

A8 Jingda series

Integrated fiber laser marking machine

Average Output Power

20W/30w



FAST MARKING SPEED.



No consumables
long-lasting maintenance-free.

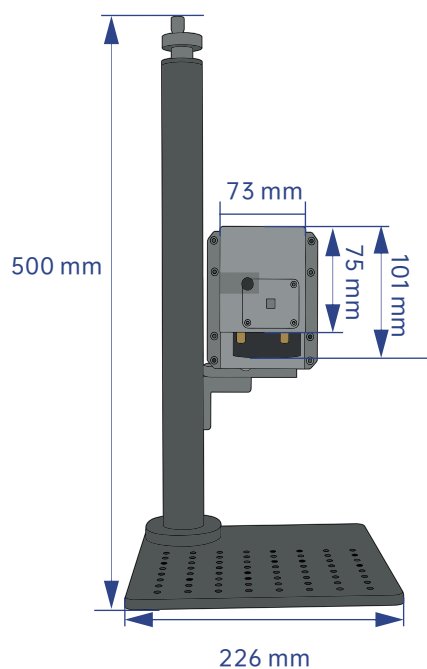


PRODUCT DESCRIPTION

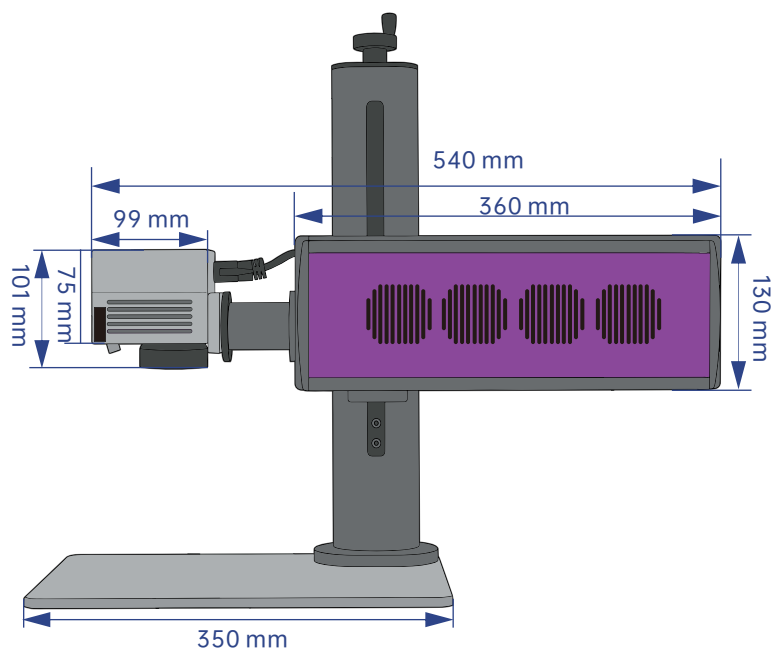
The A8 static laser marking series, an integrated desktop fiber laser marking machine, is a specially developed model designed for compact, flexible, and convenient operation. This machine offers excellent value for money, employing a high-quality Raynew fiber laser, a highly stable galvanometer system, a novel and aesthetically pleasing design, and diverse performance capabilities, easily meeting most common laser marking applications.

The product uses a 1064nm wavelength fiber laser, suitable for various metal materials such as iron, copper, aluminum, gold, and silver, as well as some non-metallic materials such as PC, ABS, PVC, and PC+ABS. It is widely used in industries such as 3C, automotive parts, electronic components, integrated circuits (PC), electrical appliances, precision instruments, hardware products, building materials, watches, jewelry, and arts and crafts.

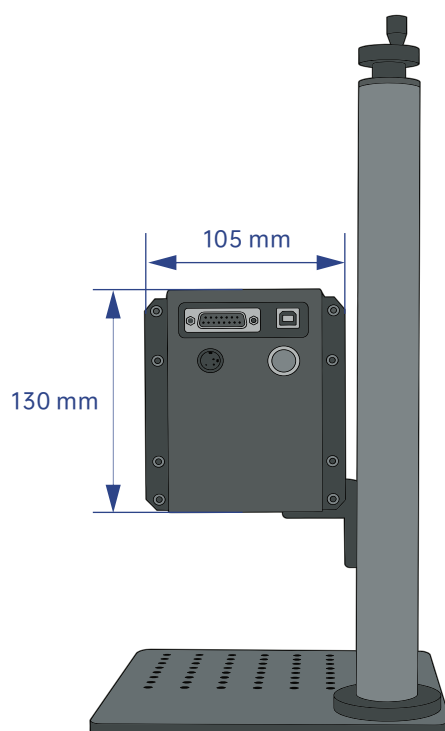
PRODUCT DISPLAY



front of the equipment



Left side of the device



Behind the equipment



Equipment photos

1 Photodetector Interface (GX16-3 Core Connector)

Only supports NPN output type photodetectors, with the pinout as follows:

