

# HIGH POWER SINGLE FREQUENCY YB-DOPED FIBER LASER

Continuous, High Power, Ultra Low Rin, Narrow Linewidth, Tunable

PreciLasers offers a 1010-1120 nm Ytterbium-doped fiber amplifier with innovative ASE suppression technology. Maximum output power reaches up to 130 W for a single-frequency operation. The lasers have ultra-low intensity noise, which makes them ideal light sources for the applications like optical lattice and laser atoms cooling. The full protection system of the laser ensures long-term free of maintenance and long life time.

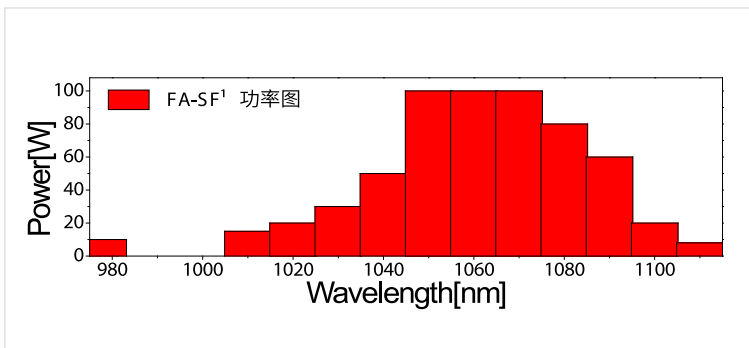


### Key Features:

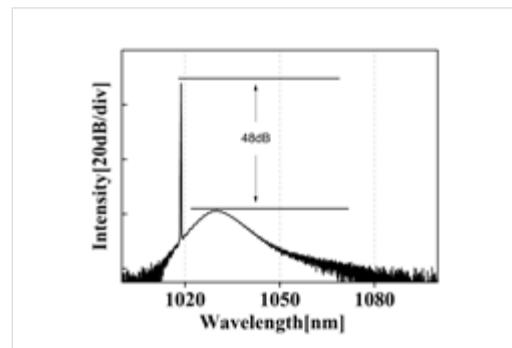
- Compact in size
- Excellent long time stability
- Good beam quality ( $M^2 < 1.1$ )
- Operation in harsh conditions

### Applications:

- Source for frequency doubling
- Mid-Infrared pump laser
- Neutron Source of Solid State Laser
- Biomedical research



Wavelength and power range of ytterbium-doped single-frequency fiber Amplifier

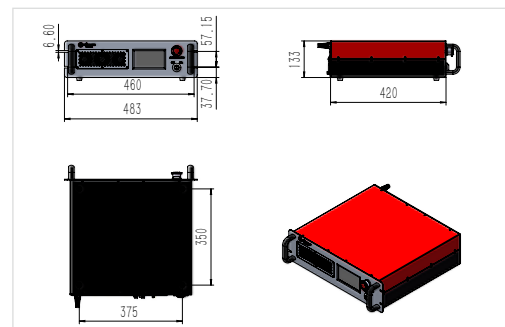


The spectrum of 15w 1018nm fiber laser

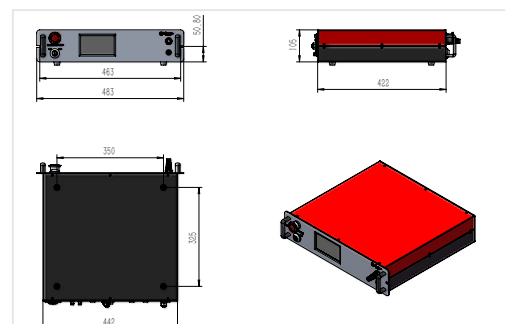
Model	FA-SF-XX-YY-ZZ <sup>1</sup>				
Wavelength, nm	976-978	1010-1018	1018-1080	1080-1100	1100-1120
Output Power, W	8	10	100	30	10
Linewidth, kHz	3 kHz (With Precilaser <sup>1</sup> FL-SF-1XXX-S)				
Operation Mode	CW				
RIN, dBc/Hz	RMS integration: <0.05% (10Hz-10 MHz)				
Beam Quality	TEM <sub>00</sub> , M <sup>2</sup> <1.15				
Polarization, dB	> 23				
RMS Power Stability	<0.5% @3hrs; <0.3% @3hrs				
Output	Collimated Fiber output				
Cooling	Air/Water				
Power Supply	50-60Hz, 100-240VAC				

Note: 100W@1013nm; 130W@1064nm.

1: XX: Central Wavelength; YY: Output Power; ZZ: Operation Mode



Size for Air-cooling Version



Size for Water-cooling Version