



# UV-R series

UV flying laser marking machine

Average output power:

3W/5W



Super fine marking



Marking speed  
200m/min

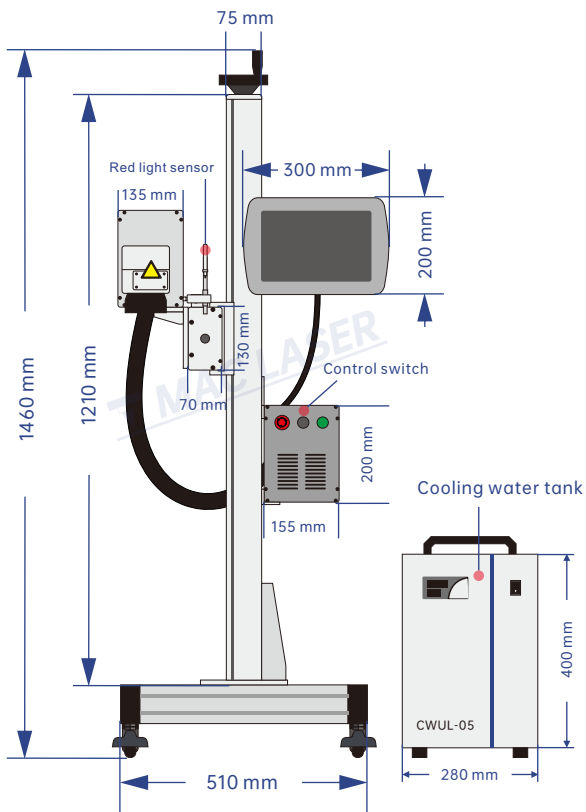


## PRODUCT DESCRIPTION

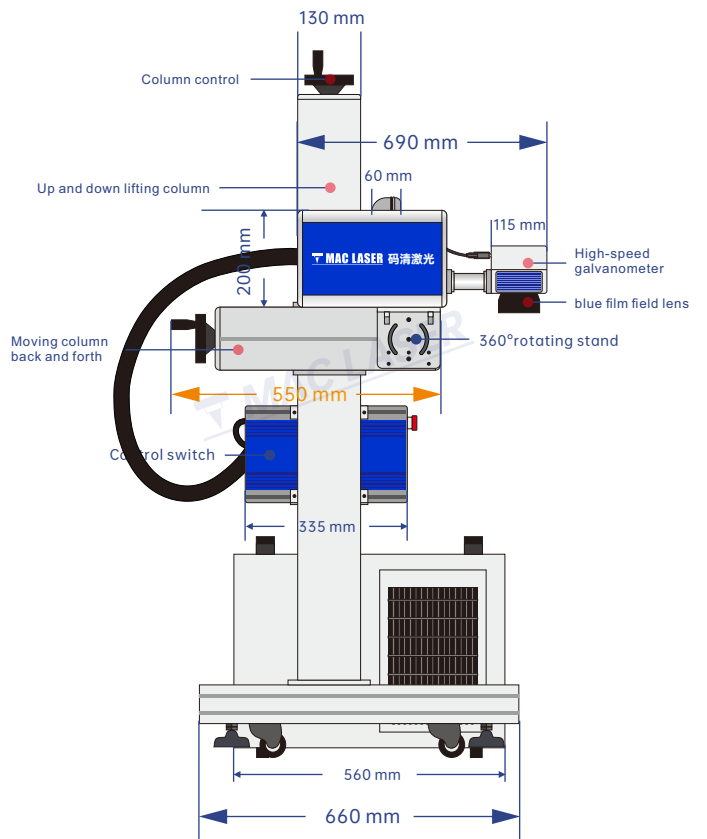
The UV-R series UV flying laser marking machine is a high-speed continuous marking model designed to improve productivity. **It uses RFH industrial-grade solid-state UV laser source which is with good beam quality and high reliability;** The marking speed of the production line is up to 200 m/min ( Single-line 2MM-high numbers and letters), It provides high-speed and high-yield application identification requirements, it's mainly used in production date, anti-counterfeiting, medical and food packaging industries. **This model supports functions such as automatic encoding, serial number, batch number, date, barcode, two-dimensional code, automatic number skipping, etc., to meet the needs of customers in different industries.**

UV series flying laser marking machine are widely used in various pipes, plastic films, plastic bottle caps and other materials like PPR, PVC, PE, etc. It is widely used in the production of food and beverage packaging, alcohol, dairy products, electronic components, medicine, personal care products, tobacco, chemical building materials and other fields, marking of expiration dates, batch numbers, shifts, manufacturer names and logos and other graphics and text.

