

# LASERLOGY

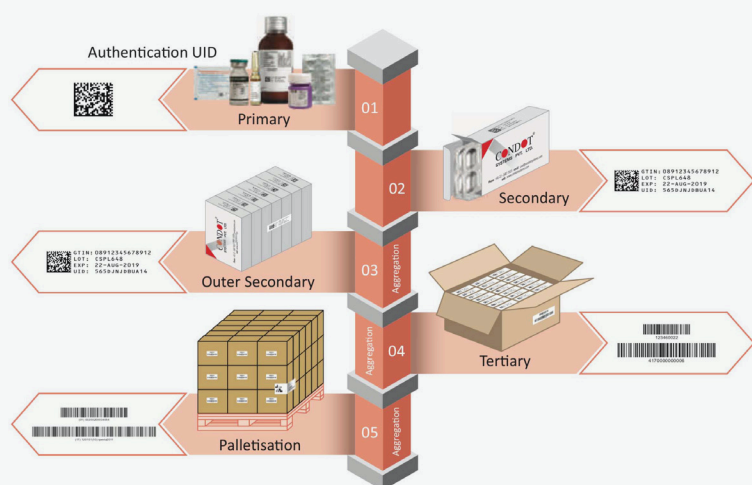
Laser Marking Systems

LS-U SERIES

Brochure | Version 1.0

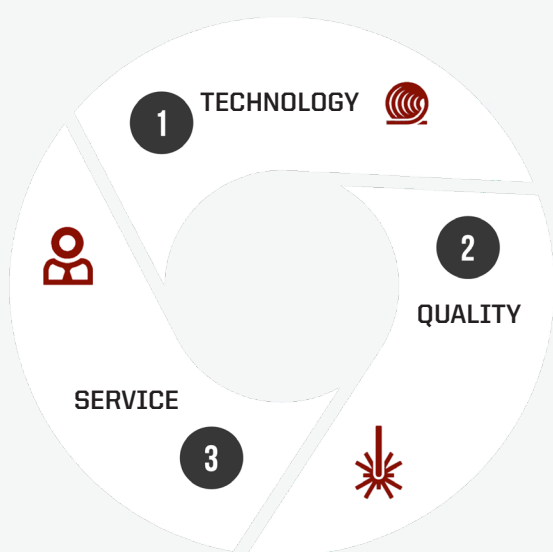
## LASER MARKING SOLUTIONS





## LASER MARKING

Laser marking allows you to create precise and permanent markings, even in hard-to-reach areas, through a fast and flexible process. LASERLOGY's innovative solutions allow you to enter information about work pieces as part of your production configuration. The permanence of the laser marks guarantees optimum traceability. In addition, contactless marking has several advantages, low material tension and low costs due to the absence of consumables.



## SERVICE

Our service begins long before a laser system is installed. Customer advice, feasibility analysis and project management are the pillars on which our concept of success is based. A global network of experts at the service of our customers.

## TECHNOLOGY

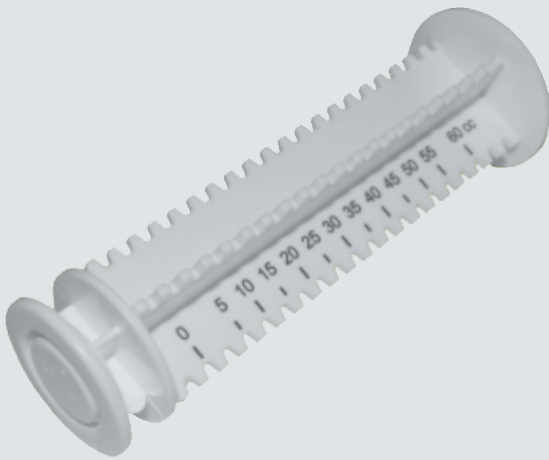
Everything we do is based on the deployment of the latest laser technologies applied to the industry. Our company, enhances the things that move people. We develop and design solutions with a high technological value, always keeping the client's needs as a global focus.

## QUALITY

In our company, each employee is involved and sensitized, resulting in high quality products and high level service. Technological know-how and a great sense of the important form the basis of our innovative and high quality products.

## UV LASER TECHNOLOGY

LS-U Series laser markers use DPSS (Diode Pumped Solid State) laser sources with a wavelength of 355nm. The high rate of absorption of this wavelength by a large number of materials allows UV lasers to perform a specific type of marking called “cold marking”, ensuring that no additional heat stress is applied to the materials. This technology is suitable for the marking of sensitive plastics, silicones, glass, electronic components and surgical material.



