

MOPA Desktop

Laser Marking Machine

DLM-MD

Laser Power:

20W / 30W / 60W (Optional)

Marking Range:

110*110 / 150*150 / 175*175mm (Optional)



Machine Introduce

The DLM-MD fiber MOPA desktop laser marking machine features a compact size, low cost, easy operation, and wide applicability. It is widely used in DIY, outdoor, office, and various small-batch processing and customization scenarios.

High beam quality: MOPA laser has a small focused spot and clear edges, which makes marking effect more rich and delicate.

High precision: The pulse width of MOPA laser is adjustable, with minimal thermal impact and minimal thermal damage to the material surface, enabling ultra-fine marking effects.

Rich marking effects: The MOPA laser's outstanding pulse control capability enables precise marking in color/black, fine patterns, and heat-sensitive materials.

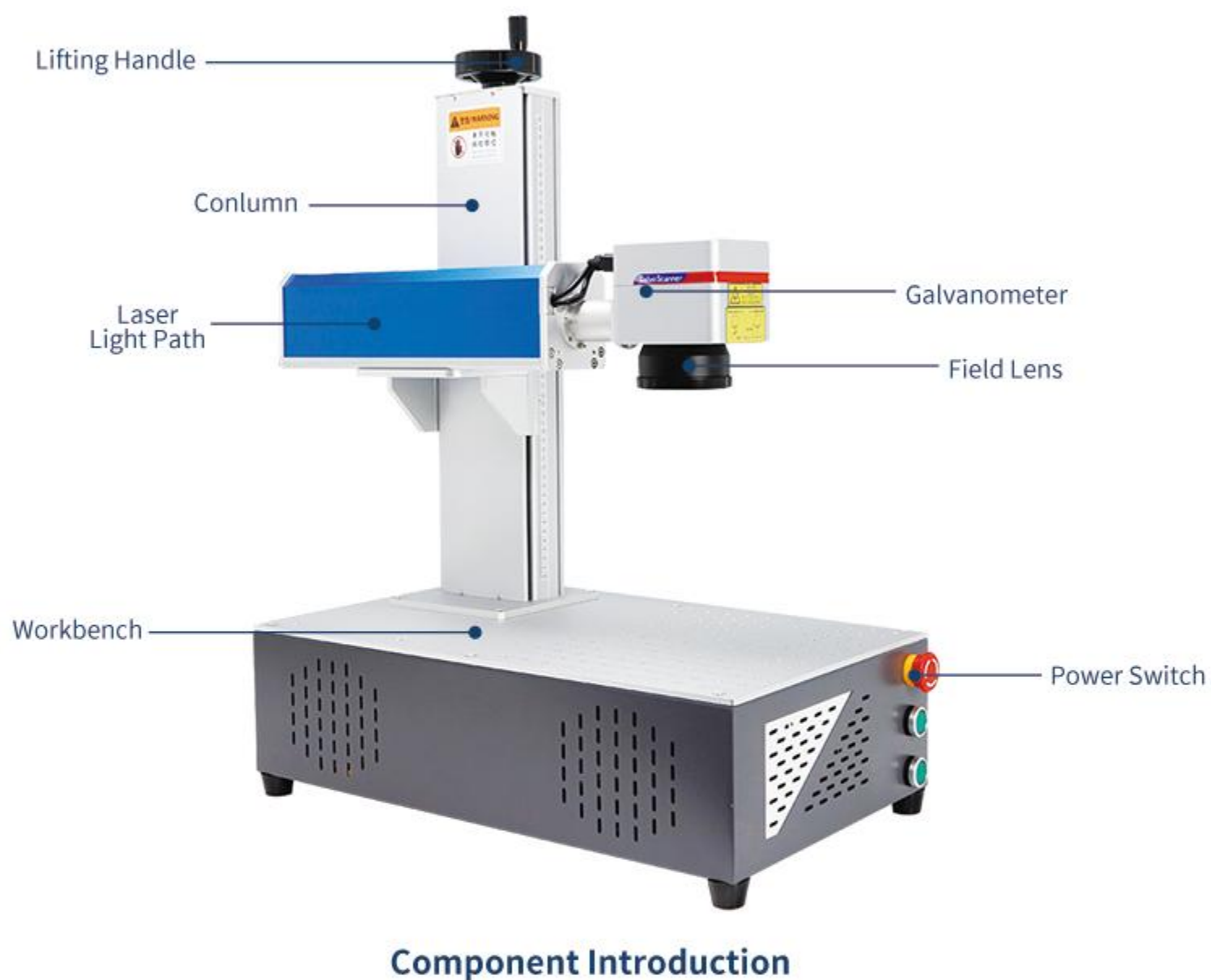
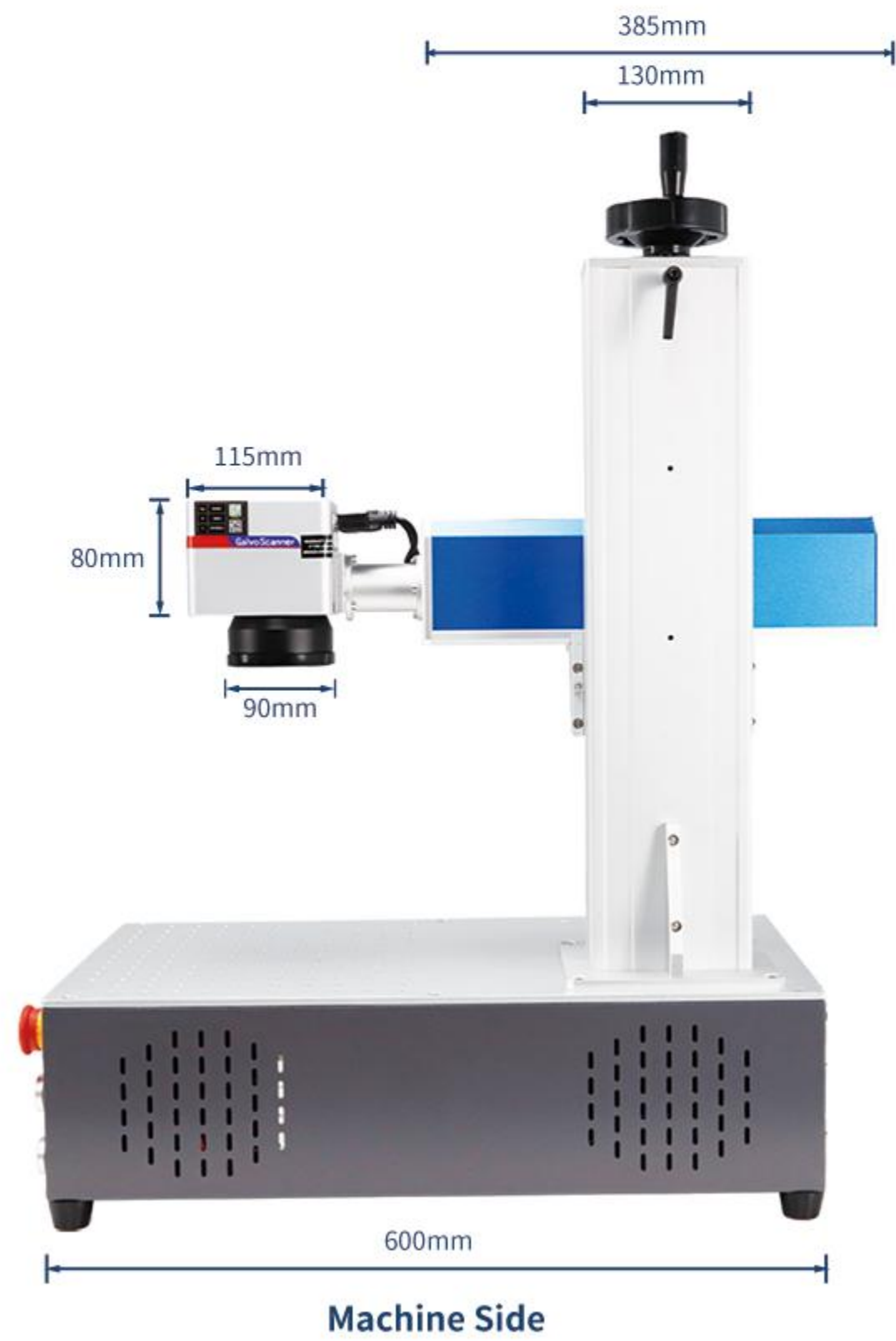
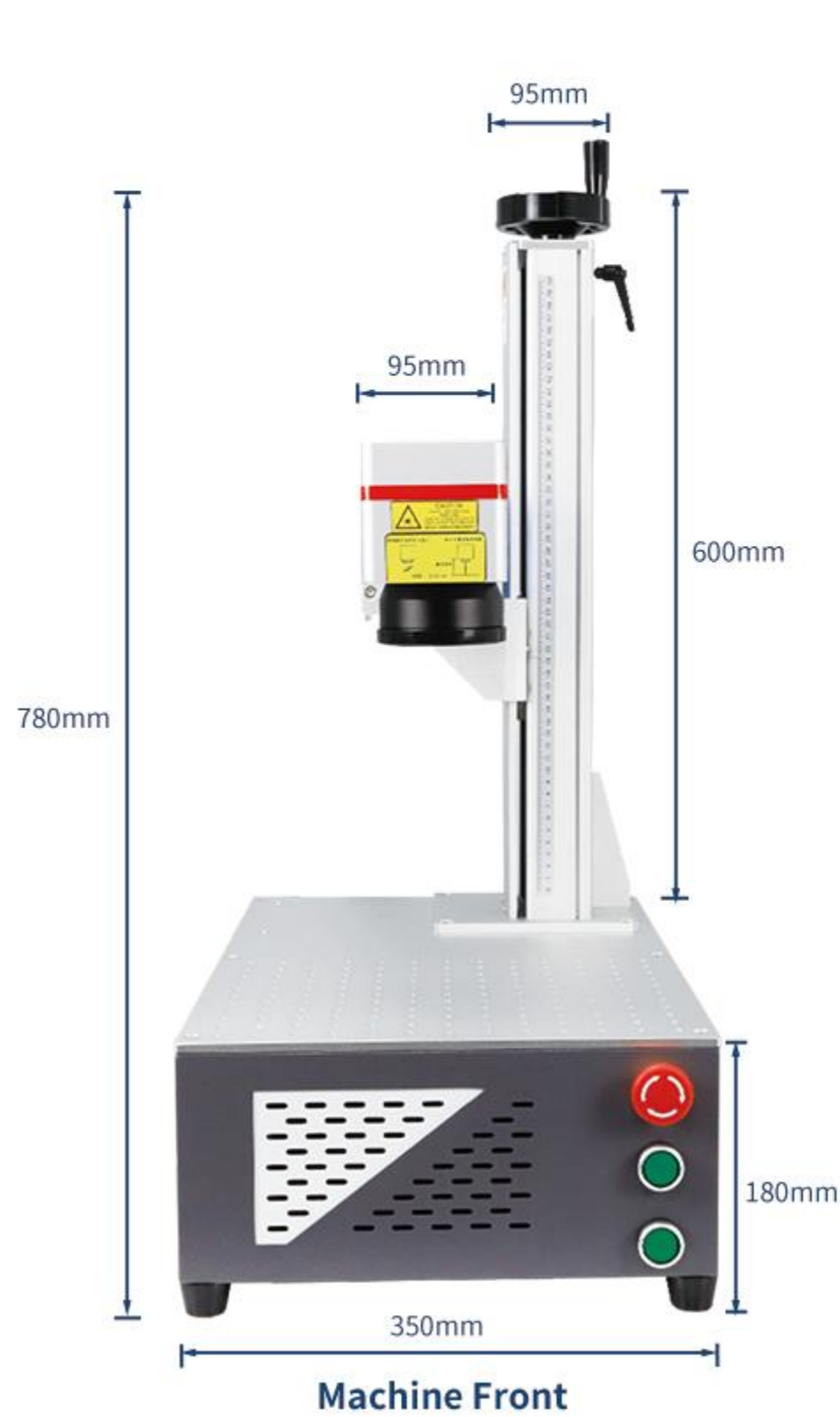
Common material range:

