

## LQ-UV LASER PRINTER

### TECHNICAL DATA SHEET

Our high-speed laser printing system, using integrated, modular design, standardized manufacturing, set miniaturization, high flexibility, high speed, user-friendly operation in one, greatly enhance the comprehensive ability of products.



Movable flying inkjet printer, novel appearance, unique structure, convenient operation interface, high modulation frequency, fast coding speed, high precision, stable performance, powerful functionality, independent research and development, can be customised according to customer needs, modification, increase, decrease the function and so on.

This figure is for reference only. The actual equipment is delivered.

## Technological advantages

With the development of laser inkjet technology, more and more manufacturers are using laser inkjet on their products. Uv laser inkjet machine with its unique low-power laser beam, suitable for the high-end market of ultra-fine processing, cosmetics, drugs, food and other polymer materials packaging bottle surface marking, fine effect, clear and firm marking, better than ink inkjet and pollution-free;



## Communication function

Data communication via USB interface and code sending software



## Multi-material inkjet

LCD glass two-dimensional code, glass surface punching, metal surface coating marking, plastic keys, electronic components , gifts, communication equipment, building materials, etc



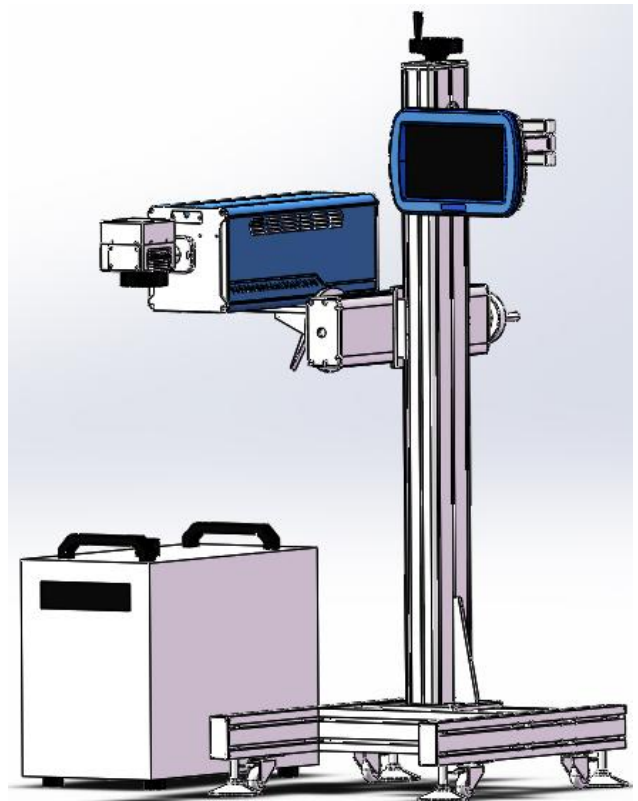
## Red light location

With a red light positioning assist system, this feature can help the operator quickly find the inkjet position when changing the inkjet product.



## Power-off protection

Industry-leading data protection technology ensures that data is not lost during emergency power outages or unplanned shutdowns, helping operators operate quickly.



This figure is for reference only and depends on the actual delivered devices

# INNO LASER



## **INNO LASER technology advantages and market position**

INNO LASER is one of the few industrial laser manufacturers in the world with the core technology and production capacity of nanosecond, subnanosecond, picosecond and femtosecond micromachining lasers.

The company's laser products cover different bands from infrared to deep ultraviolet, and a variety of pulse widths from nanoseconds to femtoseconds, which are recognized by the global market and have international competitiveness.

Ultraviolet laser is one of the core components of lithography machine, especially in EUV (extreme ultraviolet light) lithography machine, the role of ultraviolet laser is very important.

## **The importance of ultraviolet laser in lithography machine**

● **The role of the light source:** the ultraviolet laser as the light source of the lithography machine, emits a specific wavelength of ultraviolet light, and forms a high-energy spot after the optical system is focused to achieve the transfer of the circuit pattern. The choice and design of the light source have an important influence on the resolution and machining accuracy of the lithography machine.

● **Role in EUV lithography:** In EUV lithography, the ultraviolet laser is the key to producing extreme ultraviolet light, which is essential for the production of chips with processes of 5nm and below. The power and stability of EUV light source directly affect the production efficiency and chip quality of the lithography machine. Uv laser is not only the core component of the lithography machine, but also plays a crucial role in the EUV lithography machine.

