

# 532nm 550ps Microchip Laser System of MCB Series



## DESCRIPTION

MCB series microchip laser products have very ideal narrow pulse width, but also can achieve high single pulse energy. The product is a passive 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. The superior product performance index makes its application range very wide, especially in laser measurement, which can meet many different kinds of measurement needs, and also has excellent performance in the application of laser seeds.

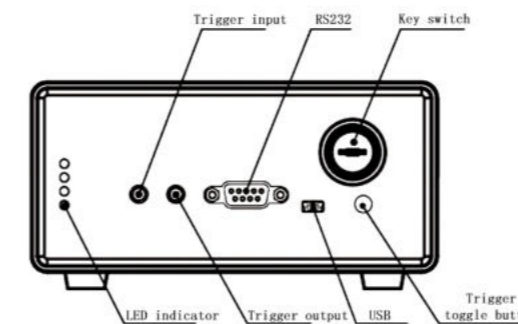
## FEATURES

- Pulse width up to 500ps
- Pulse energy up to 170μJ
- 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

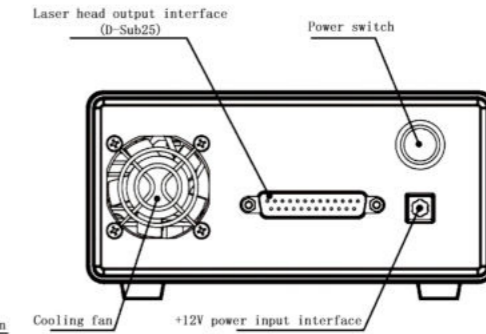
## APPLICATIONS

- Seed source
- Micromachining
- Biomedical Science
- Laser ultrasonic inspection
- Laser ionization mass spectrometry
- Non-linear optical measurement
- Seed source

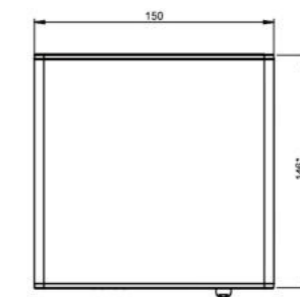
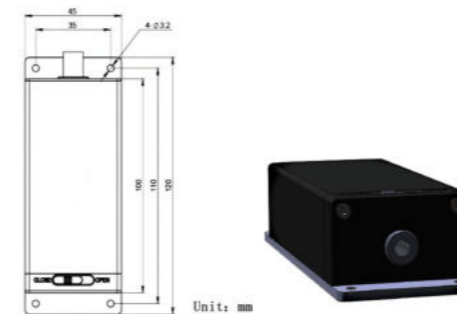
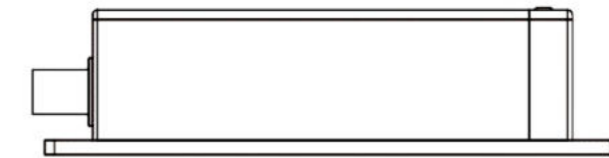
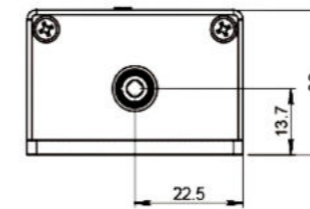
## OUTLINE SIZE(mm)



Main view of Driven



Rear view of Driven



Top view of Driven



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



## PARAMETERS

Model	CL532-100Hz-80μJ-MCB007	CL532-100Hz-180μJ-MCB008	CL532-1KHz-70μJ-MCB009	
Optical Parameter	Wavelength (nm)	532	532	532
	Repetition Frequency (kHz)	0.1	0.1	1
	Average Power (mW)	8	18	70
	Output Energy (uJ)	80	180	180
	Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e2	<3	<3	<5
	Vertical @ 1 / e2	<3	<3	<5
	Pulse Width (ps)		500	
	Power Stability (8h)		±3%	
	Beam Mode		TEM00	
	Polarization Characteristics		>100:1	
System Parameter	System Power Consumption (W)	<20	<15	<30
	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	

