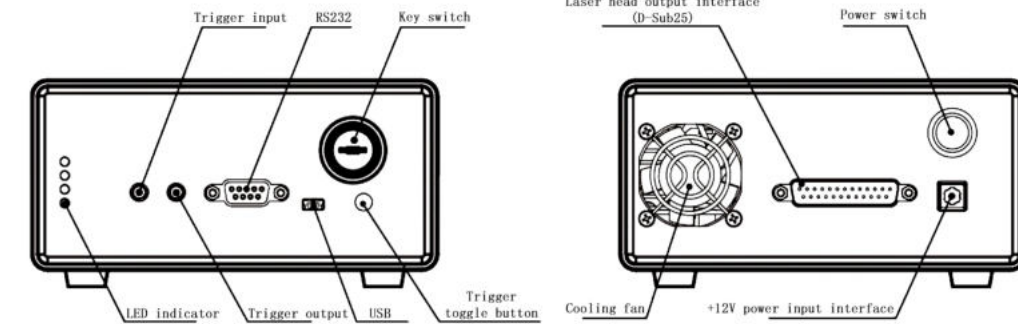


# 532nm 2ns Microchip Laser System of MCA Series



## OUTLINE SIZE(mm)

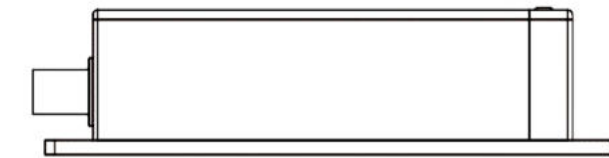
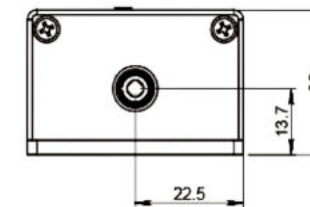


Mainview of Driven

Rear view of Driven

## DESCRIPTION

MCA series microchip laser is a passively Q-switched solid-state laser based on semiconductor pump. The laser pulse is pure without tail, 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.

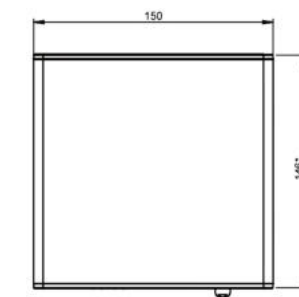
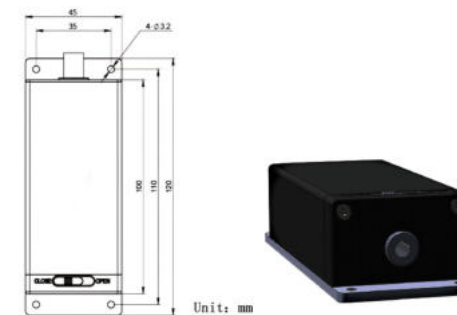


## FEATURES

- Pulse width up to 1.5ns
- Pulse energy up to 200  $\mu$ J
- External pump source fiber pump pulse energy can reach 1.2mJ
- Repetition frequency up to 20kHz
- Beam mode is TEM00
- Fully sealed design, high reliability

## APPLICATIONS

- Lidar
- Laser Ranging
- Atmospheric monitoring
- Laser ultrasonic inspection
- Optical metrology
- Laser-induced fluorescence



Top view of Driven



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



## PARAMETERS

Model	CL532-100Hz-60μJ-MCA013	CL532-100Hz-360μJ-MCA014	CL532-1KHz-50μJ-MCA015	CL532-2.5KHz-60μJ-MCA016	CL532-5KHz-20μJ-MCA017	CL532-10KHz-15μJ-MCA018	CL532-20KHz-15μJ-MCA019	
Optical Parameter	Wavelength (nm)	532	532	532	532	532	532	
	Repetition Frequency (kHz)	0.1	0.1*	1	2.5	5	10	20
	Average Powe (mW)	6	36	50	150	100	150	300
	Output Energy (uJ)	60	360	50	60	20	15	15
	Pulse Width (ns)	2	2	2	2	1.5	1.5	1.5
	Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e2	<2	<2	<4	<4	<6	<6	<6
	Vertical @ 1/e2	<2	<2	<4	<4	<6	<6	<6
	Power Stability (8h)	±3%	±3%	±3%	±3%	±3%	±3%	±3%
	Beam Mode	TEM00	TEM00	TEM00	TEM00	TEM00	TEM00	TEM00
	Polarization Characteristics	>100:1	>100:1	>100:1	>100:1	>100:1	>100:1	>100:1
System Parameter	System Power Consumption (W)	<10	<15	<15	<25	<25	<30	<35
	Power Input	100-240 VAC,50/60Hz						
	Modulation Input	TTL0-5V,SMA interface						
	Control Interface	RS232、USB						
	Power Supply Size (W × H × L, mm)	150×76×146/150×76×200*						
	Laser Head Size (W × H × L, mm)	45×30×120						
	Working Temperature (°C)	15-35						
	Storage Temperature (°C)	0-60						

