# 946nm Nd:YAG q-switched nanosecond laser MI Microchip laser system



## **DESCRIPTION**

946nm laser is a solid state laser based on q-switch and diode pump. Crylink provide the one with 2.5 nanoseconds. At present, 946nm laser's best gain medium is Nd:YAG crystal. With frequency doubling, it can realize the output of 946nm.

Our 946nm laser has high quality output light beam, which confined to its stability and high energy. Pulse repetition frequency with 5kHz leads to average power with 75mW. At the same time, our 946nm laser can maintain a low power loss.

Our 946nm laser fits many scenarios. The most common applications are as the light sources of laser induced fluorescence, laser ultrasound, radar ranging and Raman spectrometer.

## **FEATURES**

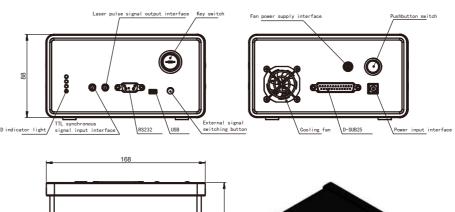
- Compact structure and high stability
- High polarization direction stability
- Repetition rate up to 5kHz
- Beam mode is TEM

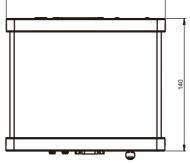
#### APPLICATIONS

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



## OUTLINE SIZE(mm)

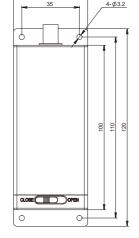




















# **PARAMETERS**

| Model             |  | CL946-1kHz-20µJ-MI003 |  |
|-------------------|--|-----------------------|--|
| Optical parameter | Wavelength (nm)  | 946                   |  |
|                   | Repetition frequency (kHz)   | 1                     |  |
|                   | Average power (mW)   | 20                    |  |
|                   | Output energy (µJ)   | 20                    |  |
|                   | Pulse width (ps)   | 2500                  |  |
|                   | Power stability (8h)   | ±3%                   |  |
|                   | Beam mode  | TEM <sub>00</sub>     |  |
|                   | Full-angle divergence angle Typ. (Mrad) level @1/e <sup>2</sup>    | 9                     |  |
|                   | Full-angle divergence angle Typ. (Mrad) vertical @1/e <sup>2</sup> | 9                     |  |
|                   | Polarization characteristics                                       | > 100:1               |  |
| System parameters | Power input  | 100-240 VAC, 50/60Hz  |  |
|                   | Control interface  | RS232, USB            |  |
|                   | System power consumption (W)                                       | ≤15                   |  |
|                   | Power supply size (W $\times$ H $\times$ L, mm)                    | 168×88×140            |  |
|                   | Laser head size (W $\times$ H $\times$ L, mm)                      | 45×30×120             |  |
|                   | Working temperature (°C)   | 15-35                 |  |
|                   | Storage temperature (°C)   | 0-60                  |  |

<sup>1. \*</sup> Side light emitting structure (non-marked products are central light emitting structure).

<sup>2.</sup> The built-in beam expansion function can be customized to meet the requirements of small divergence Angle (less than 2mrad).



