

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.

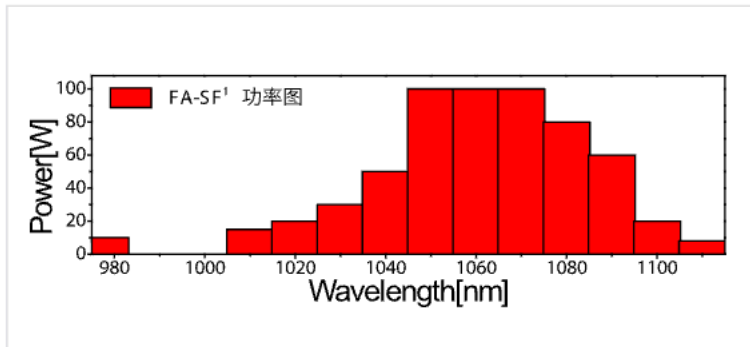


Key Features:

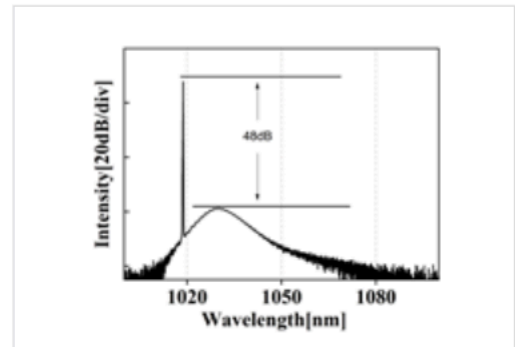
- Compact in size
- Excellent long time stability
- Good beam quality ($M^2 < 1.1$)
- Operation in harsh conditions

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

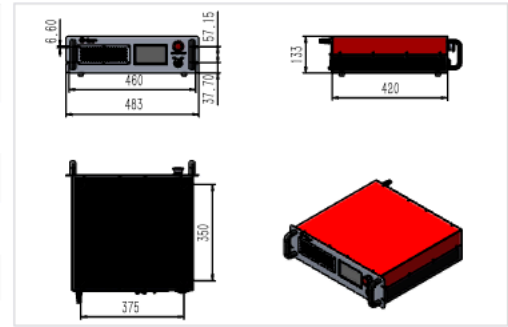


The spectrum of 15w 1018nm fiber laser

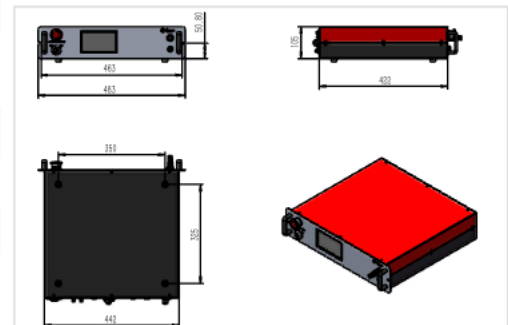
| Model | FA-SF-XX-YY-ZZ ¹ | | | | |
|---------------------|---|-----------|-----------|-----------|-----------|
| Wavelength, nm | 976-978 | 1010-1018 | 1018-1080 | 1080-1100 | 1100-1120 |
| Output Power, W | 8 | 10 | 100 | 30 | 10 |
| Linewidth, kHz | 3 kHz (With Precilaser ¹ FL-SF-1XXX-S) | | | | |
| Operation Mode | CW | | | | |
| RIN, dBc/Hz | RMS integration: <0.05% (10Hz-10 MHz) | | | | |
| Beam Quality | TEM ₀₀ , M ² <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