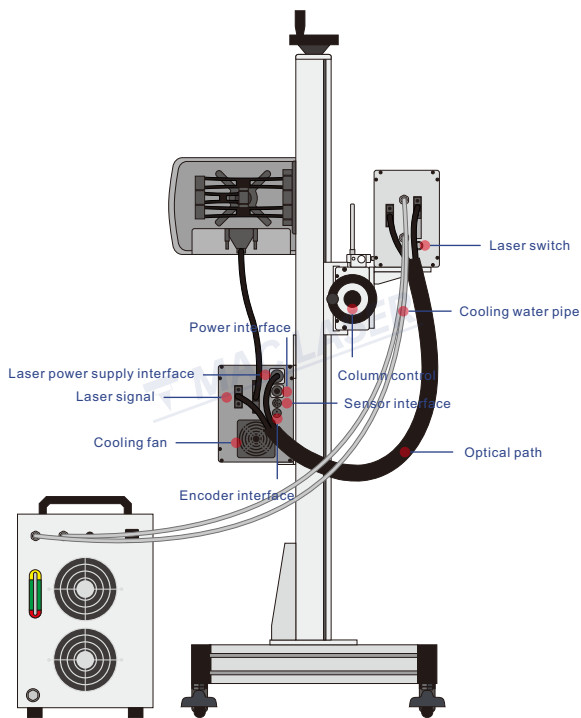
PRODUCT SIZE



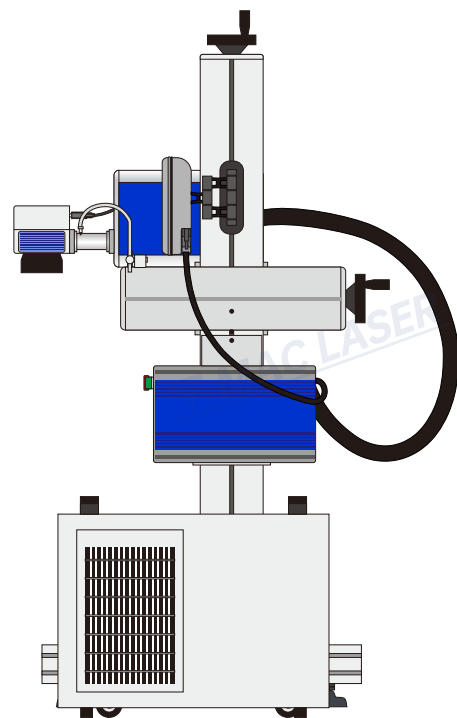
FRONT OF THE DEVICE



THE RIGHT SIDE OF THE EQUIPMENT



THE BACK OF THE DEVICE

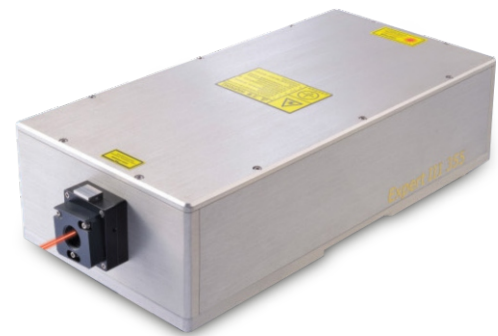


LEFT SIDE OF DEVICE

# UV-R series

## UV flying laser marking machine

The UV-R sub-series adopts RFH Laser's pulsed ultraviolet laser source, it adopts unique Q-switching control technology and suitable for various laser application control needs;The superior beam quality ( $M^2 < 1.2$ ) stricts in all frequency ranges Guarantee; Pulse width  $< 12\text{ns}@30\text{k}$  and heat-affected area is small during processing.