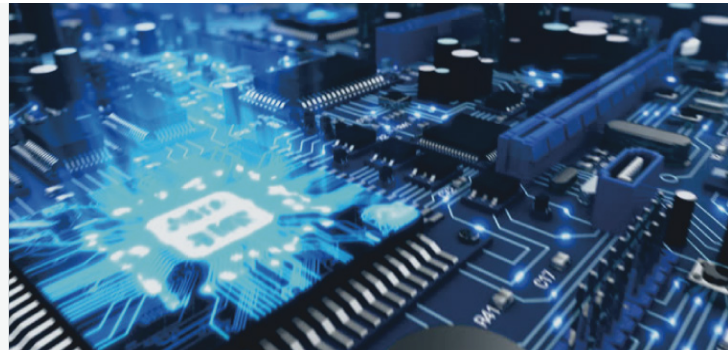
## HIGH QUALITY MARKING ON SENSITIVE PLASTICS AND GLASS

Methods for laser marking plastics range from surface melting or foaming to photochemical alteration of the material using ultraviolet lasers. For medical grade plastics, UDI markings should be soft to the touch, eliminating areas where bacteria can be accumulated. The use of UV lasers in the cold marking process alters the molecular structure of the material, which is desirable for applications very sensitive to thermal damage.

In the case of glass, laser marking is based on creating surface or internal micro-cracks that form meshes to shape the final design. For decades, glass marking has been carried out on the surface using CO2 lasers. Currently, the use of ultraviolet wavelengths has allowed us to improve the definition and quality of marking on this material, even being able to make markings inside the glass without damaging the surface. In production, the CO2 system continues to be considerably faster.

## STAND-ALONE OPERATION

The powerful built-in computer makes the LS-U Series the best solution for intensive use in standalone mode (no external PC needed). In this way, the laser marker does not need any additional hardware when it is integrated into a machine or production line.



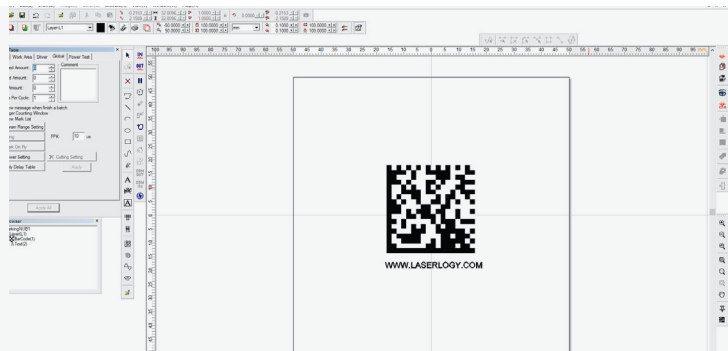
## LASER PREVIEW

The well visible, red preview laser indicates the marking position in advance. This marking simulation offers the possibility to check and adjust the marking position before to executing the real marking process.



## EASY TO USE

The LS-U series is designed to be as easy to use as a conventional printer. Through its intuitive configuration software in Windows environment, you will be able to create your design to mark very easily. You simply have to enter the content to mark.



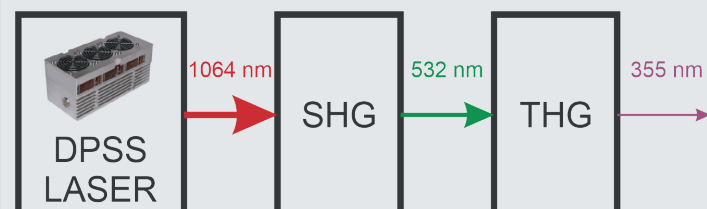
## LASER SAFETY

With the emergency button placed on the front of the control unit, the operator can stop the laser source in case of any abnormal condition happens. Additionally, it is possible to block the laser beam using the internal shutter. This safety device can be activated using a digital signal of the control unit increasing workers safety.



## DPSS LASER

LS-U series laser systems integrate solid state laser sources (DPSS) with the highest efficiency and stability of the industry. The UV wavelength (355 nm) is achieved with the third harmonic generation (THG) of a conventional 1064 nm. source.