Specializing in blackening of alumina, blackening and coloring of stainless steel and titanium.

It is applicable to marking on various metal materials such as iron, copper, aluminum, gold and silver, as well as some non-metal materials like PC, ABS, PVC and PC+ABS.

Application fields: Widely used in industries such as 3C, automotive parts, electronic components, integrated circuits (IC), precision instruments, hardware products, building materials, watches, jewelry, and craft gifts.

Machine Size



Model	DLM-MD
Machine Size	350*600*830mm
Machine Weight	23.4kg
Packing Size	500*800*550mm
Packing Weight	46.6kg

Parameter Information

Model	DLM-MD			
Laser Parameter	Laser wavelength	1064nm		
	Output power	20W	30W	60W
	Pulse width	2~500ns		
	Repetition frequency	1~4000kHz		
	Power adjustable range	10~100%		
Galvanometer	Marking speed	7000mm/s		
	Marking depth	≤0.2mm (View materials)		
	Repeatability accuracy	0.01mm		
	Min line width	0.06mm @ F=163mm (View materials)		
	Min character	0.2mm @ F=163mm		
Field Lens	Focal length	F=163mm	F=210mm	F=254mm
	Marking range	110*110mm	150*150mm	175*175mm
Control System	Control card	JCZ-LV7		
	Software system	Ezcad 2 (Compatible with LightBurn)		
	Software language	CN/EN/DE/FR/ES/TC/JA/KOR etc.		
	Support system	Windows		
	Support file format	PLT/DXF/AI/SVG JPG/GIF/BMP/PNG etc.		
Other	Cooling method	Air cooling		
	Power supply	110V-220V 50HZ-60HZ		
	Power consumption	≤0.55kW·h		

