

532nm Nd:YAG q-switched nanosecond laser MA Microchip laser system



DESCRIPTION

532nm laser is one of the most common lasers used in most fields. It can emit excellent green light. It is based on Nd:YAG crystal. Frequency doubling technology is used in Crykink's 532nm laser. As a perfect picosecond laser, our 532nm laser has version of 300ps.

Like our all lasers, 532nm laser has very pure pulsed output. Thus, stability and high quality have become synonymous with our 532nm laser. Good penetrability and strong anti-interference of stray light makes our 532nm laser can adapt most situations.

532nm laser is commonly used in industrial field, like laser engraving and etching to print circuit boards, micro-machining, and so on. Medical field is another common field for 532nm laser. Our 532nm laser is suitable for yag laser eye surgery. Laser ultrasound, laser induced fluorescence, solid state lidar, and et al, are also its competent field.

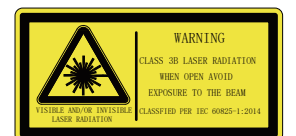
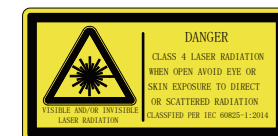
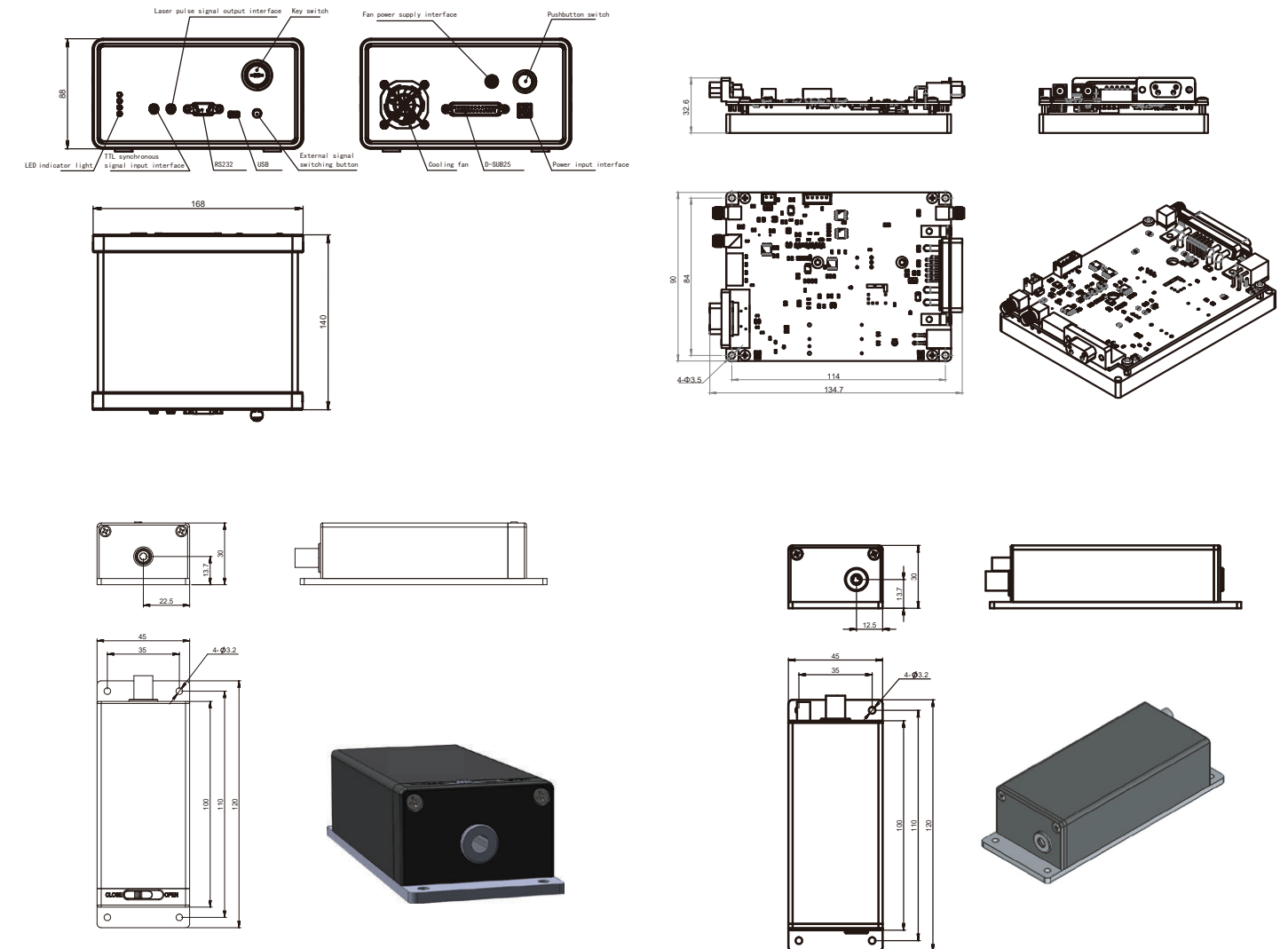
FEATURES

- Pulse width up to 1ns
- Pulse energy up to 200μJ
- 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

OUTLINE SIZE(mm)



PARAMETERS

Model		CL532- 1kHz- 60μJ- MA009	CL532- 2.5kHz- 55μJ- MA010	CL532- 2.5kHz- 90μJ- MA011	CL532- 5kHz- 30μJ- MA012	CL532- 10kHz- 15μJ- MA013	CL532- 20kHz- 10μJ- MA014
Optical parameter	Wavelength (nm)	532	532	532	532	532	532
	Repetition frequency (kHz)	1	2.5*	2.5*	5	10	20
	Average power (mW)	60	150	250	150	150	200
	Output energy (μJ)	60	55	90	30	15	10
	Pulse width (ps)	1500	1500	1500	1200	1200	1200
	Power stability (8h)	±3%	±3%	±3%	±3%	±3%	±3%
	Beam mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
	Full-angle divergence angle Typ. (Mrad) level @1/e ²	6	≤2.5	≤2.5	6	6	6
	Vertical @1/e ²	6	≤2.5	≤2.5	6	6	6
	Polarization characteristics	>100:1	>100:1	>100:1	>100:1	>100:1	>100:1
System parameters	System power consumption (W)	≤35	≤25	≤25	≤35	≤35	≤35
	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
	Control interface	RS232, USB	RS232, USB	RS232, USB	RS232, USB	RS232, USB	RS232, USB
	Power supply size (W×H×L, mm)	168×88×140	90×32.6×120	90×32.6×120	168×88×140	168×88×140	168×88×140
	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
	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

- 1.*The light outlet of the laser head is side outlet. See the mechanical dimension drawing for details
- 2.Customized internal beam expansion function to meet the requirements of small divergence angle (less than 2mrad)
- 3.MA010, MA011, and MA012 are specially designed for miniaturized weather radar applications. They are small in size, low in power consumption, and can be used in high altitudes, large temperature differences, and other subserve environments. This series accepts dual wavelength laser customization, such as 1064nm8532nm, 1064nm&355nm, or others.

