

532nm Nd:YAG q-switched picosecond laser MH 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 ULaser'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.

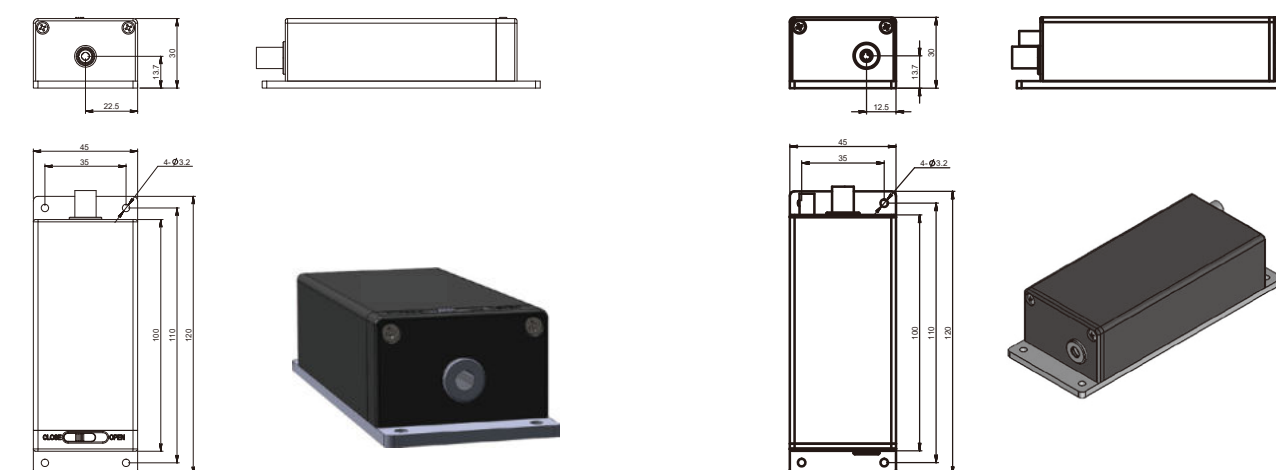
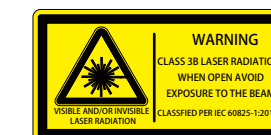
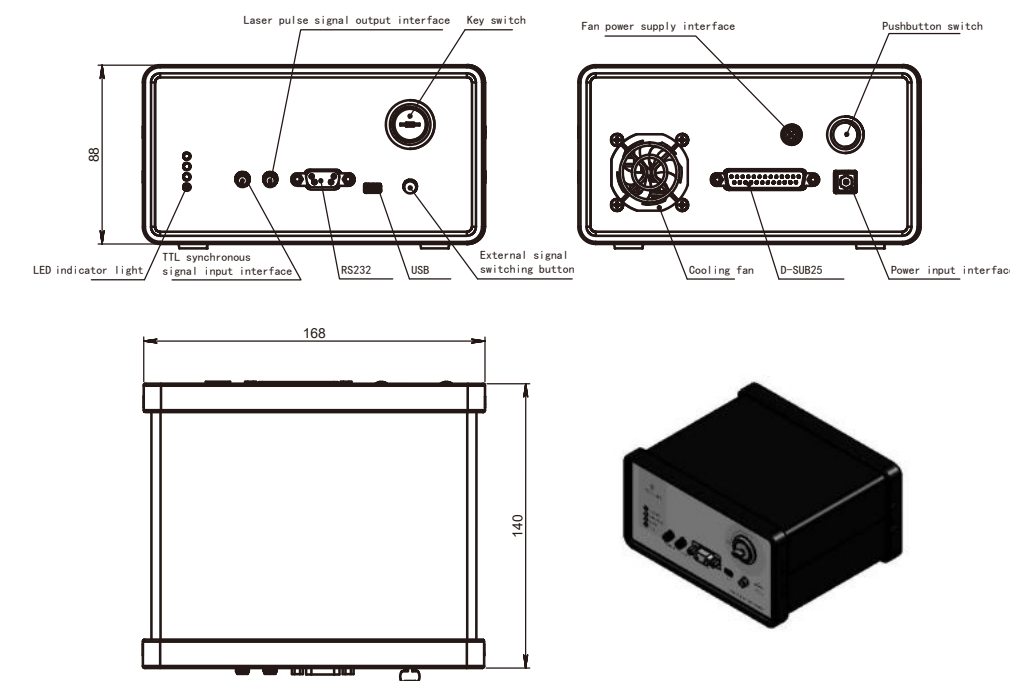
FEATURES

- Pulse width up to 300ps
- Pulse energy up to 10μJ
- Maximum repetition rate up to 50KHz
- Beam mode is TEM₀₀
- High polarization direction stability

APPLICATIONS

- Laser micromachining
- Seed source
- Ultrasound imaging
- Analytical chemistry
- Time-resolved Raman spectroscopy
- Biophotonics

OUTLINE SIZE(mm)



PARAMETERS

Model	UL532- 20kHz- 1.5μJ- MH001	UL532- 100kHz- 0.5μJ- MH002	
Optical parameter	Wavelength (nm)	532	532
	Repetition frequency (kHz)	20	100
	Average power (mW)	30	50
	Output energy (μJ)	1.5	0.5
	Pulse width (ps)	300	500
	Power stability (8h)	±3%	±3%
	Beam mode	TEM ₀₀	TEM ₀₀
	Full-angle divergence angle Typ. (Mrad) level @1/e ²	16	25
	Vertical @1/e ²	16	25
	Polarization characteristics	> 100:1	> 100:1
System parameters	System power consumption (W)	≤35	≤40
	Power input	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz
	Control interface	RS232, USB	RS232, USB
	Power supply size (W×H×L, mm)	168×88×140	168×88×140
	Laser head size (W×H×L, mm)	45×33×120	45×33×120
	Working temperature (°C)	15-35	15-35
	Storage temperature (°C)	0-60	0-60

- * the light outlet of the laser head is side outlet. Please refer to the mechanical dimension drawing for details.
- ** high PRF side light output structure, gated trigger, TTL 5V, SMA interface. Other structures are rising edges

