473nm Nd:YAG q-switched nanosecond laser MI Microchip laser system



DESCRIPTION

473nm laser is one of the series of solid state laser provided by ULaser. Based on Nd:YAG crystal and appropriate nonlinear crystal, we can get 473nm laser by stimulated radiation transition at 946nm. ULaser can provide 2ns laser with different output power.

Our 473nm laser has stable and high single pulse energy. With high pulse repetition frequency (5kHz), it can gain 20mW. Our 473nm laser implements miniaturization and low noise design, thus, it is easy to put into most systems.

Our 473nm laser is very suitable for laser induced fluorescence, laser ultrasound, Raman spectrometer and radar ranging.

FEATURES

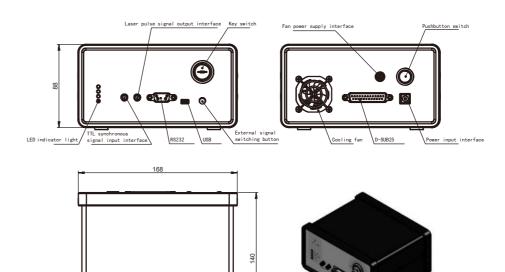
- · Compact structure and high stability
- · High polarization direction stability
- Repetition rate up to 5kHz
- Beam mode is TEM₀₀

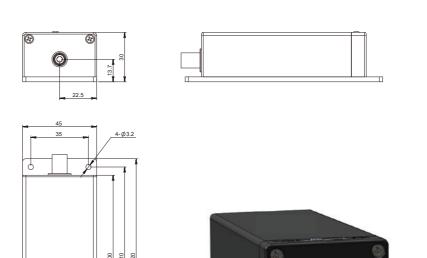
APPLICATIONS

- Laser induced fluorescence
- Ultrasonic testing
- Radar ranging
- · Raman spectroscopic detection



OUTLINE SIZE(mm)











PARAMETERS

| Model | | UL473-1kHz-5µJ-MI002 | |
|-------------------|---|----------------------|--|
| Optical parameter | Wavelength (nm) | 473 | |
| | Repetition frequency (kHz) | 1 | |
| | Average power (mW) | 5 | |
| | Output energy (µJ) | 5 | |
| | Pulse width (ps) | 2000 | |
| | Power stability (8h) | ±3% | |
| | Beam mode | TEM ₀₀ | |
| | Full-angle divergence angle Typ. (Mrad) level @1/e ² | 7 | |
| | Vertical @1/e ² | 7 | |
| | Polarization characteristics | > 100:1 | |
| System parameters | System power consumption (W) | ≤15 | |
| | Power input | 100-240 VAC, 50/60Hz | |
| | Control interface | RS232, USB | |
| | Power supply size (W×H×L, mm) | 168×88×140 | |
| | Laser head size (W×H×L, mm) | 45×30×120 | |
| | Working temperature (°C) | 15-35 | |
| | Storage temperature (°C) | 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)



