

IR Picosecond Laser

HL SERIES

HL-PS-1064-50



The IR Picosecond Laser excels in precision micromachining and is widely used for processing brittle and superhard materials.

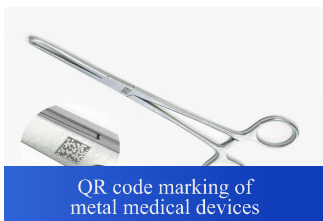
► Application

- Burst pulse output
- 24/7 precision manufacturing
- Single shot repetition rate up to 4000 kHz
- Optional dual-wavelength output function
- POL/POD output with PC remote control

► Features

- Precise shaping of superhard items
- Deep processing of metal material
- Logo marking on the surface of high-end electronics
- Cutting and drilling of plastics, oxides and organic materials
- Micro-machining of brittle materials such as glass, sapphire and ceramics

► Sample Display



Technical Parameters

HL-PS-1064-50

Optical Parameters

Wavelength	1064 nm
Output Power	50 W
Repetition Rate	Single pulse-4000kHz
Pulse Width	< 10 ps
Pulse-to-Pulse Stability (rms)	< 2% rms

Beam Characteristics

Spatial Mode	TEM ₀₀
Beam Quality	M ² < 1.3
Polarization Ratio	> 100:1(vertical)
Beam Diameter	2.0mm ± 0.3mm
Divergence Full Angle (1/e ²)	< 2 mrad
Circularity	> 90%

Working Conditions

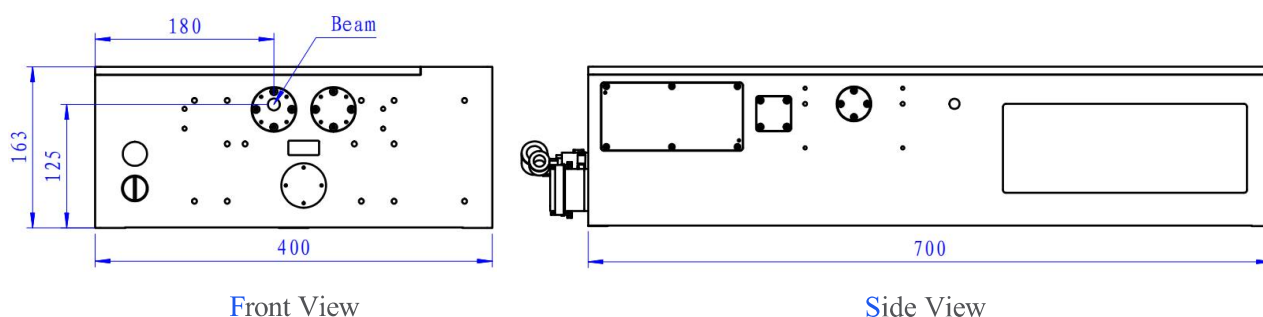
Power Supply	100 VAC to 240 VAC auto-ranging; 50 Hz to 60 Hz auto-ranging
Warm-up Time	Time from standby to ready < 10 minutes
Temperature Range	+15 °C to +28 °C (operation), 0 °C to +50 °C (non-operation)
Humidity Range	< 70% without condensation
Cooling Requirements	Water cooling, cooling capacity ≥ 1000W, accuracy ± 0.1 °C, flow rate ≥ 6L/min*

Physical Properties

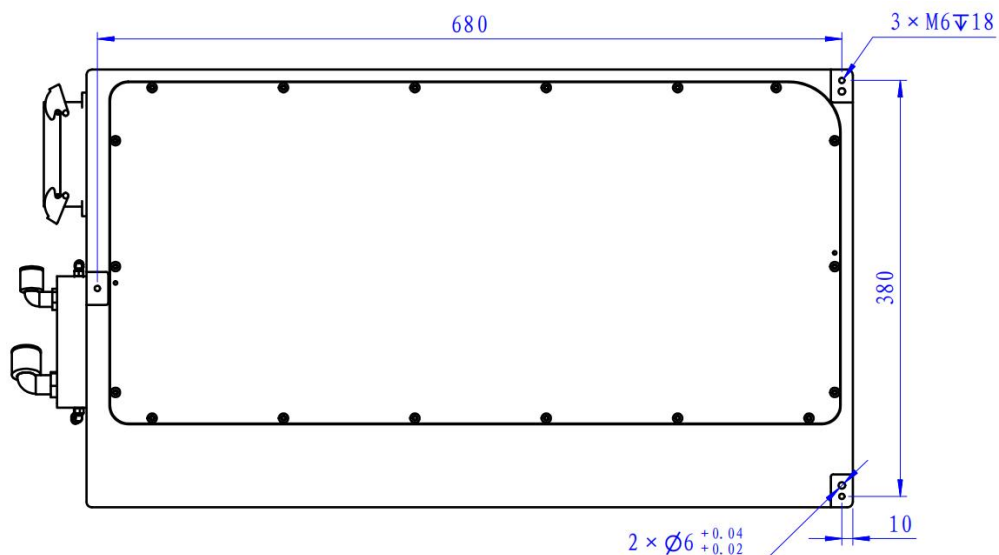
Laser Dimensions	700 mm × 400 mm × 163 mm (L × W × H)
Laser Weight	56 kg
Controller Dimensions	440 mm × 432 mm × 132.5 mm (L × W × H)
Controller Weight	19.3 kg
Water Chiller Dimensions	533 mm × 326 mm × 605 mm (L × W × H)
Water Chiller Weight	38.5 kg

- All specifications are typical data and subject to change without notice due to product improvements.
- Recommended Chiller → Brand: HANSUN, Cool Model: HC010H1-02A

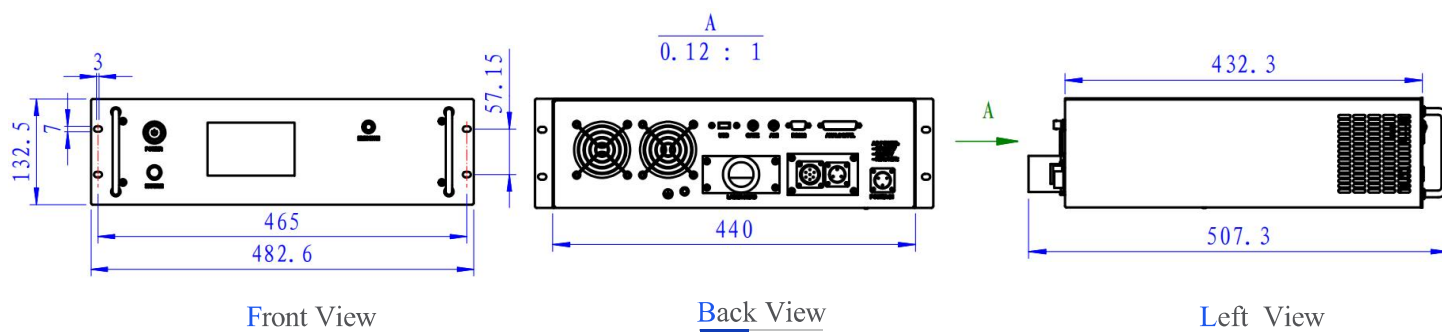
Laser Dimensions (mm)



Bottom View



Controller Dimensions (mm)



Water Chiller Dimensions (mm)

HC010H1-02A

533 mm × 326 mm × 605 mm (L × W × H)

