

## Er-Doped Single-Pass SHG Fiber Laser



### The product description

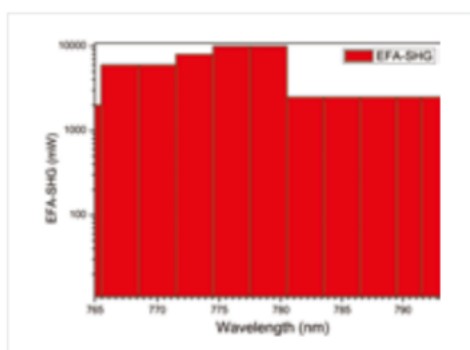
Erbium group provides narrow-linewidth, mode-hopping free, frequency doubled single frequency lasers from 765 to 798 nm, based on Er-doped fiber lasers (EFL-SSHG). It consists of an all-fiber amplifier seeded with single frequency fiber DFB laser, and a single-pass frequency doubling unit with PPLN/PPSLT crystal. Compared with frequency-doubled diode laser, the fiber solution has 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:

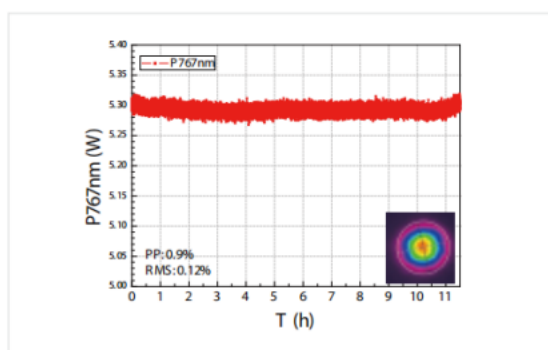
- Narrow Linewidth(<20 kHz)
- Support Seed built-in, Tunable
- Stable and Maintenance-free
- Good Beam Quality ( $M^2 < 1.1$ )
- Mode-Hopping Free

### Applications:

- Rb atom cooling
- Magic optical lattice
- Atom interferometry
- Atom clock



Wavelength-Power



Beam Profile and Power Stability

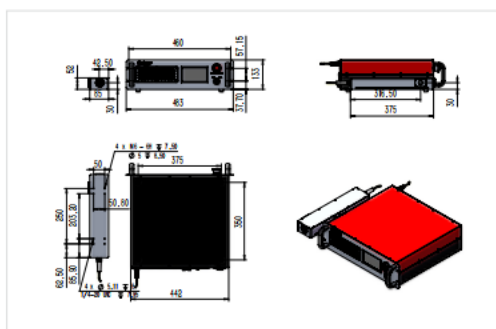
### Technical indicators

Model	EFL-SSHG-XX-YY-ZZ'							
Wavelength Range <sup>a</sup> , nm	767		770		780		790-798	
Output Power <sup>a</sup> , W	5	7	2	7	15	0.2	2	4
Seed Laser	Precilasers' DFB laser				Low Intensity Noise Diode Laser			

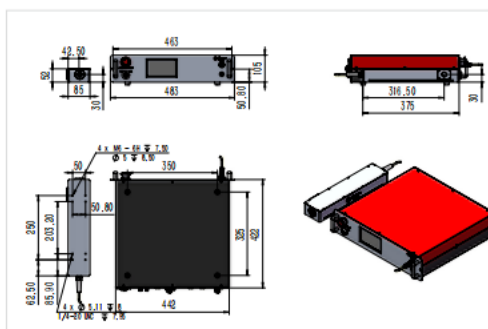


Frequency converted	Single Pass SHG	
Fast Tuning Range, GHz	6	1
Slow Tuning Range,nm	>200	>20
RMS Power Stability,%	0.3 %@3hrs	
Relative Intensity Noise, (10Hz-10 MHz Integration)	<0.1%	<0.05%
Beam Quality	TEM <sub>∞</sub> , M2 <1.1	
PER, dB	>23	
Beam Diameter, mm	0.7-1.0	
Cooling	Water Cooling/Air Cooling	
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