



Narrow Linewidth Tm fiber DFB Lasers (1695nm–2050nm)

Based on Tm fiber DFB seed laser and Tm fiber amplifier, Precilasers can provide narrow linewidth lasers from 1695–2100nm range, with very low phase noise and intensity noise.

Feature

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

Application

- Quantum Precision Measurement
- Quantum Computation



Specification

Partnumber	FL-SF-X-Y-CW ⁽¹⁾				
Wavelength Range	1695-1730nm	1730-1850nm	1850-1900nm	1900-2050nm	2050-2100nm
Output Power	>1W	>2W/10W	>2W/10W/20W	>2W/10W/15W	>2W/5W/10W
Typical Wavelength	1762nm, 2051nm				
Seed Laser ⁽²⁾	Tm Fiber DFB Laser				
Linewidth(100us Integration Time)	<5kHz/10kHz				
Total Tuning Range (Temperature)	>1nm				
PZT Tuning Bandwidth	>5kHz				
PZT Tuning Range	>3GHz/10GHz				
AOM Tuning Bandwidth (Optional)	>500kHz				
AOM Tuning Range (Optional)	>±5MHz				
Power Stability	<0.75% @3hours, RMS				
Power Tuning Range	1-100%				
Output Mode ⁽³⁾	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

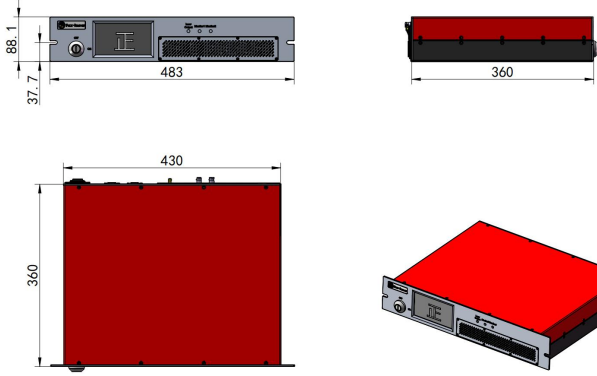
Temperature	15-30 °C (Air Cooling) Or 15-35 °C (Water Cooling)				
Power Supply	100V-240V, AC, 50/60Hz				
Communication	RS422				

(1)X is the wavelength and Y is the output power, for 2W 1762nm laser, the partnumber is FL-SF-1762-2-CW.

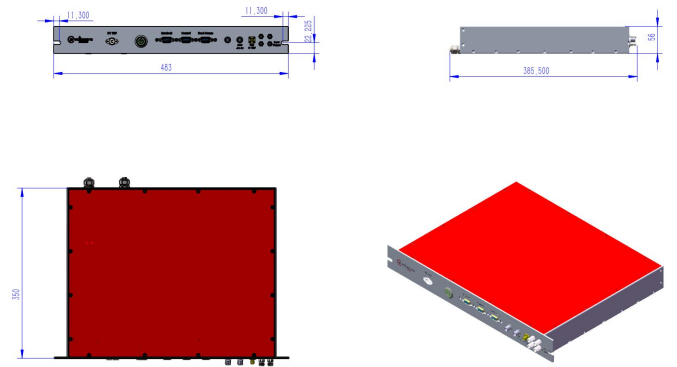
(2) Seed laser has another rack in default, and can be put into the amplifier optionally.

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

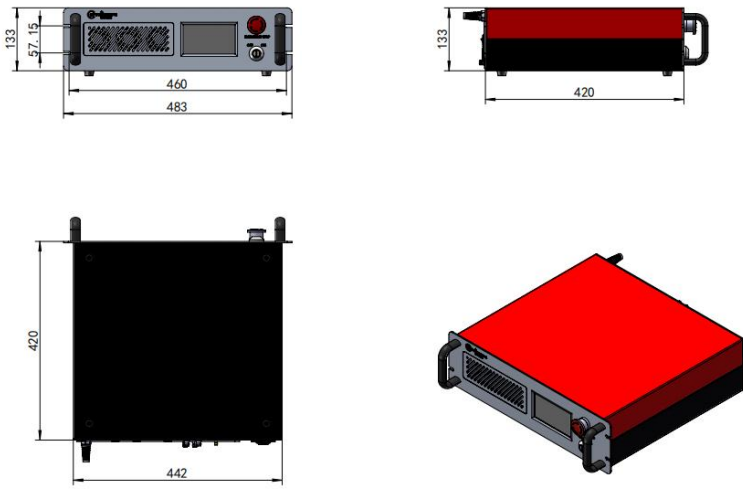
Air cooling seed laser size



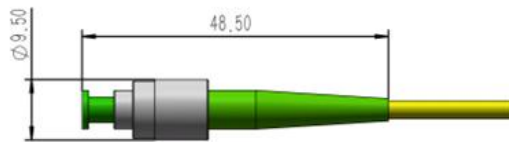
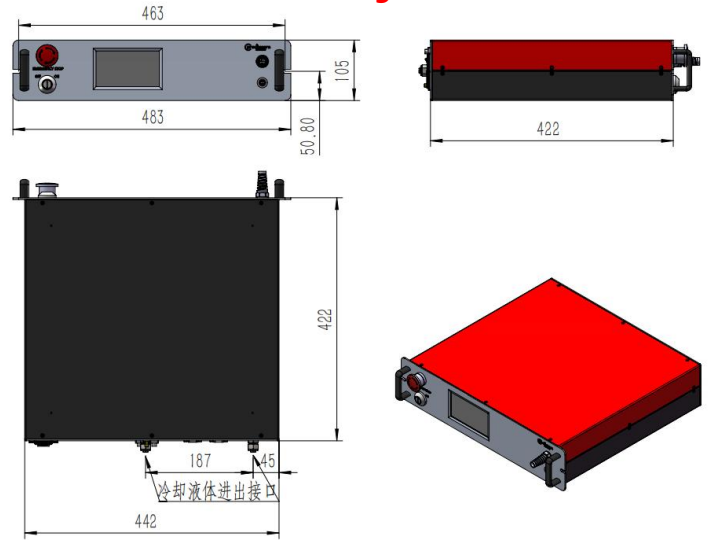
Water cooling seed laser size



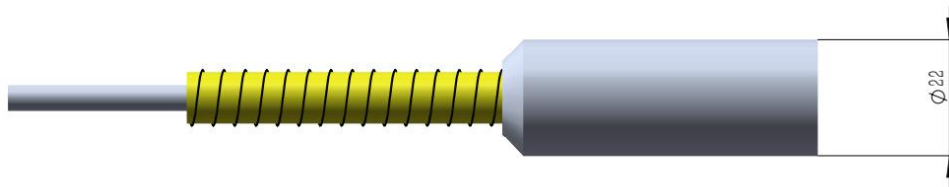
Air cooling controller size



Water cooling size



FC/APC connector (Output power ≤ 2W)



Collimator size (Output power)



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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