Pins	Functions	Description
Pin1	IF_12-24V	Power output, directly connected to the power supply input (PL14_Pin1).
Pin2	TRIGGER	Photodetector signal input
Pin3	GND	Ground connection.

2 Encoder Interface (GX16-4 Core Connector)

Only supports NPN output type encoders, with the pinout as follows:

Pins	Functions	Description
Pin1	IF_12-24V	Power output, directly connected to the power supply input (PL14_Pin1).
Pin2	EnCo_SA	Encoder A phase input.
Pin3	EnCo_SB	Encoder B phase input.
Pin4	GND	Ground connection.

3. Expansion Port (GX16-10 Core Connector)

Pins	Functions	Description
Pin1	IF_12-24V	Power output, directly connected to the power supply input (PL14_Pin1).
Pin2	CTL_IO0	Control input/output port 0, configurable as input/output via software, and corresponding functions. When used as output, it is a collector-open NPN output (PN type) with a maximum of 500mA. When used as input, it is an NPN type input.
Pin3	CTL_IO1	Control input/output port 1, configurable as input/output via software, and corresponding functions. When used as output, it is a collector-open (NPN type) output with a maximum of 500mA. When used as input, it is an NPN type input.
Pin4	CTL_IO2	Control input/output port 2, configurable as input/output via software, and corresponding functions. When used as output, it is a collector-open (NPN type) output with a maximum of 500mA. When used as input, it is an NPN type input.
Pin5	CTL_IO3	Control input/output port 3, configurable as input/output via software, and corresponding functions. When used as output, it is a collector-open (NPN type) output with a maximum of 500mA. When used as input, it is an NPN type input. When used as input, it can serve as the A phase input for the second encoder.
Pin6	CTL_IO4	Control input/output port 4, configurable as input/output via software, and corresponding functions. When used as output, it is a collector-open (NPN type) output with a maximum of 500mA. When used as input, it is an NPN type input. When used as input, it can serve as the B phase input for the second encoder.
Pin7	GND	Ground connection.
Pin8	RS232_TX	RS232 communication port for sending output.
Pin9	RS232_RX	RS232 communication port for receiving input.
Pin10	GND	Ground connection.

A8 Jingda series

Integrated Fiber Laser Marking Machine

The A8 series adopts a self-developed integrated fiber laser marking machine. With higher reliability, the laser in this series features extremely high pump efficiency, adjustable or fixed pulse waveforms, a wide range of pulse repetition frequencies, compact design, and reliable performance. These characteristics enable it to provide users with the optimal laser solution, meeting various application requirements.



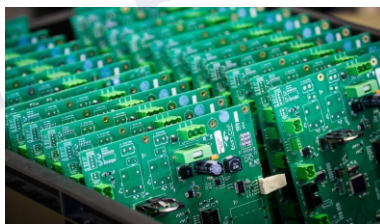
PRODUCT PARAMETER

Model series		A8 Quiet Series	
model		A8-20T	A8-30T
Laser parameters	Laser model	Integrated laser	
	output power	≤20w	≤30w
	Beam quality M ²	≤2	
	Pulse Repetition Frequency	30-80 kHz	
	wavelength	1064nm	
	Output power stability	< 5%	
	life	Approximately 100000 working hours (non service life)	
optical characteristics	Scope	70~170mm (Scope optional)	
	Engraving depth	≤1mm(Depending on power and time)	
	Engraving speed	≤8000m/s	
	repeatability	±0.002	
	Minimum marking line width	0.1mm	
	Minimum character height	0.15mm	
Usage environment	Cooling method	Built in air cooling	
	System power supply	350W / 220V / 50Hz	
	Temperature and humidity	0~40°C, 30%≤RH≤85%. Air conditioning is required when using outside this range.	
	Oil mist and condensation	not allow	
Other	Operating software	Golden Orange	
	file format	The software supports marking content such as text, QR code, barcode, graphics, etc	
	External dimensions	226X540X500 mm	
	Packaging size	625X310X205mm	

