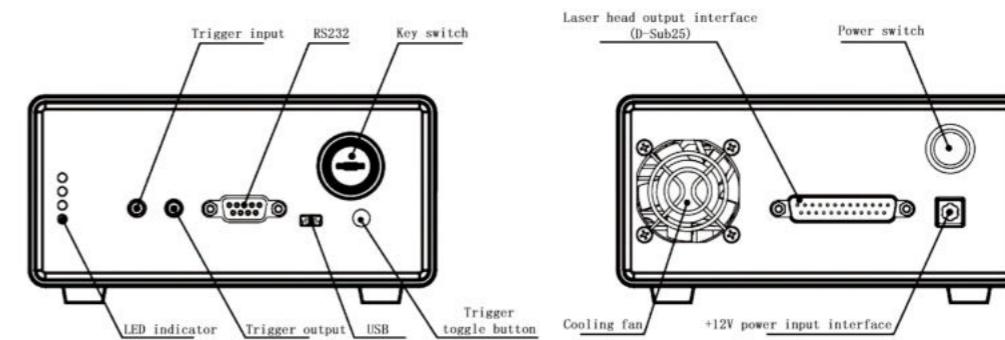


# 532nm 350ps Microchip Laser System of MCH Series



OUTLINE SIZE(mm)



Main view of Driven

Rear view of Driven

## DESCRIPTION

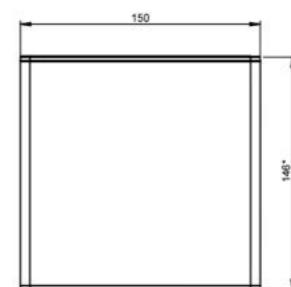
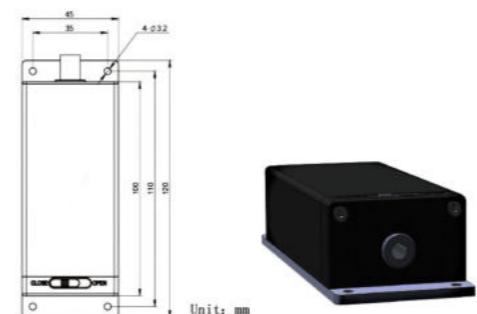
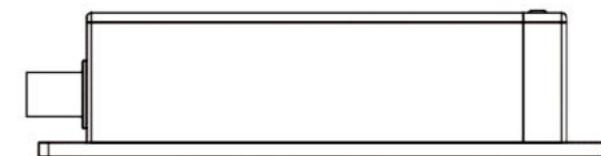
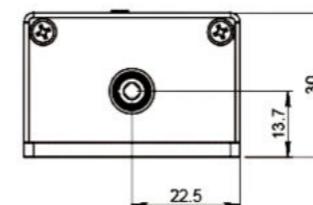
MCH series high repetition rate microchip laser series can achieve high repetition rate while the pulse width is less than 300ps. The product is a passively Q-switched solid-state laser based on semiconductor pump, with stable energy, good beam quality and single longitudinal mode operation. The laser is designed with full seal, small size, convenient for user installation and integration. The system supports internal and external triggering and can be used for secondary development.

## FEATURES

- Pulse width up to 280ps
- Pulse energy up to 32μJ
- Maximum repetition frequency up to 20KHz
- Beam mode is TEM00

## APPLICATIONS

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



Top view of Driven

\* Optical fiber pump for external pump source,  
power supply length: 200mm

## PARAMETERS

| Model             | CL532-1KHz-16μJ-MCH006   | CL532-5KHz-8μJ-MCH007 | CL532-10KHz-5μJ-MCH008 | CL532-20KHz-2.5μJ-MCH009 |
|-------------------|--|-----------------------|------------------------|--------------------------|
| Optical Parameter | Wavelength (nm)  | 532                   | 532                    | 532                      |
|                   | Repetition Frequency (kHz)                                       | 1                     | 5                      | 10                       |
|                   | Average Powe (mW)  | 16                    | 40                     | 30                       |
|                   | Output Energy (uJ)   | 16                    | 8                      | 5                        |
|                   | Pulse Width (ps)   | 300                   | 280                    | 280                      |
|                   | Power Stability (8h)   | ±2%                   | ±3%                    | ±3%                      |
|                   | Full-Angle Divergence Angle Typ. (Mrad) Level @ 1/e <sup>2</sup> | <6                    | <6                     | <12                      |
|                   | Beam Mode  | TEM00                 | TEM00                  | TEM00                    |
|                   | Vertical @ 1 / e <sup>2</sup>                                    | <6                    | <6                     | <12                      |
|                   | Polarization Characteristics                                     |                       | >100:1                 |                          |
| System Parameter  | System Power Consumption (W)                                     | <20                   | <40                    | <45                      |
|                   | Power Input  |                       | 100-240 VAC,50/60Hz    |                          |
|                   | Modulation Input   |                       | TTL0-5V,SMA interface  |                          |
|                   | Control Interface  |                       | RS232、USB              |                          |
|                   | Power Supply Size (W × H × L, mm)                                |                       | 150×76×146             |                          |
|                   | Laser Head Size (W × H × L, mm)                                  |                       | 45×30×120              |                          |
|                   | Working Temperature (°C)   |                       | 15-35                  |                          |
|                   | Storage Temperature (°C)   |                       | 0-50                   |                          |