## MARKING AREA

The LS-U series offers the possibility to install 4 different optical configurations to suit the needs of each application. F210 standard focal (140x140mm work area) offers the best compromise between marking field and resolution. It is available as options F100 (70x70mm work area) and F160 (110x110mm work area) for high resolution applications and F300 (210x210mm work area) for wide marking field applications.



## DUAL POINTER

LS-U series incorporates a second laser pointer in order to adjust and check easier the focus distance. The user must only verify where the two laser pointers (preview laser pointer and auxiliary focusing laser pointer) match on the piece to ensure that the head is in the correct working distance.



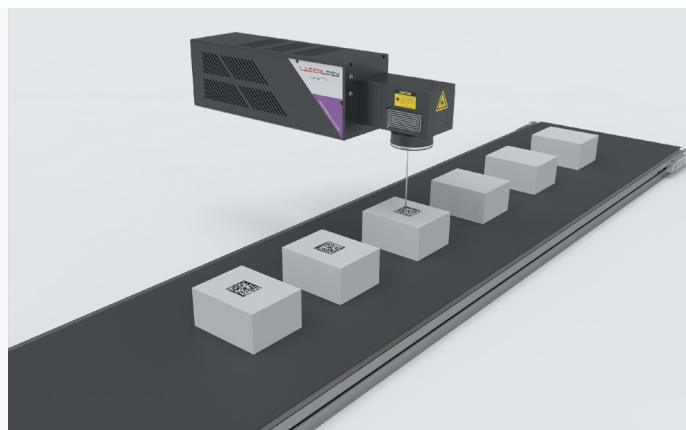
## REMOTE CONTROL

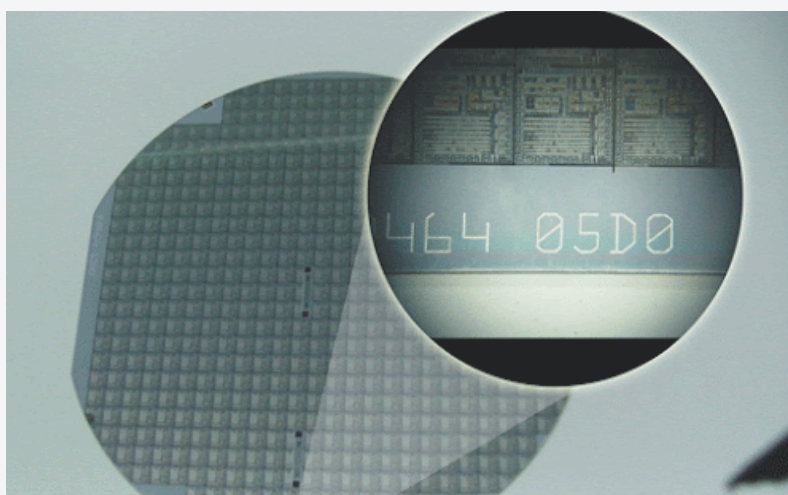
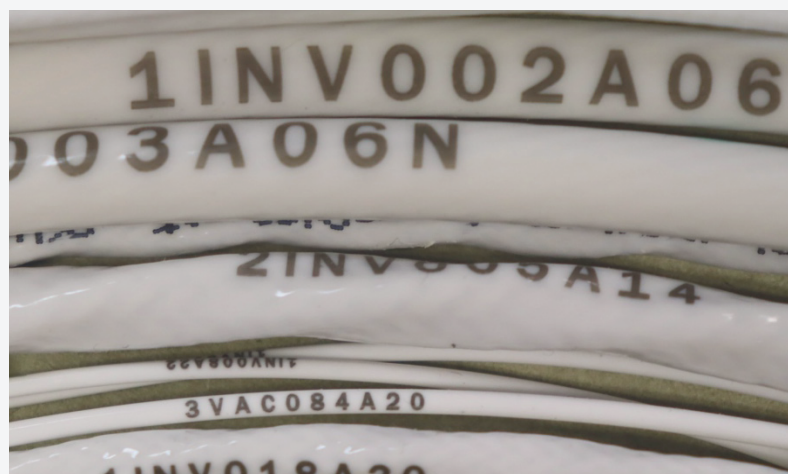
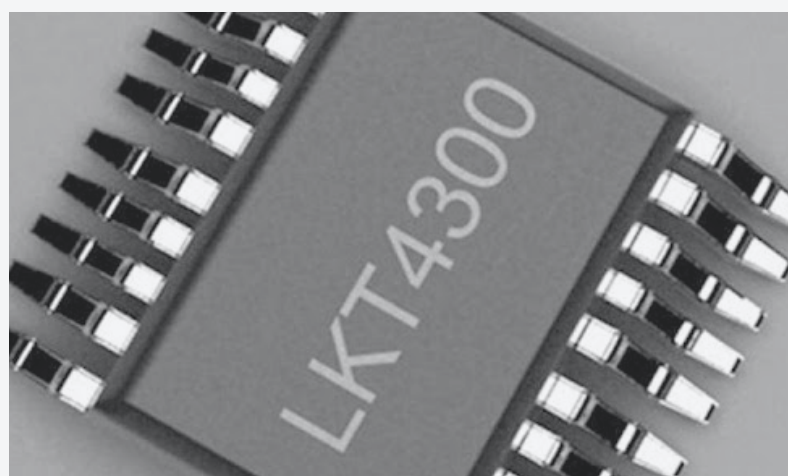
The LS-U series equipment is designed for easy integration into machines and production lines, allowing its control remotely by Ethernet (TCP / IP) communications or through its In/Out port with digital signals (24V).



