

## Dual Output 780nm Narrow Linewidth Laser (FECL)

Based on fixed external cavity diode laser, low noise erbium doped fiber amplifier and high efficiency frequency doubling module, Precilasers can provide high power 780nm laser, which is widely used in quantum precision measurement and optical precision measurement.

### Features

- Ultra-small Size
- Narrow Linewidth
- Tunable
- Continuous Laser

### Applications

- Rb Atom Quantum Computing
- Rb Atom Atomic Gravimeter
- Precision Distance Measurement



Specification		
Partnumber	FECL-SF-780-2-2-CW	
Note	Two completely independent 780nm frequency-doubled lasers, accepting customization of various structures	
Center Wavelength	780.24nm	
Output Power	Independent dual-channel output, Each channel output > 2W	
Operation Mode	Continuous	
Tuning Range (Temperature)	> 15GHz, Continuous without mode hop	
Output Mode	Single-mode polarization-maintaining fiber output <sup>(1)</sup>	
Linewidth <sup>(2)</sup> (100us integration time)	< 6kHz	< 15kHz
Polarization Extinction Ratio	> 20dB	
Power Stability (3 Hours RMS)	< 0.75%	
Beam Quality	$M^2 < 1.1$	
Current Tuning Range	> 1GHz	
Current Tuning Bandwidth	> 1MHz	
RIN Relative Intensity Noise (10Hz-100MHz, RMS)	< 0.08%	
Cooling	Air Cooling	

(1) Spatial collimation output can also be selected at low power, with a diameter of 0.7-1mm. The single-mode polarization-maintaining fiber defaults to FC/APC connector. Please pay attention to the cleanliness of the fiber end face when using it.

(2) Fiber Delay Self-Heterodyne Beat Frequency Measurement

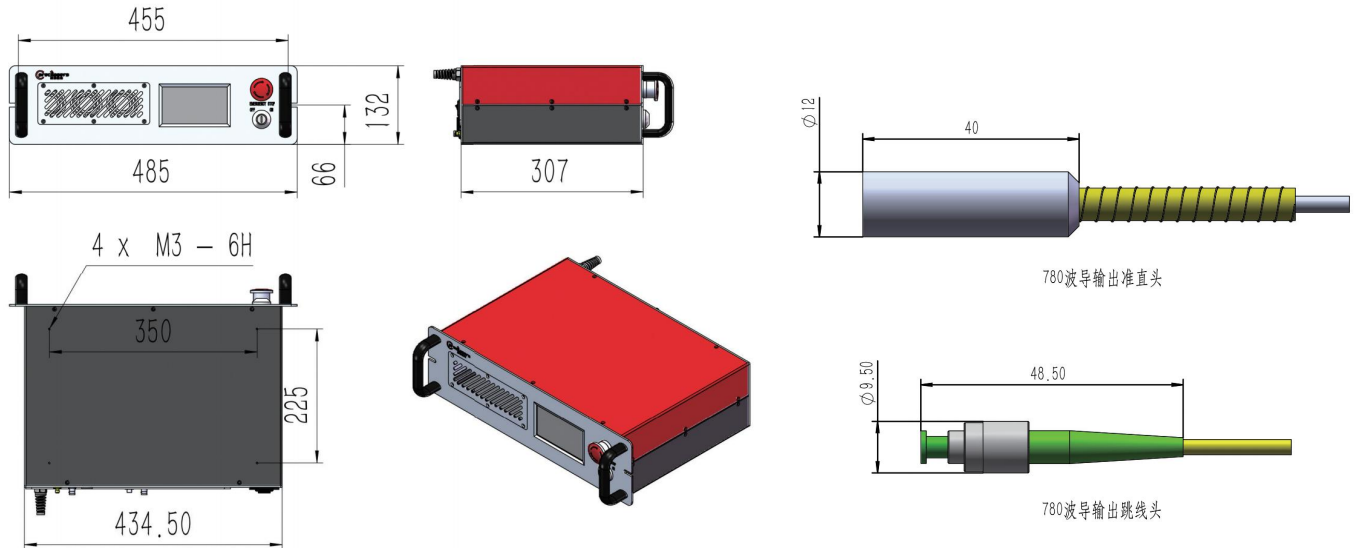
Options	
AOM Options	AOM Tuning Range: > $\pm 5$ MHz AOM Tuning Bandwidth: > 500kHz
EOM Options	Built-in EOM Bandwidth : dc-150MHz

Other parameters	
Temperature	15-30°C <sup>(1)</sup>
Power Supply	100-240V , 50/60Hz

(1) High temperature environment option: can be used in an environment of 0-50°C

## ❖ Product Dimensions

Air Cooling Laser Dimensions



Shanghai Precilasers Technology Co., Ltd.

📍 Floor 2, Building 2, No. 1918, Xupan Road, Jiading District, Shanghai

☎ 021-59160265

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

