

20W 30W 50W Fiber Laser Marking Machine

Specifications :

Price	Contact us
Brand Name	Hanyi
Place of Origin	China
Min.Order Quantity	1
Payment Terms	T/T
Supply Ability	100
Delivery Detail	5 days - 20 days
Packaging Details	Standard export wooden case or carton box

Detail Introduction :

Only fiber lasers are powered by 24V, a few fiber lasers are powered by 48V. The end pump laser is powered by 12V.

These cabinets for fiber lasers can also be equipped with semiconductor end-pumped laser marking machines at the same time.

Features of fiber laser

The fiber laser adopts the coupling technology of multi-mode pump light and double-clad fiber with a single-mode core to obtain a fully reinforced side-parallel pump fiber laser.

Main features:

1. Good beam quality, TEM00 single-mode output, collimated beam diameter 10mm, M2 is less than 1.8, beam divergence angle 0.24mrad.
2. Suitable for fine marking, punching and other applications.
3. High pulse repetition frequency, very suitable for high-speed marking.
4. Using maintenance-free main oscillation power amplification technology and seed light source pulse generation technology.
5. High reliability, the average trouble-free working time is more than 100,000 hours. It can run continuously for 24 hours, free of maintenance, saving maintenance and operating costs, and greatly improving the user's input-output ratio.
6. Very high overall electro-optical conversion efficiency, no need of bulky power supply system.

Overall performance

The fiber laser marking machine is composed of a control system, a computer control system, an optical system, a cooling system, and a workbench.

1) Control system

Control the operation of the entire equipment, including the control and instructions of the optical system components.

2) Computer control system

The marking software uses WIN7, 8, 10, etc. as the operating platform, compatible with files output by various software such as AUTOCAD, CORELDRAW, etc. It can mark bar codes, QR codes,

graphic texts, etc., and supports PLT, AI, DXF and other file formats. It can automatically encode, print serial number, batch number, date, etc.

3) Optical system

The optical system includes parts such as laser, galvanometer scanning system and focusing lens.

4) Cooling system

It adopts a simple air-cooling method, and the cooling system guarantees long-term and stable operation of the optical system.

Working environment requirements

The ambient temperature should be between 15-35°. The humidity requirement is 40%-80%. No condensation.

There should be no strong electromagnetic signal interference near the equipment. Some should be equipped with anti-static devices, strengthen shielding, etc.

Avoid a large number of punching and other machine tools nearby. Keep the equipment space as smoke-free and dust-free as possible.

Performance parameters

Laser output power: 20W/30W/50W

Laser wavelength: 1.06μm

Laser repetition frequency: 20-80KHz

Engraving range: 100×100mm-200×200mm, optional

Beam quality: $\leq 1.5M^2$

Spot diameter: 6-8mm

Engraving depth: 0.3mm (depending on the material)

Engraving line speed: 12000mm/s

Minimum line width: 0.012mm

Minimum character: 0.1mm

Repeatability: ±0.003mm

Power consumption of the whole machine: 500W/600W/700W

Power supply requirements: single-phase/220V/50Hz/10A

Industry application

It can engrave metal materials and some non-metal materials, and is mainly used in fields that require high depth, smoothness, and fineness, such as clocks, molds, IC industry, bar codes, bitmap marking, etc.

Shanghai Hanyi Engineering Equipment Company is one of the most experienced manufacturers of Laser marking machines in China.