### PRODUCT PARAMETER

Model series		UV-R series (RFH laser source)	
Model		UV300R	UV500R
Laser parameters	Laser source model	S9-F-3	S9-F-5
	Output Power	3W	5W
	Beam quality $M^2$	$< 1.2$	
	Laser wavelength	355 nm	
	Pulse frequency	10-200 kHz	
	Output beam diameter	$0.8 \pm 0.2$ mm	
	Output power stability	$< 5$	
	Working life	About 20,000 hours	
Optical properties	Marking range	100~300mm (range optional)	
	Engraving depth	$\leq 1\text{mm}$ (depending on power and time)	
	Engraving speed	$\leq 10000\text{mm/s}$	
	Repeat accuracy	$\pm 0.002$	
	Minimum marking line width	0.1mm	
	Minimum character height	0.15mm	
Use environment	Cooling way	External water cooling	
	System power supply	500W / 220V / 50Hz (110V can be connected)	
	Temperature humidity	0~40°, 30% RH 85%, air conditioner should be installed when used outside the range	
	Oil mist, condensation	Not allowed	
Other parameters	Operating system	Flying marking system	
	File format	The software supports text, QR code, barcode, serial number, graphics and other marking content	
	Dimensions	660X510X1460 mm	
	Packing size	Host: 850X510X280mm Water tank: 680X430X57mm Column: 1350X350X280mm	
	Total Weight	Including cooling water tank about 89kg	

SCOPE OF APPLICATION



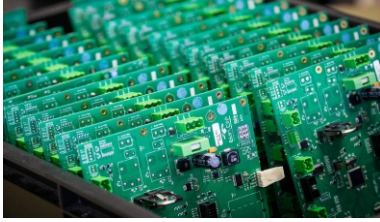
Food and beverages and fast moving consumer goods