Types of characters that can be output:



Technical specifications

<b>Applicable Industry</b>	Electronic products, wire and cable and pipe, food and beverage, daily chemical supplies, pharmaceutical and other industries	
<b>Laser machine complete characteristics</b>	Laser output power	3/5/10/15/20W
	Material of complete machine	Alumina and sheet metal construction
	Laser	Ultraviolet laser generator
	Laser wavelength	355nm
	Control motherboard	Industrial grade highly integrated motherboard
	Operating platform	10 inch touch screen
	Cooling system	Water cooling (working temperature 25°C)
	port	SD card interface /USB2.0 interface/communication interface
	Data protection	Ensure that user data is not lost in case of unexpected power failure
	Lens rotation	The scanning head can be rotated 360 degrees at any Angle
	Power requirements	AC220V,50-60Hz
	Overall power	1200w
	Machine weight	90kg
Pollution level	The marking itself does not produce any chemicals	
<b>Environmental resistance</b>	Storage ambient temperature	-10°C-45°C (without freezing)
	Operating ambient temperature	

	Storage humidity	10%-85% (no condensation)
	Working ambient humidity	
<b>Parameter of Lens</b>	Marking range	Standard 110*110mm
	Marking line type	Lattice, vector
	Minimum line width	The 0.01 mm
	Repeated positioning accuracy	The 0.01 mm
	Positioning mode	Red light location
	Focusing mode	Double red focus
	Number of marking character lines	Edit at will within the marking range
	Line speed	0-280m/min (depending on product material and marking content)
<b>Character type</b>	Support font types	Single line font, Double line font, and dot matrix font
	Graphics file format	PLT format vector file input/output
	File format	BMP/DXF/JPEG/PLT
	Graphic element	Point, line, arc text, rectangle, circle
	Variable text	Serial number, time, date, counter, shift
	Bar code	Code39、 Code93、 Code128、 EAN-13 etc
	Two-dimensional code	QRCode、 Data Matrix etc

### Configuration parameter

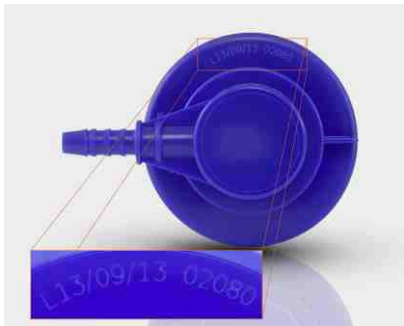
Name	Specification	remark
Ultraviolet laser	3/5/10/15/20W	Eno
Scanning galvanometer	High speed digital galvanometer	Kim Hae-chuang
Marking system	10 inch touch screen	Third party
Cooling system	Custom	Guangzhou
Focusing field mirror	F=160mm	Shenzhen
Three-dimensional flight rack	Custom	Third party
Switch unit	Integrated third party	Schneider
Red light location	Custom	Third party

# UV laser marking machine

## Applicable materials

**Glass:** The surface and interior carving of glass and crystal products.  
Widely used for surface engraving of metals, plastics, wood, leather, acrylic, nanomaterials, fabrics, ceramics, purple sand and coated films. (Actual testing is required due to different ingredients)

**Industry:** Mobile phone screens, LCD screens, optical components, hardware, glasses and watches, gifts, PC, precision electronics, instruments, PCB boards and control panels, inscription display boards, etc.  
Adapt to surface treatment such as marking, engraving, etc, for high flame retardant materials



