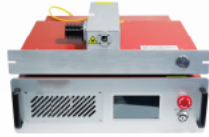




Mid-infrared single-frequency fiber laser



The product description

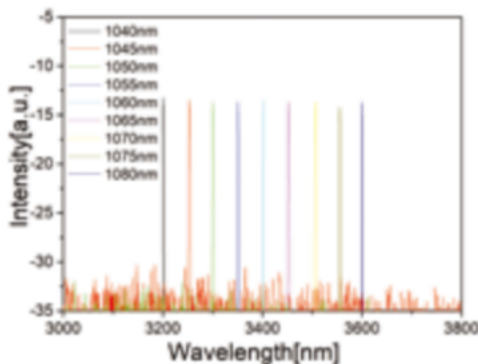
Erbium group develop the all-fiber single-pass differential frequency laser (FA-SDFG) extend the wavelength to Mid-infrared range. FA-SDFG series use ultra-narrow linewidth DFB as the seed source. All-fiber amplifier amplify the laser power. The periodic polarization crystal is adopted for producing the high power differential frequency laser. The wavelength range of the FA-SDFG series cover 2.4-4.0 um. The laser has the characterizers of narrow laser line width (Lorentz linewidth <10kHz), no mode jump under a large range of temperature and vibration conditions, excellent laser beam quality ($M^2 < 1.2$), high output power and low intensity noise.

Applications:

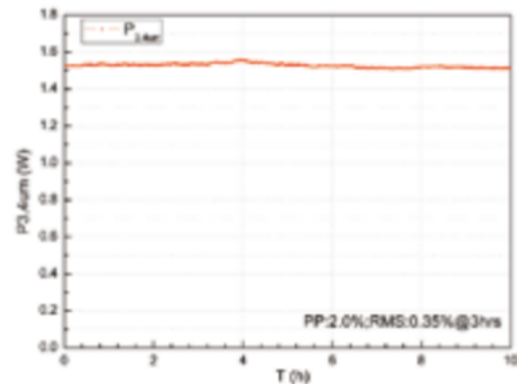
- Remote sensing
- Laser spectrum
- Gas detection

Key Features:

- High power, narrow linewidth, tunable, linear polarization
- No mode hopping
- High and low temperature, Vibration resistance
- Excellent beam quality ($M^2 < 1.2$)



Wavelength tuning range



Performance test

Technical indicators

Model	FA-SDFG		
Central wavelength, nm	2.4~4.0		
Output Power, w	0.05~1.5		
Seed Laser	Fiber DFB	Diode DFB	Wide-tuned seed
Frequency converted	Single-pass difference frequency		
Differential frequency tuning range, nm	> 10	> 20	> 400
Linewidth, kHz	< 10	< 10000	< 20
RMS Power Stability	<0.5%@3hrs	<0.5%@3hrs	<0.5%@3hrs
Beam Quality	TEM ₀₀ , M ² <1.1		

