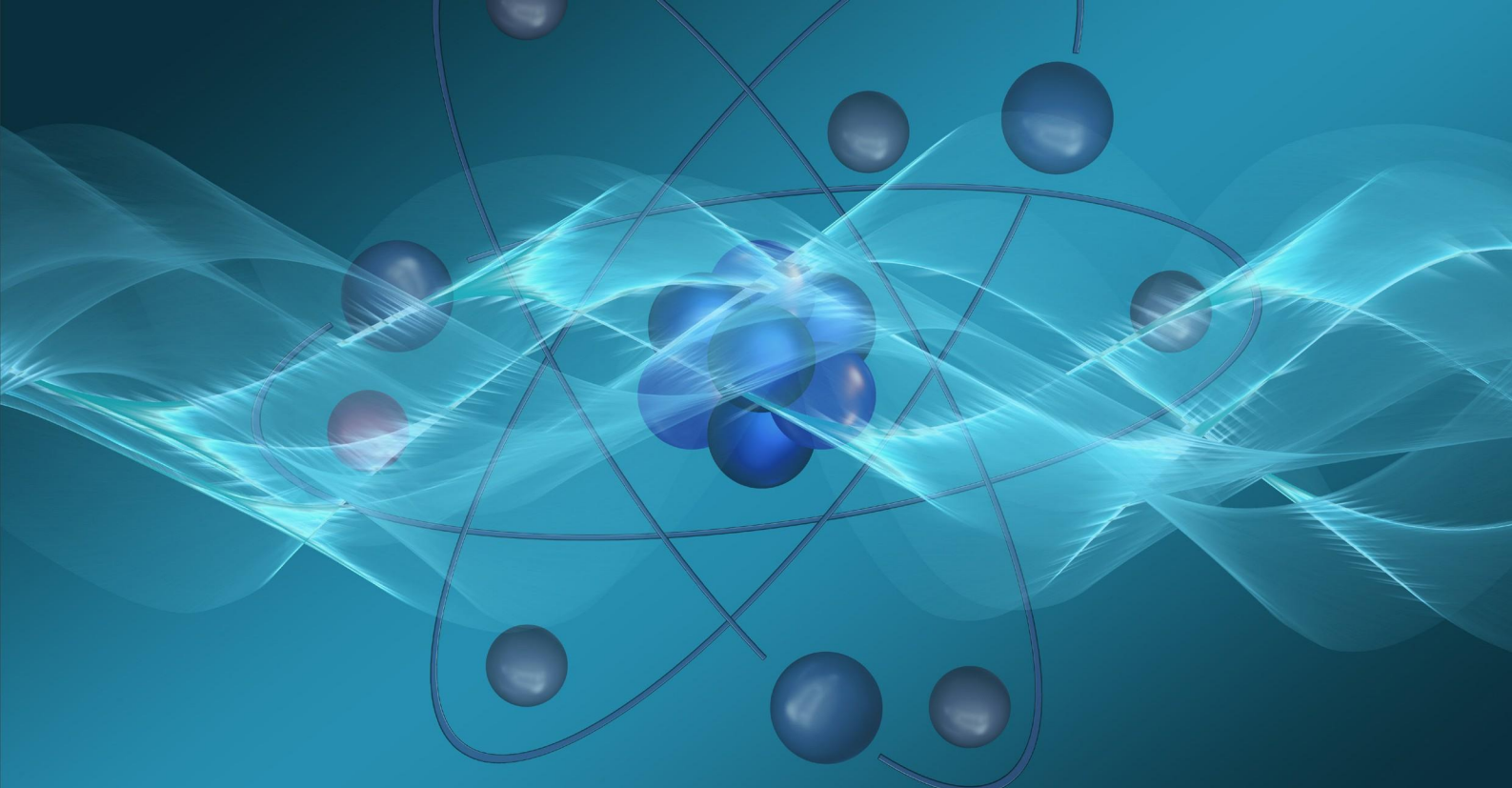




780nm Narrow Linewidth Laser (DFB)

Based on 1560nm fiber DFB seed 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

Applications

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



Specification							
Partnumber	FL-SF-780-X ⁽¹⁾ -CW						
Center Wavelength	780.24nm						
Output Power	0.2W	0.5W	1W	2W	4W	8W	20W
Operation Mode	Continuous						
Tuning Range (temperature)	> 0.5nm,Continuous without mode hop						
Output Mode	Single-mode polarization-maintaining fiber output ⁽²⁾				Spatial collimation output, diameter0.7-1mm		
Linewidth ⁽³⁾ (100 us integration)	< 2kHz				< 5kHz		
Polarization Extinction Ratio	> 20dB						
Power Stability (3 Hours RMS)	< 0.75%						
Beam Quality	M ² < 1.1						
PZT Tuning Range	> 3GHz						
PZT Tuning Bandwidth	> 5kHz						
Cooling	Air Cooling				Water Cooling		