Plastic



Wood products



Leather



Fabric



Ceramic



Spectacle frame



Electronic component



Glass



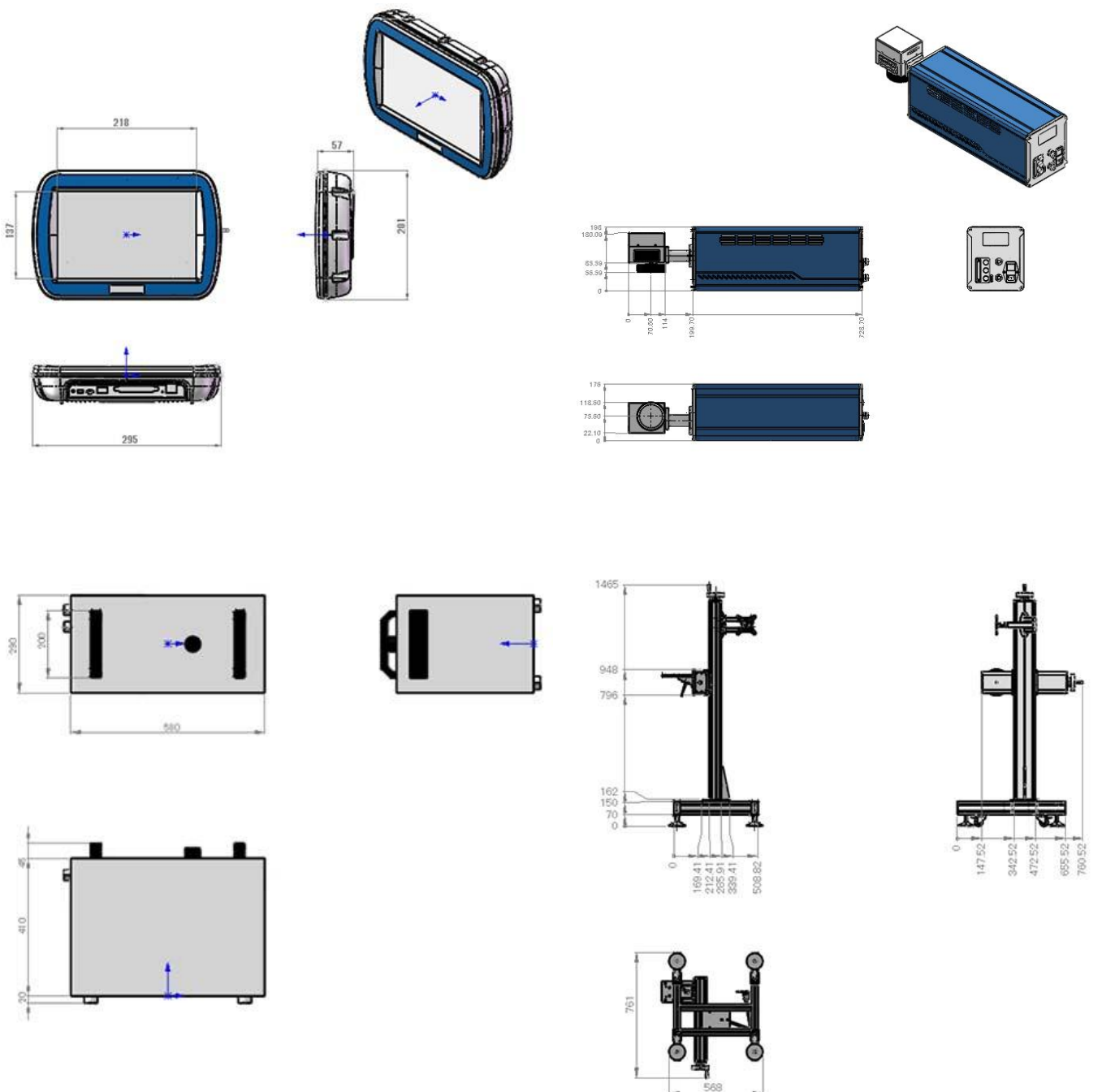
Mobile phone lettering



**Parts list:**

Name	Specification	Remark
Laser machine equipment	A SET	Spare parts
Test report	A PCS	
Power cord	A PCS	
Cistern	A SET	
Specification	A PCS	
Certificate of conformity	A PCS	

**Apparent dimension :**



High-speed laser coding equipment is the fourth generation of high-speed laser printing system of our company, adopting integrated and modular design, standardised manufacturing, integrating miniaturisation, high flexibility, high speed, operation and use of user-friendly in one, which greatly enhances the comprehensive ability of the product.

Ultraviolet laser inkjet printer with its unique low-power laser beam-based, especially adapted to ultra-fine processing of the high-end market, cosmetics, pharmaceuticals, food and other polymer materials, packaging bottles surface coding, the effect of fine, clear and firm marking, better than inkjet coding and non-polluting; flexible PCB board marking, scribing; silicon wafer microporous, blind hole processing; LCD LCD LCD glass two-dimensional code marking, glass appliances, surface perforation, metal surface plating Perforation, metal surface plating marking, plastic keys, electronic components, gifts, communication equipment, construction materials and so on.

The laser machine adopts anti-error marking control, the laser control equipment sends the data to the laser machine at the same time will also be sent to the remote control computer, the remote control computer will compare the data with the data stored in its own database. If any inconsistency is found, it means that there is an error in the coded text, the main controller will immediately switch off the laser marking software and an error warning will appear on the control screen.