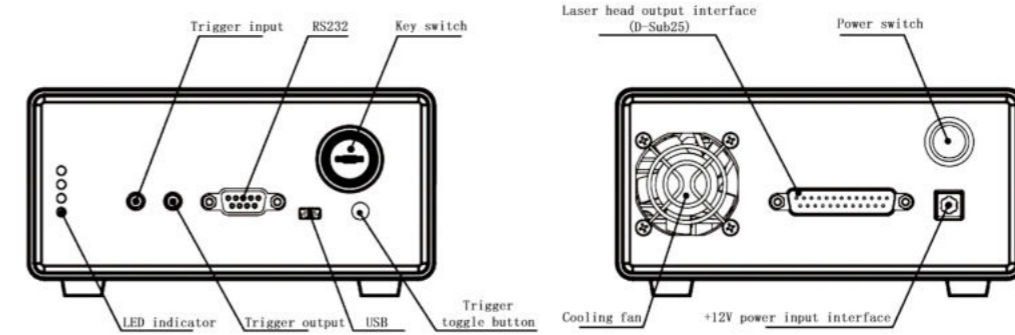


1064nm Microchip Laser System of MA Series



OUTLINE SIZE(mm)

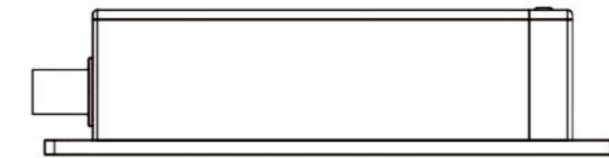
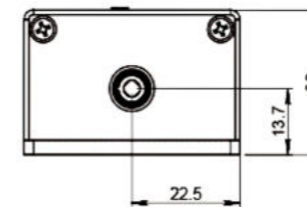


Main view of Driven

Rear view of Driven

DESCRIPTION

MA 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.

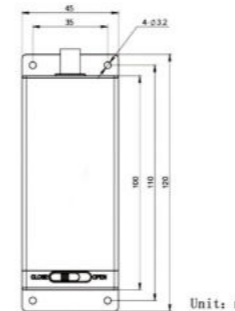


FEATURES

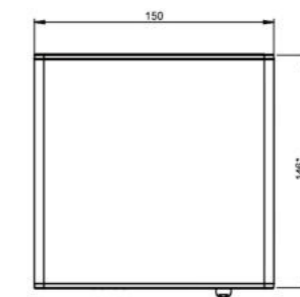
- Pulse energy up to 200 μ J
- External pump source fiber pump pulse energy can reach 1.2mJ
- Repetition frequency up to 20kHz
- Beam mode is TEM00
- Fully sealed design, high reliability

APPLICATIONS

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



Unit: mm



Top view of Driven



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



PARAMETERS

Model	CL1064-100Hz-180μJ-MA020	CL1064-1KHz-120μJ-MA021	CL1064-2.5KHz-120μJ-MA022	CL1064-1KHz-200μJ-MA023	CL1064-2.5KHz-180μJ-MA024	CL1064-5KHz-50μJ-MA025	CL1064-10KHz-35μJ-MA026	CL1064-20KHz-30μJ-MA027
Optical Parameter	Wavelength (nm)	1064	1064	1064	1064	1064	1064	1064
	Repetition Frequency (kHz)	0.1	1	2.5	1	2.5	5	20
	Average Powe (mW)	18	120	300	200	450	250	350
	Output Energy (uJ)	180	120	120	200	180	50	35
	Pulse Width (ns)	2	2	2	2.5	2.5	1.5	1.5
	Power Stability (8h)	±3%	±3%	±3%	±3%	±3%	±3%	±3%
	Beam Mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
	Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e ²	< 4	< 6	< 6	< 8	< 8	< 10	< 10
	Vertical @ 1/e ²	< 4	< 6	< 6	< 8	< 8	< 10	< 10
	Polarization Characteristics	> 100:1	> 100:1	> 100:1	> 100:1	> 100:1	> 100:1	> 100:1
System Parameter	Power Input	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz
	Modulation Input	TTL0-5V,SMA interface	TTL0-5V,SMA interface	TTL0-5V,SMA interface	TTL0-5V,SMA interface	TTL0-5V,SMA interface	TTL0-5V,SMA interface	TTL0-5V,SMA interface
	Control Interface	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB
	System Power Consumption (W)	< 15	< 15	< 20	< 20	< 25	< 25	< 30
	Power Supply Size (W × H × L, mm)	168×88×140/168×88×220*	168×88×140/168×88×220*	168×88×140/168×88×220*	168×88×140/168×88×220*	168×88×140/168×88×220*	168×88×140/168×88×220*	168×88×140/168×88×220*
	Laser Head Size (W × H × L, mm)	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120
	Working Temperature (°C)	15-35	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	0-60

