

1064nm Single Frequency Continuous Laser



DESCRIPTION

The single frequency series laser includes single frequency continuous seed source, single frequency continuous amplification + frequency multiplier, single frequency high energy solid-state laser. Based on the non planar ring cavity technology, resonance detection technology, external cavity resonance frequency doubling technology and other engineering technology, the full parameter multi band laser product coverage from narrow linewidth seed source, excitation amplification to nonlinear frequency conversion is realized. By means of advanced engineering design means, the reliability and stability of products are effectively guaranteed in the light mechanical thermal integration analysis, automatic electronic control system development, etc. This series of products are widely used in lidar systems such as Doppler lidar, laser debris observation, laser remote sensing, etc., with the following technical advantages,

- Hyperspectral characteristics to meet the spectrum fine analysis
- High quality seed light injection, excellent power amplification
- Resonance detection technology ensures the single frequency characteristics of each pulse
- Frequency locking and stabilizing technology

The design of nonplanar ring cavity is adopted. The spectral linewidth is less than 5 kHz, and the output power is more than 100 MW. It can support the spatial optical output and the optical fiber coupling output.

FEATURES

- Narrow line width
- High stability
- Tunable
- Compact structure, ideal for OEM applications

APPLICATION

- Laser seed source
- Coherent lidar
- Ranging, remote sensing
- Laser spectroscopy

PARAMETERS

Model	CL1064-50mW-SCSL001	CL1064-100mW-SCSL002	
Optical Parameter	Central Wavelength (nm)	1064.4	1064.4
	Output Power (mW)	>50	>100
	Energy Stability	<1.5%@2h	<1.5%@2h
	Frequency Stability (MHz@1min)	<3	<3
	Line Width (KHz)	<5	<5
	Beam Quality M2	<1.2	<1.2
Function Parameter	Output Method	Fiber-Coupled Output	Spatial output
	Temperature Tuning Range (°C)	±2	±2
	Temperature Tuning Rate (GHz/°C)	3-4	3-4
	PZT Tuning Range (MHz)	±100	±100
	PZT Tuning Rate (MHz/V)	1.4	1.4
	PZT Tuning Line Width (KHz)	100	100
	Temperature / PZT Tuning Interface	SMA, 50Ω	SMA, 50Ω
	Control Interface	DB9, RS232	DB9, RS232
	Powered By	24VDC	24VDC
	Output Power (W)	<50	<50
Environmental Requirements	Operating Temperature (°C)	15-35	15-35
	Storage Temperature (°C)	-10-50	-10-50
	Humidity	0-80%	0-80%
Weight and Size	Laser Head Weight (g)	Customizing	200
	Power Weight (Kg)	1.5	1.5
	Laser Head Size (mm)	Customizing	500*67*34.5
	Power Size (mm)	248.4*209*84.5	248.4*209*84.5

OUTLINE SIZE(mm)

