

# Portable High Performance Fiber Laser Marking Machine For Ic Products, Electric Wires

## Specifications :

Brand Name	Hanyi
Place of Origin	Shanghai, China
Min.Order Quantity	1unit
Payment Terms	T/T
Delivery Detail	5 days - 20 days
Packaging Details	Standard export wooden case or carton box.

## Detail Introduction :

### High Performance Fiber Laser Marking Machine

#### Description?

The machine uses a fiber laser to output laser, and then achieves the marking function through a high-speed scanning galvanometer system. The pulsed fiber laser has the advantages of short start-up time, narrow optical pulse and high peak power.

The special design scheme ensures that the laser does not leak when the laser is turned off. Even in special materials, the phenomenon of shadows and virtual breaks will not occur. At the same time, the laser has the characteristics of anti-high reaction and can be processed on high-reflective materials such as aluminium, copper, gold and silver.

The whole machine is cooled by air-cooling mode. It has small volume, good beam quality and high reliability. Carvable metal materials and some non-metallic materials are mainly used in areas requiring high depth, smoothness and fineness.



Metal materials	gold, silver, titanium, copper, alloy, aluminum, steel, manganese steel, magnesium, zinc, stainless steel, carbon steel / mild steel, all kinds of alloy steel, electrolytic plate, brass plate, galvanized sheet , Aluminum, all kinds of alloy plates, all kinds of sheet metal, rare metals, coated metal, anodized aluminum and other special surface treatment, electroplating the surface of the aluminum-magnesium alloy surface oxygen decomposition,so on.
Non-metallic materials	coating materials, industrial plastics, hard plastics, rubber, ceramics, resins, cartons, leather, clothes , wood, paper, plexglass, epoxy resin, acrylic resin, unsaturated polyester resin material so on.
Application industrial	electronic and communication products, IC products, electric wires, auto components and electric appliance, precision parts, hardware tools, instrument appliance,medical equipment, building materials so on.

## Main feature

### 1. Galvanometer scanning

Famous brand domestic galvanometer with high performance , ensure the deflection marking of laser beam is accurate, high resolution QR code or barcode marking effect , especially with printing variable data, auto components, electric appliance, precision parts, hardware tools,etc.

### 2. Precision marking effect

Marked the logo, photo, special graphic, variable data on the object surface that is the precise instrument, electric appliance, hardware tools etc. precision marking position, permanent marking effect, high resolution.

### 3. Rational layout of inner machine, PC as controller

Complete complex printing demand, can printing almost any contents you want to . Easy to operating.

#### **4. 40% photoelectric conversion rate**

More than 100,000 hours running time can meet long-term and stable work requirements. Efficient conversion rate massively reduce the extra electric energy wastage, steady running without consumables, without pollution.



#### **Key spare parts of fiber laser marking machine**

##### **1. Laser source**

The core of laser marking machine, long-term life time, stable performance. Chinese best brand Raycus laser generator. Optional: MAX/IPG/JPG etc marking laser source .

##### **2. Galvanometer**

High precision marking, good stability, and performance reached the international advanced level.

A. PC control system, appropriate work platform setting

Easy to operating, various marking contents demands can be completed by PC.

##### **3. Power supply**

Power supply for laser source , galvanometer, touch screen, red light pointer. The rational layout of each component ensures the stable operation of the power supply system.



### Introdaction:

Pulsed Fiber Laser	20W
Input power	Input voltage: AC220V Frequency: 50 Hz Input power: ?1000W
Wavelength (nm)	1060~1085
Normal average output power (W)	?20
Single pulse energy(MJ)@20khz:	1
Beam quality	?<1.8
Beam Diameter(mm)	6~8
Pulse duration(ns)@20kHz	<120
Pulse repetition rate(kHz)	20~60
Output power tunability(%)	10~100
Output fiber cable length(m)	2.0
Power consumption(20?)(W)	200
Modulation frequency	20kHz ~ 80kHz
Dimension WDH (mm)	260*391*120

Marking range	110 * 110mm 70 * 70mm (optional)
Maximum scanning speed	7000 mm / s
Scan accuracy error	<2 mrad
Repetition error	<5 ?rad
Minimum line width	0.01 mm ~ 0.2mm
Line depth	0.01 ~ 0.2 mm (depending on material)
Field Focal Length (optional)	F = 100mm Effective Focus Scanning Range: 70 * 70 mm F = 160mm Effective focus scanning range: 110mmX110mm
Working environment	Should work in dust-free, smoke-free, non-corrosive gas work environment Temperature: 0 ~ 42 ? Humidity: 45 ~ 85%
Cooling way	Forced air cooling, (3 fans in the laser, each fan is 75.2 CFM)
Safety	over-current protection; over-temperature protection; over-voltage protection
Approximate weight	70~90kg with the wooden case
Controller	Window IPC i32.5G, 500G, 2G, 19-inch LCD(Static marking) Touch screen (fly marking)
Language	Chinese English(touch screen)

Shanghai Hanyi Engineering Equipment Company is an experienced supplier of laser marking machines and solutions in China.