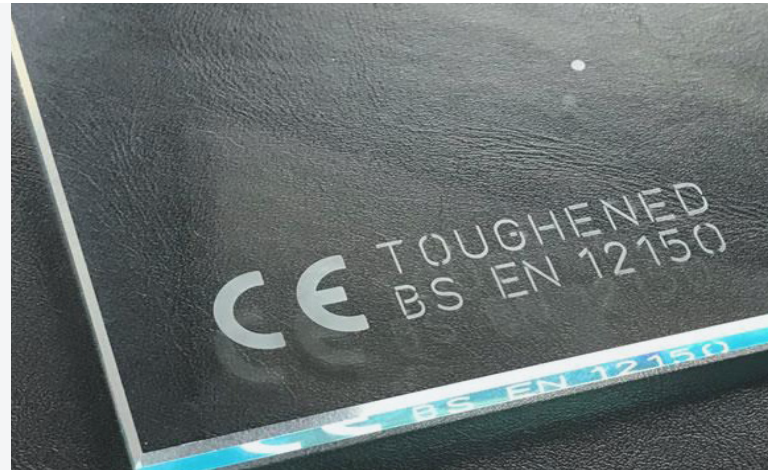
## MOTF (MARKING ON THE FLY)

"Marking On The Fly" feature lets to mark moving workpieces. This type of marking is used for continuous manufacturing processes where any standstill of the production line would be uneconomical.









## FEATURES

Know all the details and characteristics of our equipment. If you need to expand this information or learn more about our equipment, contact our support service.



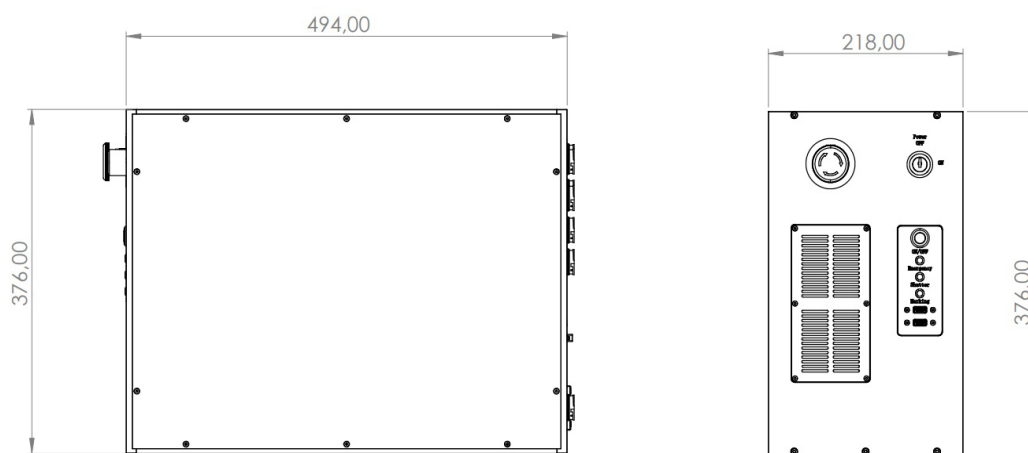
	LS-5U	LS-8U	LS-10U
Laser Power	5W	8W	10W
Marking area	70x70mm, 110x110mm, 140x140mm or 210x210mm		
Laser Type	DPSS		
Wavelength	355 nm		
Frequency	0-200 KHz		
Laser Guide	Semiconductor $\lambda = 655\text{nm}$ , laser class 2; 1mW		
Marking method	Galvanometer scanning		
Max. scanning speed	12000 mm/seg		
Software	LogyMARK		
Type of characters	Capital & small characters, numerals, symbols, and other special characters		
1D/2D Code formats	CODE39, CODE128, ITF2/5, NW-7, JAN/UPC/EAN, RSS 14, RSS limited, RSS expanded (GS1 Databar), GS1 Data Matrix, QR, Micro QR, Data Matrix (ECC200), etc.		
Logos/Graphics formats	DXF, SVG, BMP, HPGL, JPEG, AI, EPS, etc		
Control modes	Built-in PC or Remote control		
Operating temperature	0 to +40°C (no condensation or frost), storage: -10 to 60°C		
Operating humidity	35 to 75% RH (no condensation or frost)		
Supply voltage	90 to 132VAC or 180 to 264VAC, 50/60Hz		
Power consumption	< 500W		
Communication ports	Digital I/Os, Ethernet (TCP/IP), Encoder		
Cooling	Forced Air cooling		
Interconnection cables length	5 meters (other lengths on demand)		
Marking condition	Static and Marking on the fly		
Head weight	16 Kg		
Controller weight	25 Kg		



