### **1064nm Nd:YAG q-switched picosecond laser MH Microchip laser system**



#### DESCRIPTION

1064nm laser is one of the most common laser among ULaser's products of solid state laser. Unlike other lasers, 1064nm laser beam is directly emitted from the Nd:YAG crystal. Q-switched crystal helps our laser to emit picosecond output light beam. Either the one with single longitudinal mode or the one with fundamental mode can be chosen in ULaser.

ULaser provides absolute high quality 1064 nm laser. Our 1064nm laser contains high average power, up to 100mW. And it has high pulse repetition frequency, up to 50kHz. At the same time, our 1064nm laser has smaller size and lower power consumption by microchip laser technology.

Our 1064nm laser can be used in most military, civil and scientific research fields. In industry, it can be used in micromachining. In cosmetology, it can be used in picosecond laser tattoo removal machine. Besides, it can also be used in laser ultrasound, laser induced breakdown spectroscopy, etc.

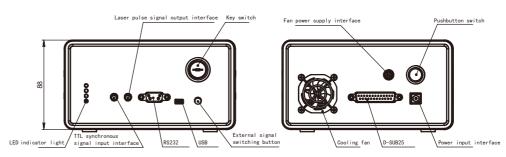
#### FEATURES

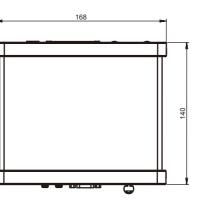
- Pulse width up to 300ps
- Pulse energy up to 10µJ
- Maximum repetition rate up to 50KHz
- Beam mode is TEM<sub>00</sub>
- High polarization direction stability

#### APPLICATIONS

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

#### **OUTLINE SIZE(mm)**









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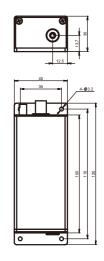
















### PARAMETERS

Model		UL1064-20kHz-3µJ-MH003	UL1064-100kHz-1µJ-MH004	
Optical parameter	Wavelength (nm)	1064	1064	
	Repetition frequency (kHz)	20	100	-
	Average power (mW)	60	100	
	Output energy (µJ)	3	1	
	Pulse width (ps)	350	500	
	Power stability (8h)	±3%	±3%	
	Beam mode	TEM00	TEM <sub>00</sub>	
	Full-angle divergence angle Typ. (Mrad) $level@1/e^2$	25	30	
	Full-angle divergence angle Typ. (Mrad)Vertical@1/e <sup>2</sup>	25	30	
	Polarization characteristics	> 100:1	>100:1	
System parameters	power input	100-240 VAC,50/60Hz	100-240 VAC,50/60Hz	
	Control interface	RS232、USB	RS232、USB	
	System power consumption (W)	≤35	≤40	
	Power supply size (W $\times$ H $\times$ L, mm)	168×88×140	168×88×140	
	Laser head size (W $\times$ H $\times$ L, mm)	45×33×120	45×33×120	
	Working temperature (°C)	15-35	15-35	
	Storage temperature (°C)	0-60	0-60	

1. This series of lasers with wavelength of 355nm and 266nm can be customized

2. Other frequencies can be customized





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