Medicines and medical devices



Cosmetics, personal and home care products



Electrical components



Clothing accessories



Chemical building materials

SAMPLE PICTURES



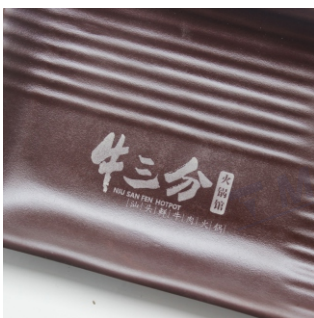
● Metal scalpel marking



● Cable marking



● Earplug box mark



● Ceramic dishes marking

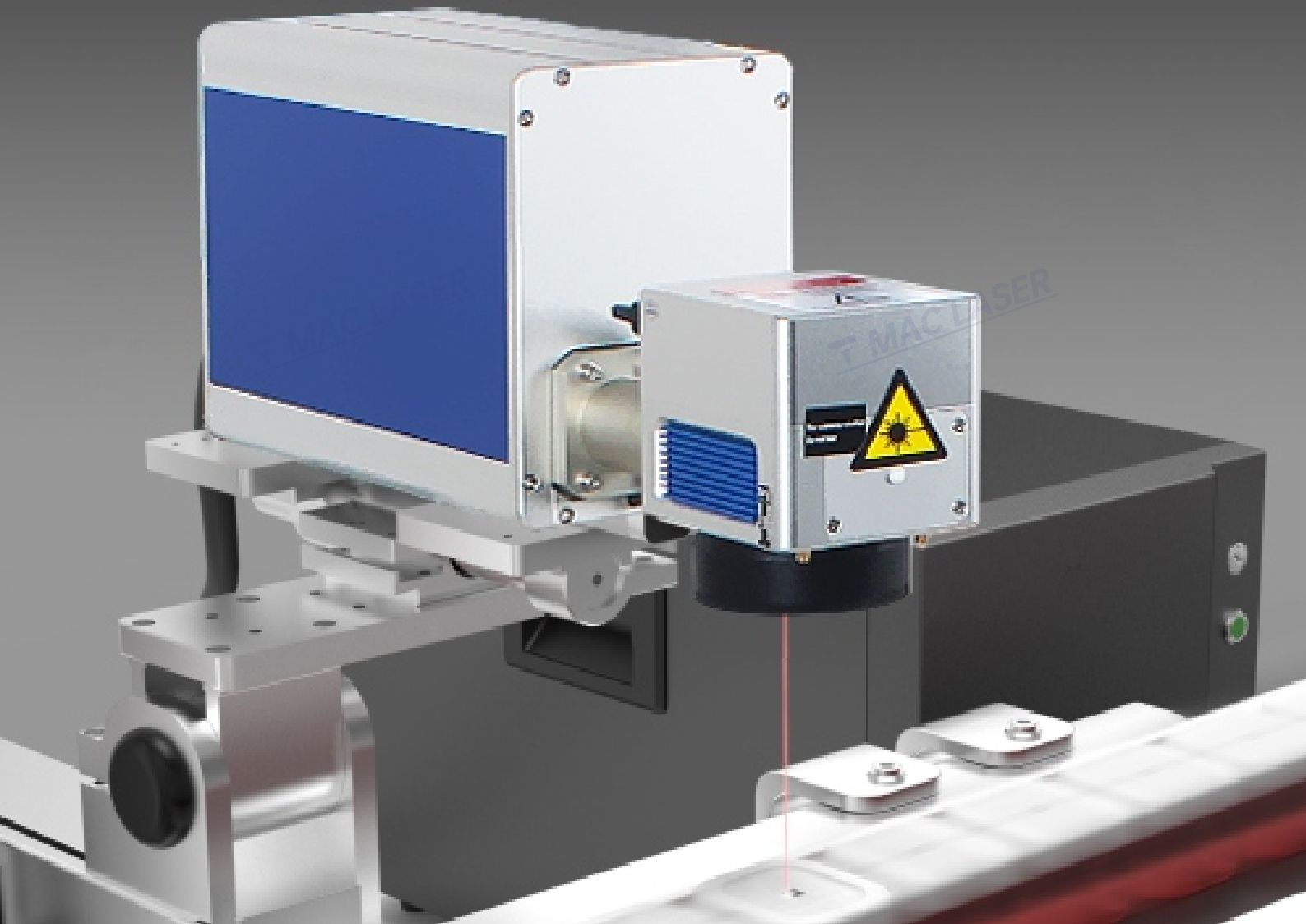


● Marking of plastic parts



● Glass mark

## LASER MARKING ADVANTAGES



## UV series UV flying laser printer series

With the development of the national economy driving the progress of various industries, the laser marking equipment plays a pivotal role in the production line. Laser marking equipment shows the unique personality of the product through packaging, which is a key part of the enterprise to win the trust of consumers.

The three-phase (production date, expiration date, batch number) and traceability code are assigned to each product through the identification equipment, which is required by various industries, especially the fast-moving consumer goods industry. The current main processing methods are ink coding and laser coding.

COMPARE THE PROS AND CONS

 Laser



 Ink



Excellent performance, flexible and reliable

Simple installation, convenient and easy to use

Low operating cost, long-term maintenance-free

Powerful data processing, strong anti-counterfeiting

Safety and environmental protection

Using online high-speed non-stop laser marking, high production efficiency, can work in both static and high-speed flow state of the production line

It can print serial codes, batch numbers, barcodes, QR codes, logos and patterns. The number of information printing lines and font size are limited

The performance is stable and reliable, it can work continuously around the clock, free of maintenance for a long time. Minimal maintenance provides the longest stable operation time. Little environmental impact

Intuitive Windows software, display interface with high resolution and clear picture. It makes the creation and editing of print information convenient and fast

Simple, lightweight chassis, the smallest and lightest laser print head can be directly installed on the production line, it's suitable for any production space

One-time purchase price is higher

The operating cost is extremely low, no unplanned shutdown of production is avoided. The equipment can be operated without maintenance for a long time, without the need for maintenance by a dedicated person, without any consumables and zero operating costs

The control host adopts an embedded flight system, which has powerful data transmission and processing capabilities, it can be connected to all anti-counterfeiting data systems to meet multi-level anti-counterfeiting needs, with clear and permanent markings

