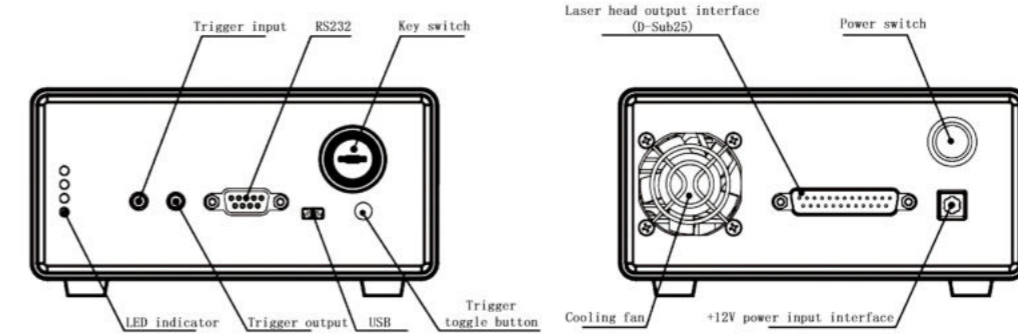


# 355nm 2ns Microchip Laser System of MCA Series



## OUTLINE SIZE(mm)

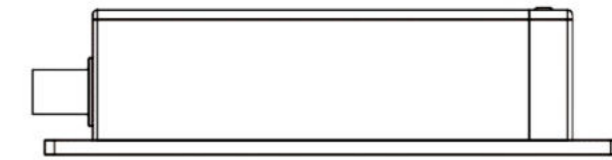
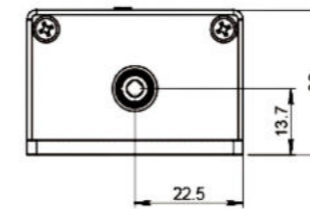


Main view of Driven

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.

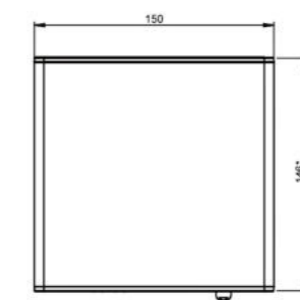
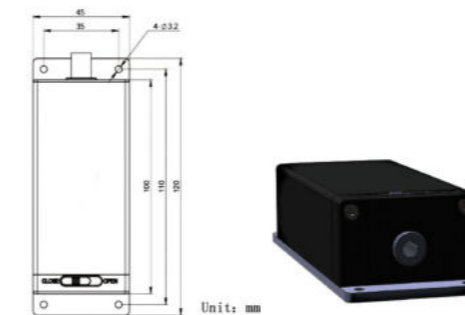


## FEATURES

- 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	CL355-100Hz-40μJ-MCA007	CL355-100Hz-240μJ-MCA008	CL355-1KHz-30μJ-MCA009	CL355-5KHz-10μJ-MCA010	CL355-10KHz-7μJ-MCA011	CL355-20KHz-7μJ-MCA012
Wavelength (nm)	355	355	355	355	355	355
Repetition Frequency (kHz)	0.1	0.1*	1	5	10	20
Average Powe (mW)	4	24	30	50	70	140
Output Energy (uJ)	40	240	30	10	7	7
Pulse Width (ns)	2	2	2	1.5	1.5	1.5
Power Stability (8h)	±3%	±3%	±3%	±3%	±3%	±3%
Beam Mode	TEM00	TEM00	TEM00	TEM00	TEM00	TEM00
Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e2	<3	<3	<3	<5	<5	<5
Vertical @ 1/e2	<3	<3	<3	<5	<5	<5
Polarization Characteristics	>100:1	>100:1	>100:1	>100:1	>100:1	>100:1
System Power Consumption (W)	<15	<15	<20	<25	<30	<35
Working Temperature (°C)	15-35	15-35	15-35	15-35	15-35	15-35
Storage Temperature (°C)	0-60	0-60	0-60	0-60	0-60	0-60
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					

