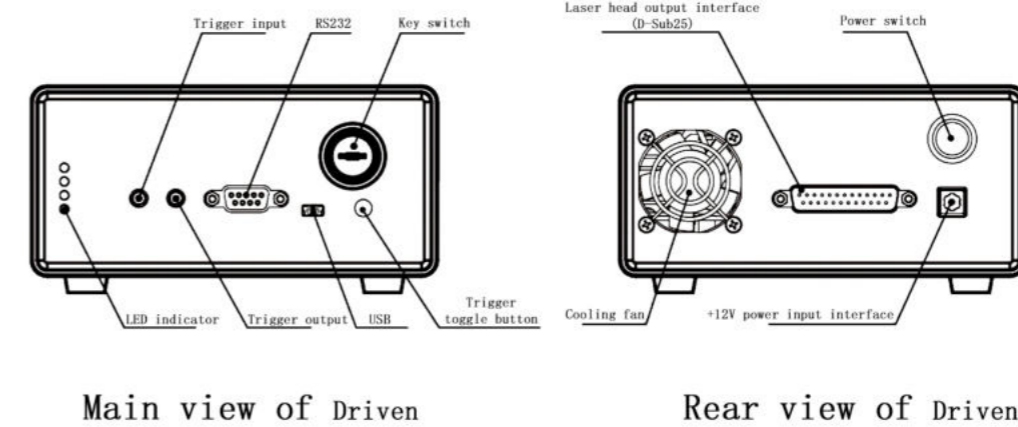


# 355nm 350ps Microchip Laser System of MCD Series



## OUTLINE SIZE(mm)



## DESCRIPTION

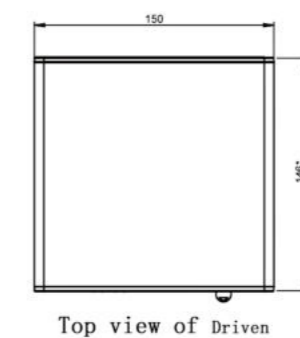
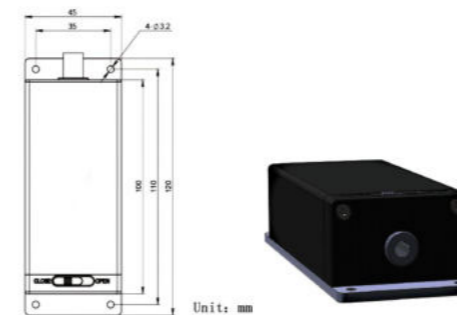
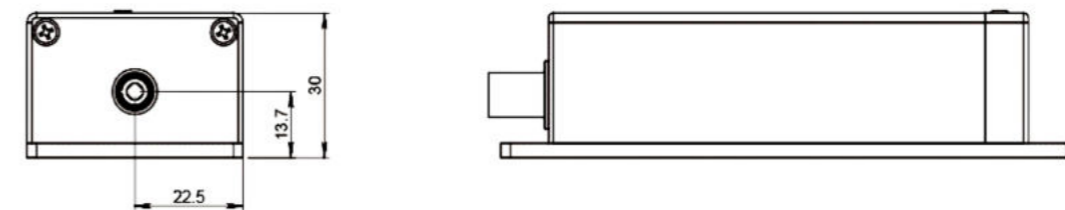
MCD series microchip laser is a passively Q-switched solid-state laser based on semiconductor pump. The laser pulse is pure and tailless, the single pulse energy is stable, and the beam quality is good. The integrated design of semiconductor pump module and laser crystal makes the compact laser head 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



\* Optical fiber pump for external pump source, power supply length: 200mm



## PARAMETERS

Model	CL355-100Hz-30μJ-MCD005	CL355-100Hz-100μJ-MCD006	CL355-500Hz-25μJ-MCD007	CL355-1KHz-20μJ-MCD008	
Optical Parameter	Wavelength (nm)	355	355	355	355
	Repetition Frequency (kHz)	0.1	0.1*	0.5	1
	Average Powe (mW)	3	10	12	20
	Output Energy (uJ)	30	100	25	20
	Pulse Width (ps)	300	300	300	300
	Power Stability (8h)	±3%	±3%	±3%	±3%
	Beam Mode	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>	TEM <sub>00</sub>
	Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e <sup>2</sup>	< 3	< 3	< 4	< 4
	Vertical @ 1 / e <sup>2</sup>	< 3	< 3	< 4	< 4
	Polarization Characteristics	> 100:1	> 100:1	> 100:1	> 100:1
System Parameter	Working Temperature (°C)	15-35	15-35	15-35	15-35
	Storage Temperature (°C)	0-60	0-60	0-60	0-60
	Control Interface	RS232、USB	RS232、USB	RS232、USB	RS232、USB
	System Power Consumption (W)	<20	<15	<20	<25
	Power Supply Size (W × H × L, mm)	150×76×146/150×76×200*			
	Laser Head Size (W × H × L, mm)	45×30×120			
	Power Input	100-240 VAC, 50/60Hz			
	Modulation Input	TTL0-5V,SMA interface			