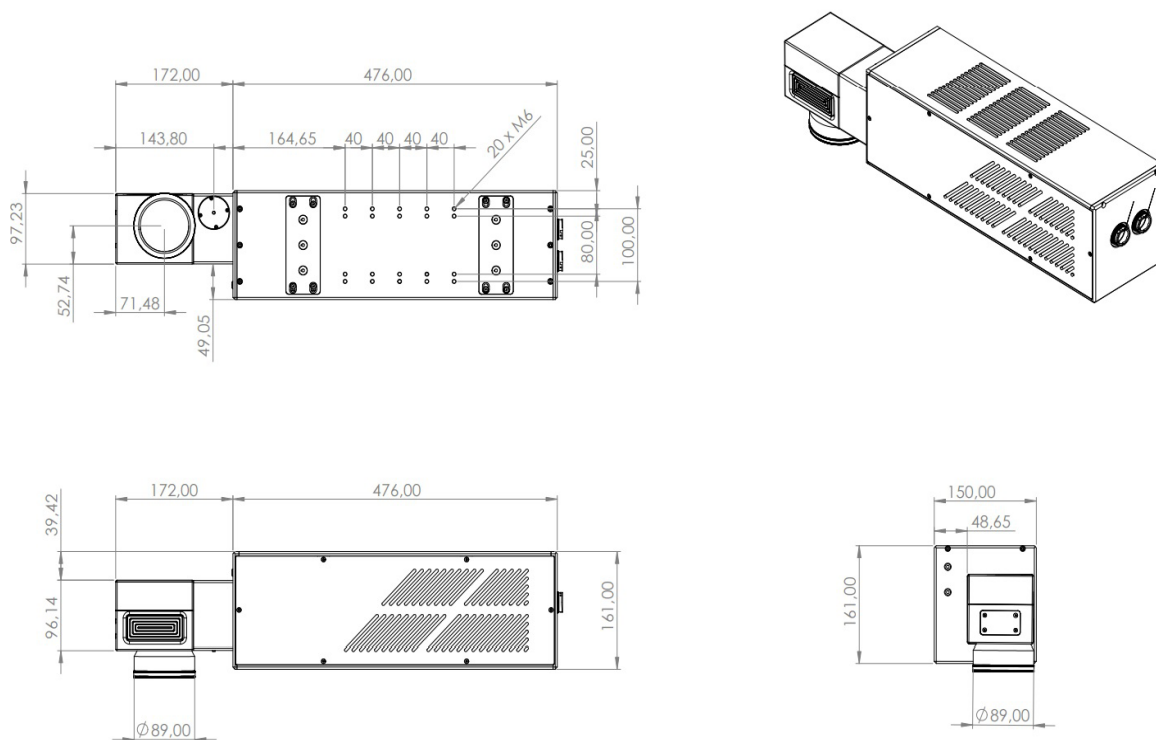
## DIMENSIONS

Compact and easy to integrate into your machine or production line. Check the dimensions or request the 3D files in order to verify your project

### LASER CONTROLLER



### LASER HEAD





**LASERLOGY**

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