(1)X represents power, for example, if the power is 2W, the model is FL-SF-780-2-CW

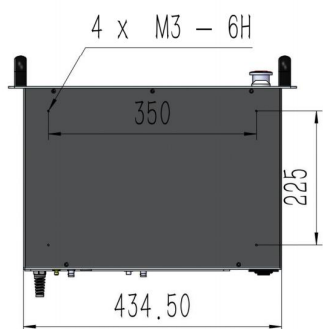
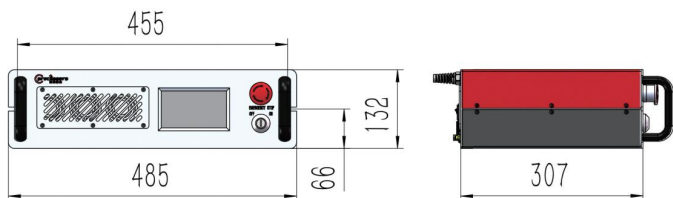
(2) You can also choose spatial collimation output at low power, with a diameter of 0.7-1mm. The single-mode polarization-maintaining fiber has a default FC/APC connector. Please pay attention to the cleanliness of the fiber end face when using it.

(3)Measurement of fiber delay by self-heterodyne beat frequency method

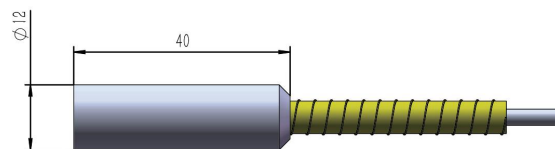
Other Parameters	
Temperature	15-30°C ⁽¹⁾
Power Supply	100-240V AC, 50/60Hz

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

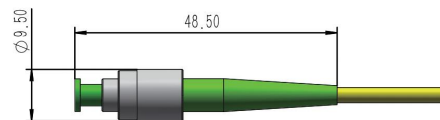
❖ Dimension



Laser Controller Size

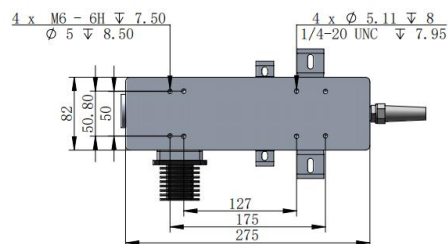
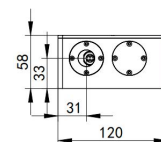
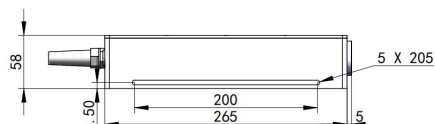
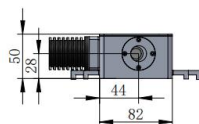
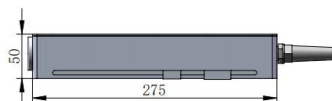


780波导输出准直头

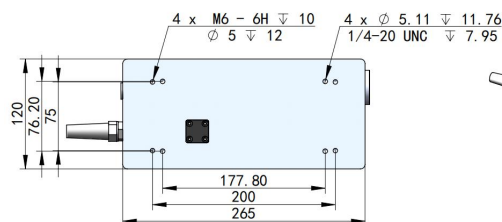


780波导输出跳线头

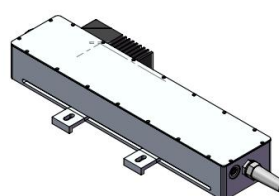
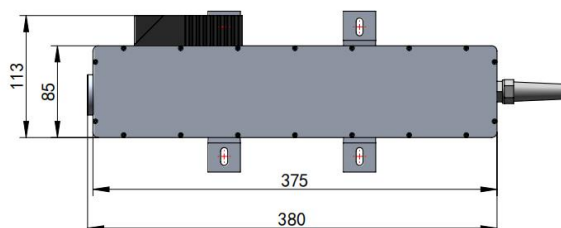
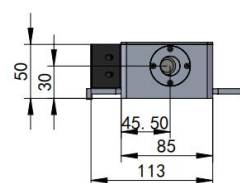
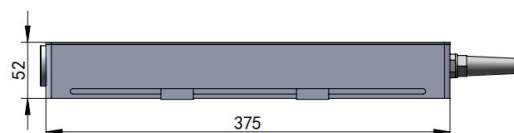
PM fiber output, Power $\leq 2W$



Free space output laser head size
(Power $\leq 1.5W$)



Free space output laser head size
(1.5W < Power $\leq 7W$, no 1560nm laser output)



Free space output laser head (Power > 7W)