

Desktop UV Laser Marking Machine

IM-FUL500

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The Industrial Laser Marking Machine from the FL series by REDT Inc. brings years of technology and expertise to offer a high-quality performance at a mid to low price range. This versatile machine meets the diverse needs of various industries, enhancing efficiency with its practical and user-friendly design.



Product Features

- High Precision Z-Axis: 220mm stroke built into the Z-axis for optimal marking performance.
- Large Working Area: 110 x 110 x 220 mm, perfect for various marking tasks.
- Versatile Marking Types: Capable of standard, black, color, and deep marking on various metals.
- Built-In Guide Laser Pointer: Ensures easy and accurate engraving position checks.
- Automatic and Semi-Automatic Control: Z-axis control system for precise operations.
- Focus Height Adjustment: Two built-in focus pointers for easy material height setting.
- Rotary Clamp: Supports marking on cylindrical and pipe-shaped materials.
- High-Precision Scan Head: Marks clearly, even the smallest characters.
- Compact Design: Suitable for tight spaces.
- External Device Control: Switch design and I/O ports for seamless integration with external devices.
- Fume Collector Control: Direct switch for easy Fume management.
- Automatic Correction: Ensures accurate and consistent settings.

Product Specifications

Dimensions	378(W) x 719(D) x 664(H) (mm)	Focus Distance	Approximately 190mm	Max. Material Height	220mm
Working Area	110(X) x 110(Y) (mm)	Z-axis Travel	220mm	Max. Speed	4000mm/s
Laser Power	5W	Z-axis Operation	Semi-automatic	Z-axis Motor Type	DC motor
Power Supply	AC 100~240V 50/60Hz	Z-axis Control Method	Switch	Laser	Fiber
External Power Device	AC 220V/2A	Z-axis Extension	200mm	Weight	42kg
Power Consumption	<500W	Temperature	15~35°C	Humidity	10-85%

Applications

Suitable for marking serial numbers, barcodes, logos, and various graphic images on materials in automotive, electrical, electronics, mobile, medical equipment, tools, and other industries.
Marks on hard metals, aluminum, brass, stainless steel, titanium, and various other metals.



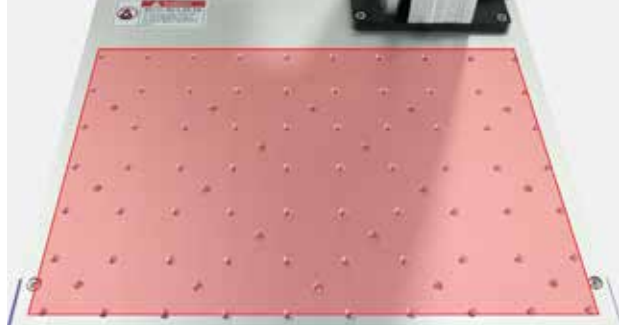
Compact Size for Installation in Tight Spaces

- Effective placement in small workspaces due to its compact size
- User-friendly design ensures easy installation and operation



Spacious Working Area

- Large working area accommodates materials of various sizes, including those that are long or large in both horizontal and vertical dimensions



Fast and Easy Focus Pointer Settings

- Built-in dual focus pointers make it easy to check and set focus height according to material height
- Manual focusing capability allows precise marking on protruded materials



High-Speed Marking on Various Metals

- Accurately marks high-quality markings on various metal materials, including nameplates and parts
- Supports multiple marking type; such as standard, black, and deep marking



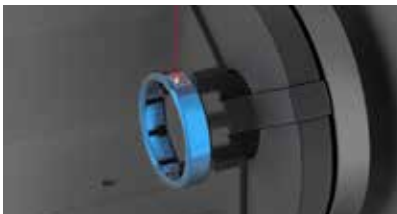
Engraving Small Characters as Tiny as 0.5mm

- High-precision scan head can mark characters as tiny as 0.5mm, which is difficult to see with the bare eye



Supports Rotary Marking

- Connects to a rotary marking device to mark both the outer and inner diameters of cylindrical materials
- Designed with a detachable modular structure for easy and quick disassembly



Efficient Serial Number Marking

- Serial number marking automated to minimize user intervention.
- Start command automatically changes serial numbers during marking.



I/O Port Support

- Direct control of the dust collector's power from the device eliminates the inconvenience of manually turning the dust collector on and off.



IM-FL Series Feature Comparison Chart

Marking Types	IM-FL300	IM-FL500	IM-FL1000
Black Marking/White Marking	★	★★★	★★★
Photo Marking	○	○	○
Color Marking	★	★★★	★★★
Deep Marking	★	★	★
Cutting	★	★	★
V-Carving	★	★	★
Cleaning	○	○	○

★ : Good ★★ : Better ★★★ : Best ○ : Supported