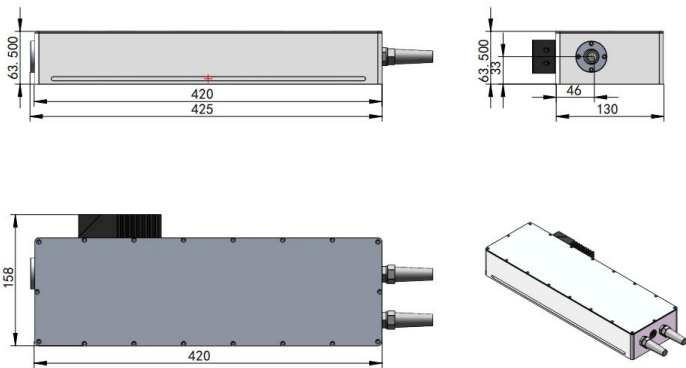
### Air Cooling Control Unit Dimension



### Water Cooling Control Unit Dimension




### Laser Head Output Dimension



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**⚠ DANGER**

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

