1064nm 350ps Microchip Laser System of MCD Series





DESCRIPTION

MCD series microchip laser is a passively Q-switched solid-state laser based on semiconductor pump. The laser pulse is pure and tailless, the single pulse energy is stable, and the beam quality is good. The integrated design of semiconductor pump module and laser crystal makes the compact laser head easy to install and integrate. The system supports internal and external triggering. This series of products include four wavelengths of 1064nm, 532nm, 355nm and 266nm. The full sealing module inside the laser head can be used by customers for secondary development and application. This series of lasers have great advantages in seed light, laser micromachining, laser measurement and other applications. We also provide 1064nm and 532nm isolators.

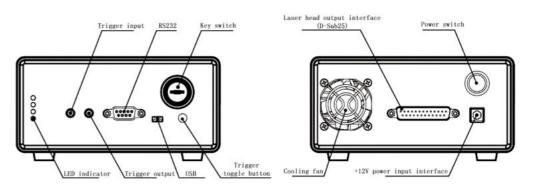
FEATURES

- Pulse width up to 300ps
- Pulse energy up to 150µJ
- External pump source fiber pump pulse
 Charge energy up to 360µJ
- Maximum repetition frequency up to 1kHz
- Beam mode is TEM00
- Fully sealed design, high reliability

APPLICATIONS

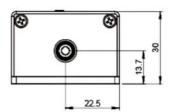
- Seed source
- Micromachining
- Fluorescence lifetime measurement
- Laser-induced fluorescence
- Laser ionization mass spectrometry
- · Non-linear optical measurement

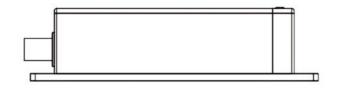
OUTLINE SIZE(mm)

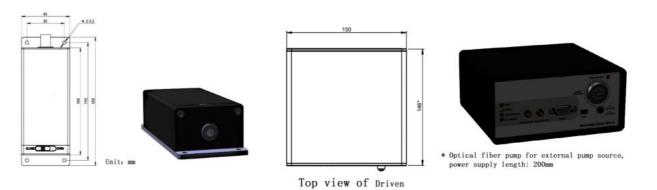


Main view of Driven

Rear view of Driven







PARAMETERS



Model		CL1064-100Hz-150µJ-MCD013	CL1064-100Hz-500µJ-MCD014	CL1064-500Hz-130µJ-MCD015	CL1064-1KHz-100µJ-MCD016
Optical Parameter	Wavelength (nm)	1064	1064	1064	1064
	Repetition Frequency (kHz)	0.1	0.1*	0.5	1
	Average Powe (mW)	15	50	65	100
	Output Energy (uJ)	150	500	130	100
	Pulse Width (ps)	350	350	350	350
	Power Stability (8h)	±3%	±3%	±3%	±3%
	Beam Mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
	Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e2	< 5	< 5	< 9	< 9
	Vertical @ 1 / e2	< 5	< 5	< 9	< 9
	Polarization Characteristics	>100:1	>100:1	>100:1	>100:1
System Paramete	Power Input	100-240 VAC,50/60Hz			
	Modulation Input	TTL0-5V,SMA interface			
	Control Interface	RS232、USB			
	Power Supply Size (W \times H \times L, mm)	150×76×146/150×76×200*			
	System Power Consumption (W)	<15	<15	< 20	< 20
	Laser Head Size (W \times H \times L, mm)	45×30×120	45×30×120	45×30×120	45×30×120
	Working Temperature ($^{\circ}$ C)	15-35	15-35	15-35	15-35
	Storage Temperature ($^{\circ}$)	0-60	0-60	0-60	0-60



