



Yb-Doped Single-Pass SHG Fiber Laser



The product description

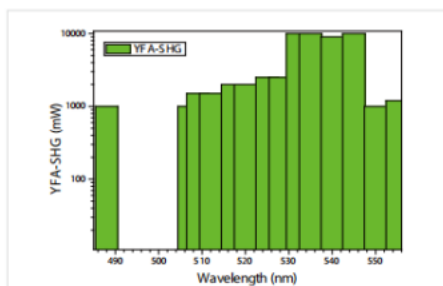
Erbium group provides narrow-linewidth, mode-hopping free, frequency-doubled single frequency lasers from 488 to 560 nm, based on Yb-doped fiber lasers (YFL SSHG). It consists of an all-fiber amplifier seeded with single frequency fiber DFB laser, and a single-pass frequency doubling unit with PPLN/PPSLT crystal. Compared with frequency-doubled lasers based on diode laser, the fiber solution has a stable configuration, excellent beam quality ($M^2 < 1.1$), high output power (up to 10 W) and low intensity noise ($RIN < 0.06\%$ from 10 Hz-10 MHz). It remains mode-hopping-free and stable under wide temperature variation and high mechanical vibration.

Key Features:

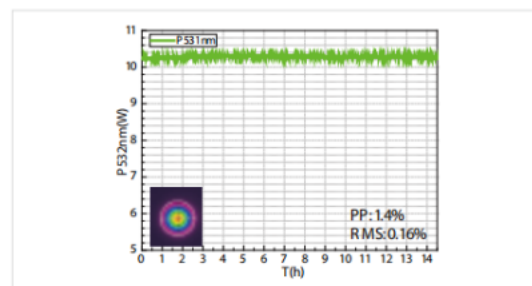
- Narrow Linewidth(<20 kHz)
- Support Seed built-in, Tunable
- Stable and Maintenance-free
- Excellent Beam Quality
- Mode-Hopping Free

Applications:

- Laser cooling, trapping, Optical Lattice
- Pump laser for OPO, Ti:Sapphire
- Biomedical
- Fundamental light for UV laser



Wavelength-Power



Beam Profile and Power Stability

Technical indicators

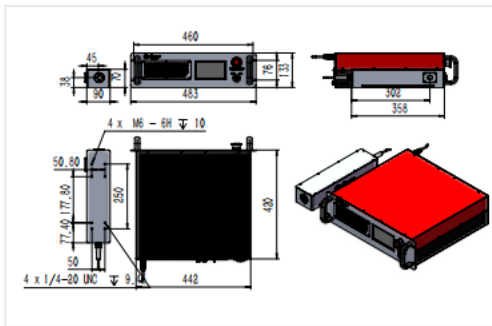
| Model | YFL-SSHG-XX-YY-ZZ' | | | | | | |
|------------------------|------------------------------|---------|---------|-----|---|----|-----|
| Wavelength Range, nm | 488 | 509-530 | 531-550 | 556 | | | |
| Output Power, W | 0.5 | 1 | 1 | 5 | 2 | 10 | 1.5 |
| Seed Laser | Precilasers' Fiber DFB laser | | | | | | |
| Frequency converted | Single Pass SHG | | | | | | |
| Fast Tuning Range, GHz | 6 | | | | | | |
| Slow Tuning Range, nm | 0.3 | | | | | | |



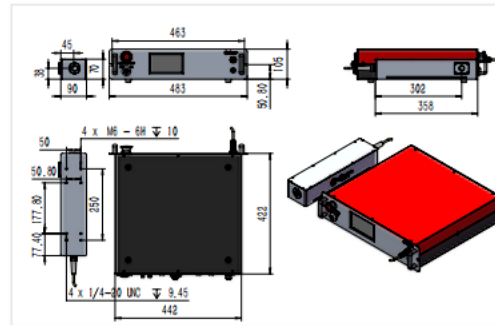
| | |
|------------------------|-----------------------------|
| Linewidth (100us), kHz | <20 |
| RMS Power Stability | <0.3 %@3hrs |
| Beam Quality | TEM ₀₀ , M2 <1.1 |
| PER, dB | >20 |
| Beam Diameter, mm | 0.7-1.0 |
| Cooling | Water Cooling/Air Cooling |
| Power Supply | 50-60Hz , 100-240VAC |

1: XX: Central Wavelength, YY: Maximum Output Power, ZZ: Operation Mode
 2:The center wavelength can be customized;
 3: High power can be customized

Structure size



Size for Air-cooling Version



Size for Water-Cooling Version