

SINGLE PASS SHG FIBER LASER

► Yb-Doped Single-Pass SHG Fiber Laser

Narrow Linewidth, Low Frequency Drift, Mode-hopping Free, Active power Stability, Excellent Beam Quality



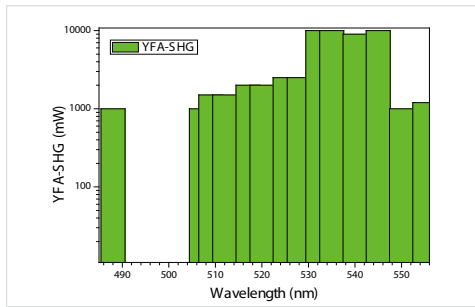
Precilasers provides narrow-linewidth, mode-hopping free, frequency-doubled single frequency lasers from 488 to 560 nm, based on Yb-doped fiber lasers (YFL-SSHG). It consists of an all-fiber amplifier seeded with single frequency fiber DFB laser, and a single-pass frequency doubling unit with PPLN/PPSLT 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:

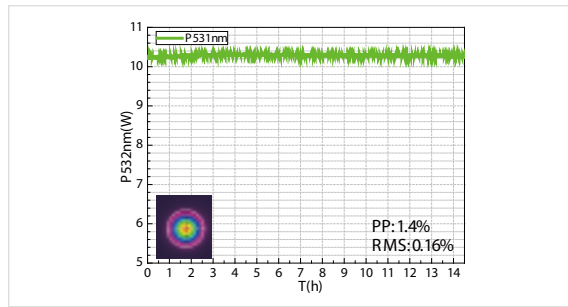
- Narrow Linewidth(<20 kHz)
- Support Seed built-in, Tunable
- Stable and Maintenance-free
- Excellent Beam Quality
- Mode-Hopping Free

Applications:

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



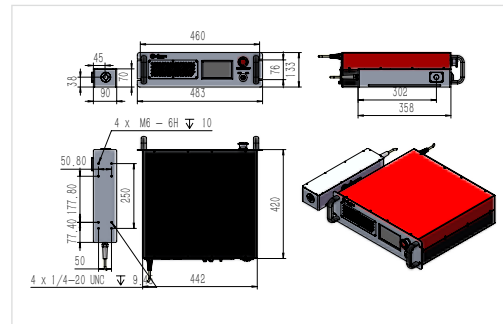
Wavelength-Power



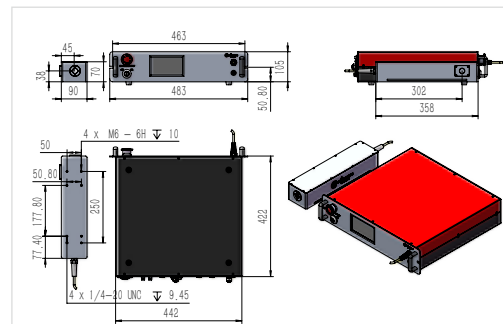
Beam Profile and Power Stability

Model	YFL-SSHG-XX-YY-ZZ ¹						
Wavelength Range, nm	488	509-530	531-550	556			
Output Power, W	0.5	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 , M ² <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



Size for Air-cooling Version



Size for Water-Cooling Version