



Narrow Linewidth Er fiber DFB Lasers(1525nm-1625nm)

Based on FECL/Er fiber DFB seed laser and Er fiber amplifier, Precilasers can provide narrow linewidth lasers from 1525-1625nm range, with very low phase noise and intensity noise.

Features

- Narrow Linewidth
- Low Phase Noise
- Low Intensity Noise
- Never Mod-hop

Applications

- Quantum Precision Measurement
- Quantum Computation



Specification

Partnumber	FL-SF-X-Y-CW ⁽¹⁾				
Wavelength Range	1525-1530nm	1530-1535nm	1535-1570nm	1570-1596nm	1596-1625nm
Output Power	>1W	>2W/10W/15W	>2W/20W/40W	>2W/10W	>2W/5W
Typical Wavelength	1550.12nm, 1560.48nm				
Seed Laser ⁽²⁾	Fiber DFB Seed Laser (1525-1610nm)		Fixed External Cavity Diode Laser(FECL, 1525-1625nm)		
Linewidth(100us Integration Time)	<1kHz/2kHz		<5kHz/10kHz		
Total Tuning Range (Temperature)	>1nm		>7GHz		
Fast Tuning Bandwidth	>5kHz, PZT		>1MHz, Current		
Fast Tuning Range	>3GHz/10GHz, PZT		>500MHz, Current		
AOM Tuning Bandwidth (Optional)	>500kHz				
AOM Tuning Range (Optional)	>±5MHz				
Power Stability	<0.75% @3hours, RMS				
Power Tuning Range	1-100%				
Output Mode	Single Mode PM Fiber, FC/APC Connector (Output Power≤2W) Or Free Space Collimated Output				
Beam Diameter	0.6±0.2mm				
Beam Quality	TEM ₀₀ , M ² <1.1				
Polarization	Linear, >23dB				
Output Isolation	>25dB				
Cooling	Air Cooling/Water Cooling				

Operating Environment & Power Supply

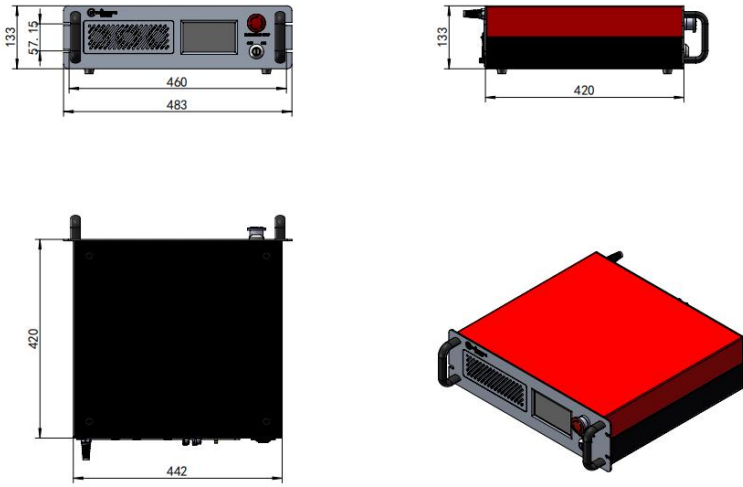
Temperature	15-30 °C (Air Cooling) Or 15-35 °C (Water Cooling)	
Power Supply	100V-240V, AC, 50/60Hz	
Communication	RS422	

(1)X is the wavelength and Y is the output power, for 2W 1560nm laser, the partnumber is FL-SF-1560-2-CW.

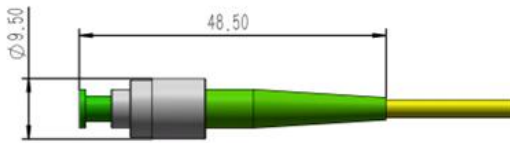
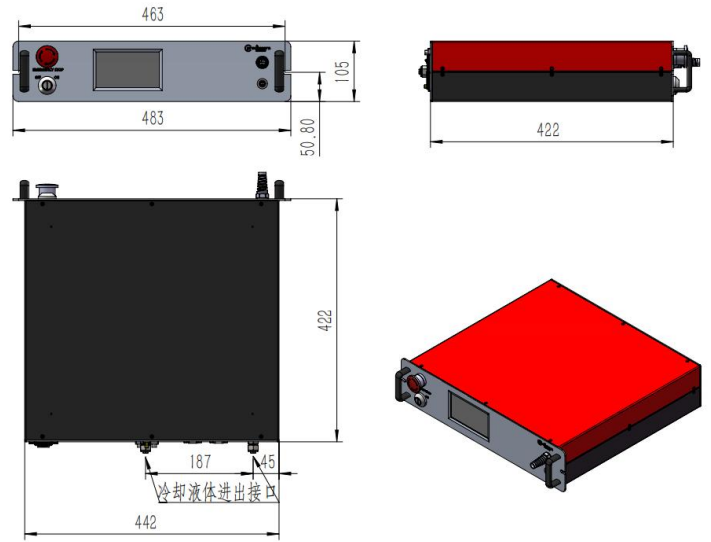
(2) Beam size for collimated outout, If PM fiber FC/APC connector output, there is no extra collimator

❖ Dimension

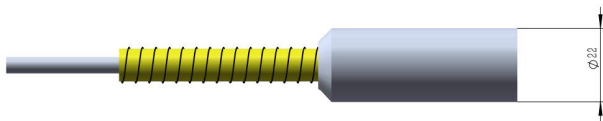
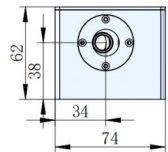
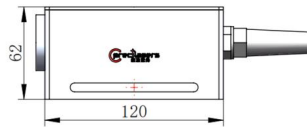
Air cooling controller size



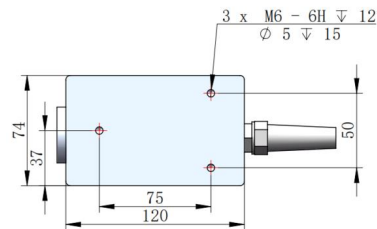
Water cooling size



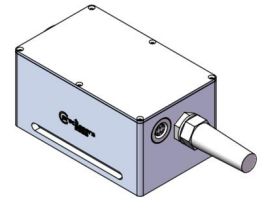
FC/APC PM Fiber (Power \leq 2W)



Collimator size (Output power<20W)



Free Space Output Laser Head Size



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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