It does not produce substances harmful to the environment and the human body, it produces surface scratches on the objects to be printed. It is an environmentally friendly high-tech product. It has been widely used in food and medicine production. Complies with GB 7 2 4 7-87; GB10320-88 standard

It can only be marked when the product is in motion and the production efficiency is high. Some inkjet printers may block the nozzles with ink, which affects production

Bar codes, batch numbers and simple patterns can be printed, the number of printing lines and font size are limited

The performance is basically stable, the failure rate is relatively high. The nozzle will be blocked due to changes in ambient temperature and dust. Maintenance and cleaning work is heavy. Affected by the environment

The display page is simple and the resolution is low. It can only enter the printed information Simple editing process

The size is large or small, some models need to be connected to external equipment such as air compressors

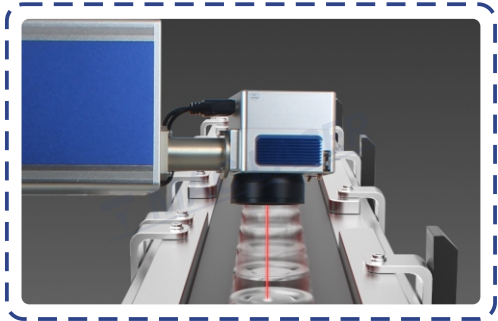
Low one-time purchase price

The inkjet printer consumes a large amount of special inks and solvents, consumes a large amount of consumables. The replacement of nozzles, pumps and other accessories is expensive. The cost of consumables for a single inkjet printer is between 20,000 and 40,000 RMB

It adopts single-chip microcomputer control, limited data processing capacity, few anti-counterfeiting functions, clear marking effect, easy to erase and change

Ink and solvent are highly volatile substances, which will produce more chemical toxic residues and pollute the environment. The chemical composition and odor of ink and solvent may penetrate into the marked object. Internationally, it is also gradually replacing ink jet coding equipment

PRODUCT CHARACTERISTICS

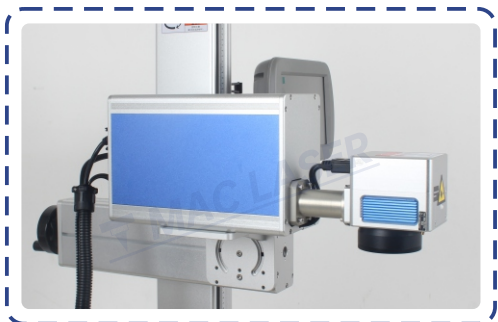
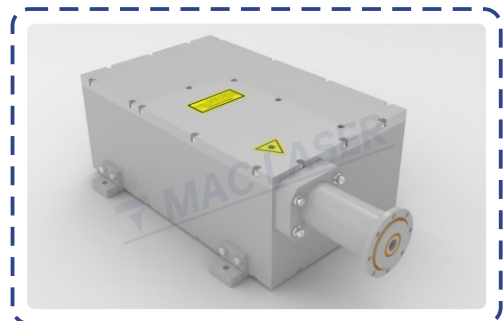


MARKING SPEED UP TO 200 METERS PER MINUTE

This is the industry's fastest marking laser coding system, with a marking speed of up to 200 m/min (single line of 2MM-high numbers and letters), which can be used in medium-speed or high-speed production lines

HIGH-QUALITY AND RELIABLE UV LASER SOURCE

It adopts RFH solid-state ultraviolet laser source which is in ultra-stable compact resonator structure, the advantages include high electro-optical conversion efficiency, good beam quality, high reliability, long life, maintenance-free operation, etc.



COMPACT DESIGN AND FLEXIBLE CONFIGURATION

This model uses compact laser printer marking head to achieve simple integration to reduce installation costs and improve positioning flexibility

FLEXIBLE INSTALLATION WAY, CONVENIENT INSTALLATION POSITION ADJUSTMENT

The flying model is specially designed for high-speed production lines, which can be flexibly combined with production lines for installation and use. The frame can be moved up and down and left and right to adjust, the marking head can also be rotated 360° for marking.