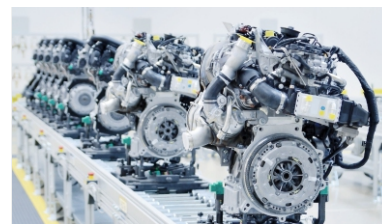
APPLICATION SCENARIO



Electrical Components and Electronic Devices



Semiconductors and Electronic Components



Aviation and Automotive



Food, Beverages
and Fast-Moving Consumer Goods



Pharmaceuticals and Medical Devices



Cosmetics, Personal
and Home Care Products

MARKING EFFECT



● Marking on Soda Cans



● Marking on Hardware Parts



● Marking on Electronic
Component Accessories



● Marking on Iron Wire



● Date Coding on Plastic Bags



● Marking on ABS Tubing

Compare the pros and cons



Laser

printing ink



Outstanding Performance with No Limitations

Utilizes online high-speed non-stop laser marking for high production efficiency, suitable for both static and high-speed flow production line operations.

Marking can only be done while the product is in motion, resulting in higher production efficiency. However, some inkjet printers may experience nozzle blockages, impacting production.

Capable of printing serial numbers, batch codes, barcodes, QR codes, logos, and patterns. The number of printed lines and font size is limited within the galvanometer range.

Capable of printing barcodes, batch codes, and simple patterns, with limitations on the number of lines and font size.

Stable and Reliable Performance, Operable 24/7, Long Maintenance Intervals Minimal maintenance required, providing the longest stable runtime. Minimally affected by environmental conditions.

Basic stability in performance with a relatively higher failure rate. Prone to nozzle blockages due to changes in environmental temperature and dust. Requires extensive maintenance and cleaning efforts. Highly affected by environmental conditions.

Intuitive Window Software with High Display Resolution Facilitates convenient and quick creation and editing of printed information.

Simple Display Interface with Low Resolution Only allows basic editing of printed information.

Simplified and Convenient Installation

Compact and lightweight casing, with the smallest and lightest laser printing head directly installable on the production line, suitable for any production space.

Varied sizes, with some models requiring external equipment such as an air compressor.

Low Operating Costs, Long-Term Maintenance-Free

Extremely low operating costs, eliminating unplanned downtime. Equipment can operate maintenance-free for an extended period without the need for dedicated personnel or consumables, resulting in zero operating costs.

Inkjet printers consume a large amount of specialized ink and solvents, with high consumable costs. Replacement of nozzles, pumps, and other accessories incurs high expenses. Consumable costs for a single inkjet printer range from 20,000 to 40,000 RMB.

Safety and Environmental Protection

Produces no harmful substances to the environment and human body, causing surface marks on printed objects. It is an environmentally friendly high-tech product widely used in the production of food and pharmaceuticals, complying with GB7247-87; GB10320-88 standards.

Ink and solvents are volatile substances, generating a considerable amount of chemically toxic residues that can pollute the environment. The chemical components and odors of ink and solvents may penetrate the marked objects. There is an international trend to gradually replace inkjet coding equipment.

ADVANTAGES OF LASER CODING



A8 Series Integrated Fiber Laser Marking Machine

This generation of products is more compact and lightweight compared to other products of the same type.

By employing the marking device to assign three key elements (production date, expiration date, batch number) and traceability codes to each product, it addresses the specific needs of various industries, particularly the fast-moving consumer goods sector. The primary methods of processing currently involve inkjet coding and laser marking.

This product can be purchased independently, eliminating the need to purchase it together with a computer for operating and controlling marking. It comes with a random installation package, allowing flexible installation and operation on any computer.

PRODUCT FEATURE



High-speed and stable marking

The industry's fastest laser marking system, meeting the needs of high-frequency marking areas.

Reliable and durable fiber laser source

Employing a self-developed laser. This ensures higher reliability, uniform laser power density, and a highly focused laser beam, resulting in better marking contrast. The laser's design life can reach 100,000 hours.



Ultra-compact design and dual red light focusing system

It adopts an industry-innovative compact laser marking head to achieve simple integration, reduce installation costs, improve positioning flexibility, and features a dual red light focusing system.