

► Tm-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 near 1000nm, based on Tm-doped fiber lasers (TFL-SSHG). It consists of an all-fiber amplifier seeded with single frequency fiber DFB laser, and a single-pass frequency doubling unit with PPLN/PPLT crystal. Compared with frequency-doubled diode laser, the fiber solution has stable configuration, excellent beam quality ($M^2 < 1.1$). It remains mode-hopping-free and stable under wide temperature variation and high mechanical vibration.

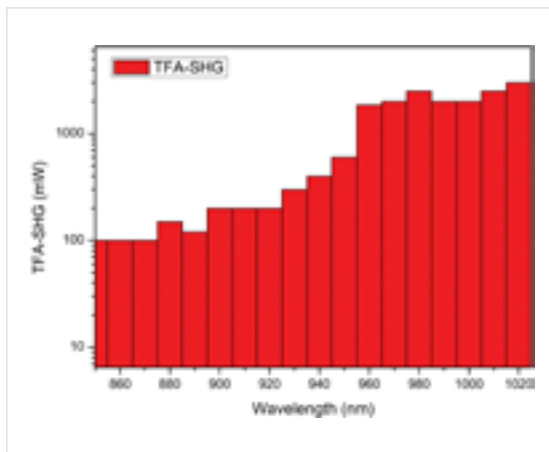


Key Features:

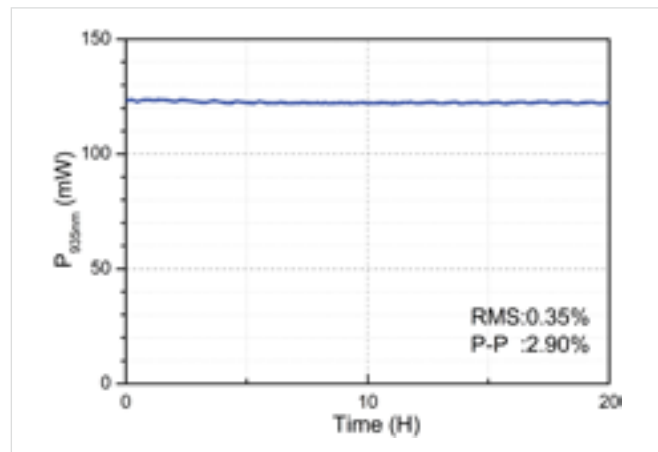
- Narrow Linewidth(<20 kHz)
- Good Beam Quality ($M^2 < 1.1$)
- Stable and Maintenance-free
- Mode-Hopping Free

Applications:

- Laser cooling, trapping, Optical Lattice
- Pump laser for OPO, Ti:Sapphire
- Biomedical
- Solar cell processing



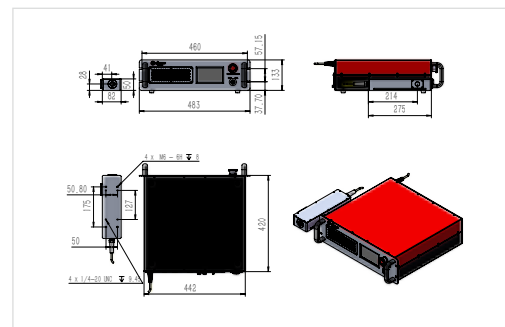
Wavelength-Power



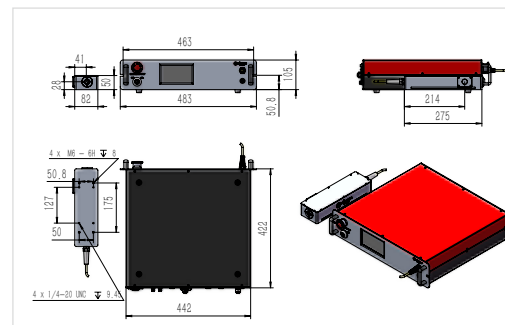
Power Stability

Model	TL-SSHG-XX-YY-ZZ ¹			
Central Wavelength ¹ ,nm	920	935	960	975
Output Power, W	0.5	1	2	2
Linewidth (100 us), kHz	<20			
No hopping tuning range, nm	>0.4			
Beam Quality	$M^2 < 1.1$, TEM ₀₀			
PER, dB	Linear, PER>20dB			
RMS Power Stability, %	<0.3% RMS@3h			
Power Range	10%-100%			
Cooling	Air Cooling/Water Cooling			
Power consumption, W	<200W			

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