

532nm Nd:YAG q-switched picosecond laser ME 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 Crylink'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.

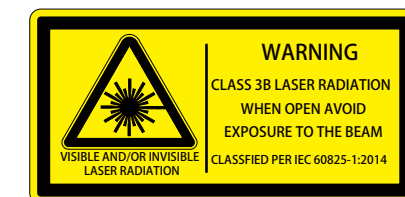
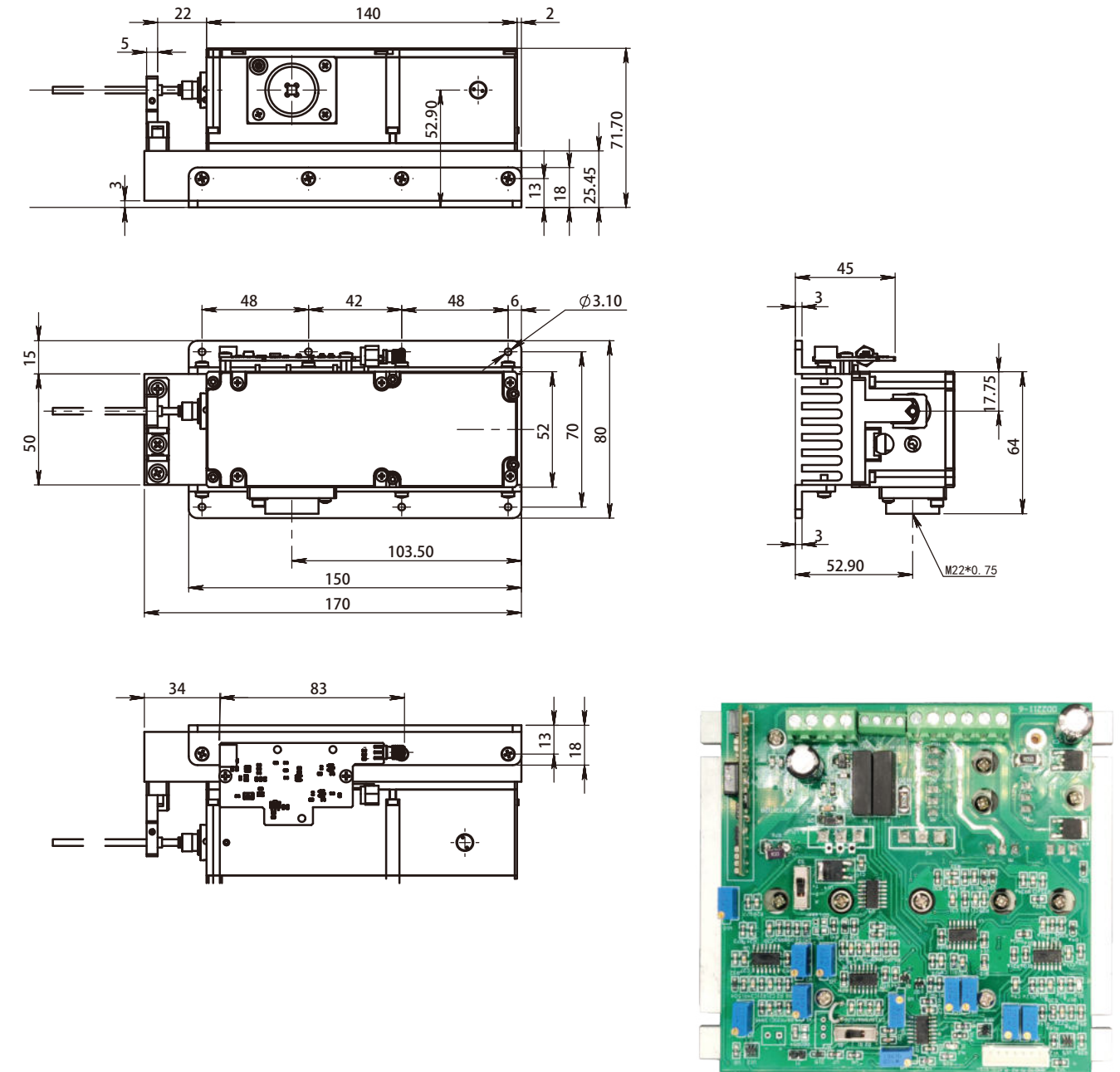
FEATURES

- The repetition frequency can reach 20kHz
- Fully sealed design, high reliability
- Compact structure, high cost performance

APPLICATIONS

- Glass, ceramic, gem, plastic marking
- Laser microprocessing
- Analysis instrument
- Bioluminescent molecule

OUTLINE SIZE(mm)



PARAMETERS

| | | | | |
|-------------------|--|-----------------------------------|-----------------------------------|-----------------------------------|
| Model | | CL532-2.5kHz-300μJ-ME001 | CL532-5kHz-200μJ-ME002 | CL532-7kHz-140μJ-ME003 |
| Optical parameter | Wavelength (nm) | 532 | 532 | 532 |
| | Repetition frequency (kHz) | 2.5 | 5 | 7 |
| | Average power (mW) | 750 | 1000 | 1000 |
| | Output energy (μJ) | 300 | 200 | 140 |
| | Pulse width (ns) | 3 | 5 | 7 |
| | Power stability (8h) | ±3% | ±3% | ±3% |
| | Beam mode | TEM ₀₀ | TEM ₀₀ | TEM ₀₀ |
| | Collimating spot diameter (mm) | ≈9 | ≈9 | ≈9 |
| | Full divergence Angle Typ.(@1/e, mrad) | ≤1 | ≤1 | ≤1 |
| | Polarization characteristics | >100:1 | >100:1 | >100:1 |
| System parameters | Power input | 12V, >180W | 12V, >180W | 12V, >180W |
| | External trigger control | Gated, 5V TIL, high level enabled | Gated, 5V TIL, high level enabled | Gated, 5V TIL, high level enabled |
| | Laser head size (WxHxL.mm) | 60x39x158 | 60x39x158 | 60x39x158 |
| | Operating temperature (°C, need to provide air cooling heat dissipation) | 15~35 | 15~35 | 15~35 |
| | Storage temperature (°C) | -40~65 | -40~65 | -40~65 |

1. The external beam expanding function can be customized to meet the requirements of small divergence Angle (beam expanding mirror magnification 5-20X).
2. Control the temperature of the laser head. It is recommended that the temperature of the bottom plate be within the range of 15-35 °C