Optional Type



● DLM-MC MOPA Split



● DLM-MC MOPA Cabinet

Sample



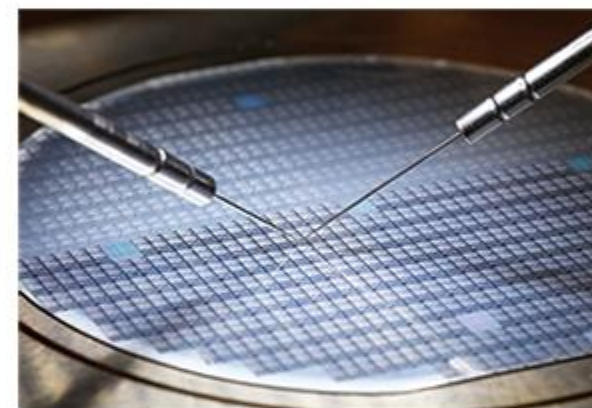
Application Scenarios



● 3C Electronics Industry



● IC Industry



● Semiconductor Industry



● Kitchen and Bath Industry



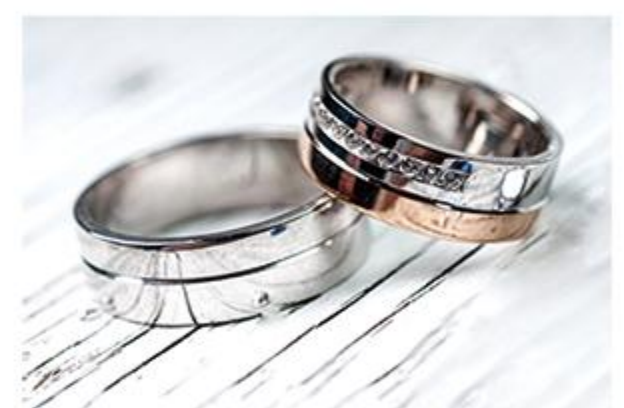
● Building Materials Industry



● Packing Industry



● Medical Industry

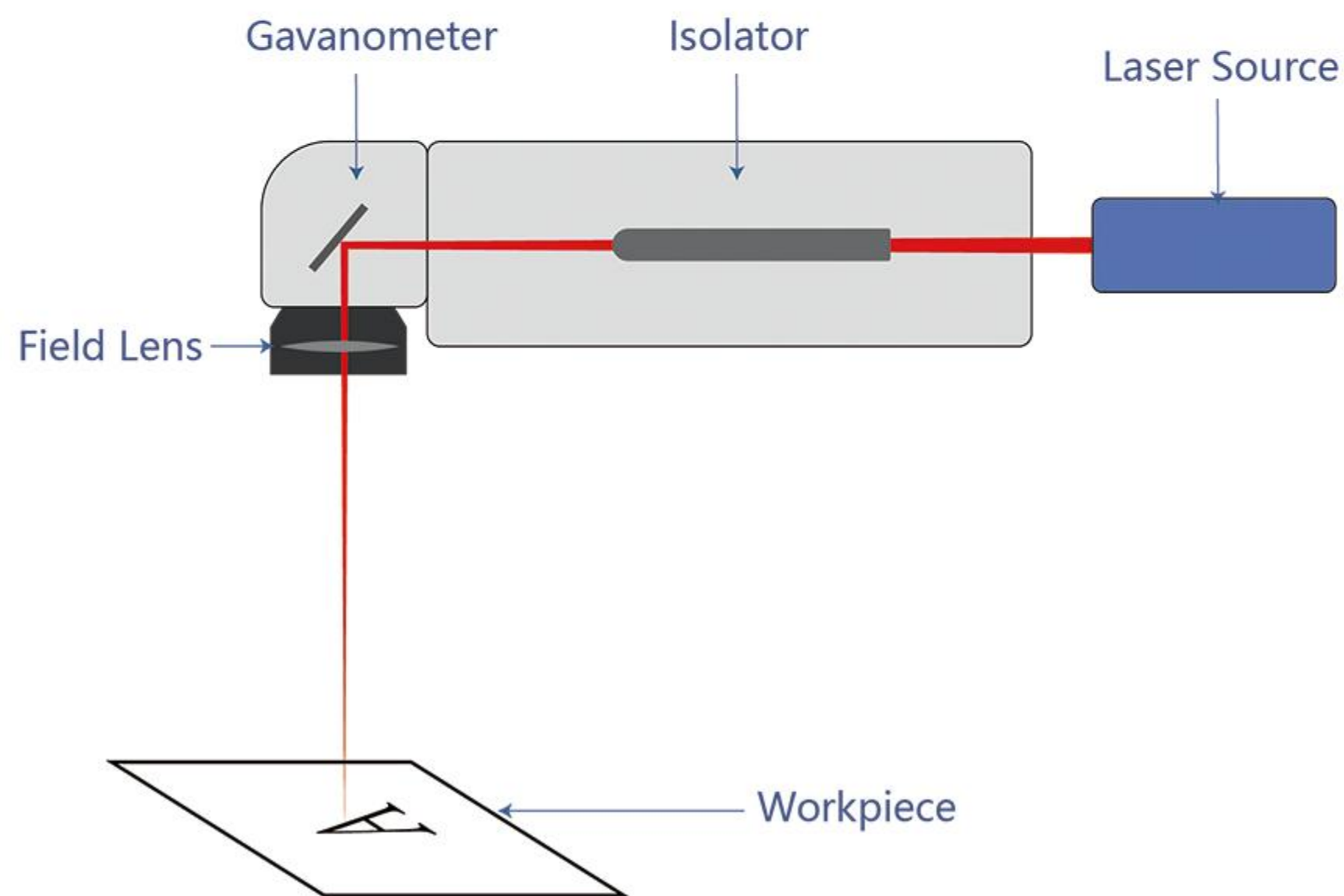


● Jewellery Industry

Core Component

Laser Source

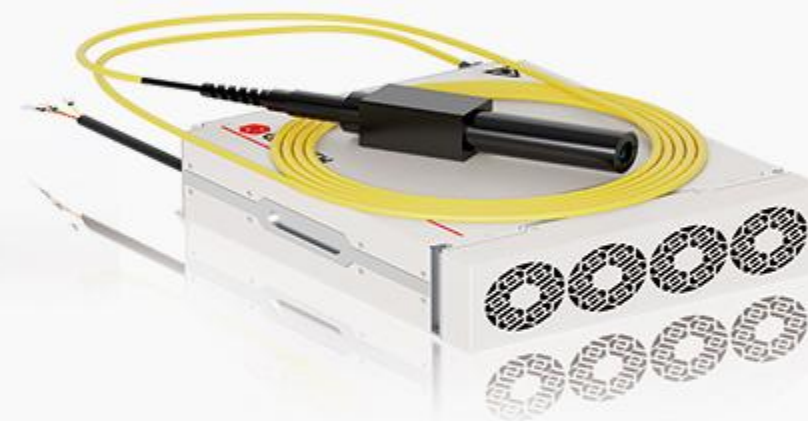
MOPA laser marking machine achieves diverse, high-quality and low-damage marking effects by adjusting the parameters of the laser pulses generated by the laser and precisely controlling the interaction between the pulses and the materials.



Common Brand



● JPT Laser



● GZTECH Laser

Galvanometer

After computer sends instructions, the control card drives the high-speed deflection of the galvanometer, thereby changing the angle of the lens. The fixed laser beam is continuously reflected by the lens and finally focused by the field lens to form a controllable motion spot on the surface of the workpiece, which is combined into the desired pattern.



● Ordinary (Standard)



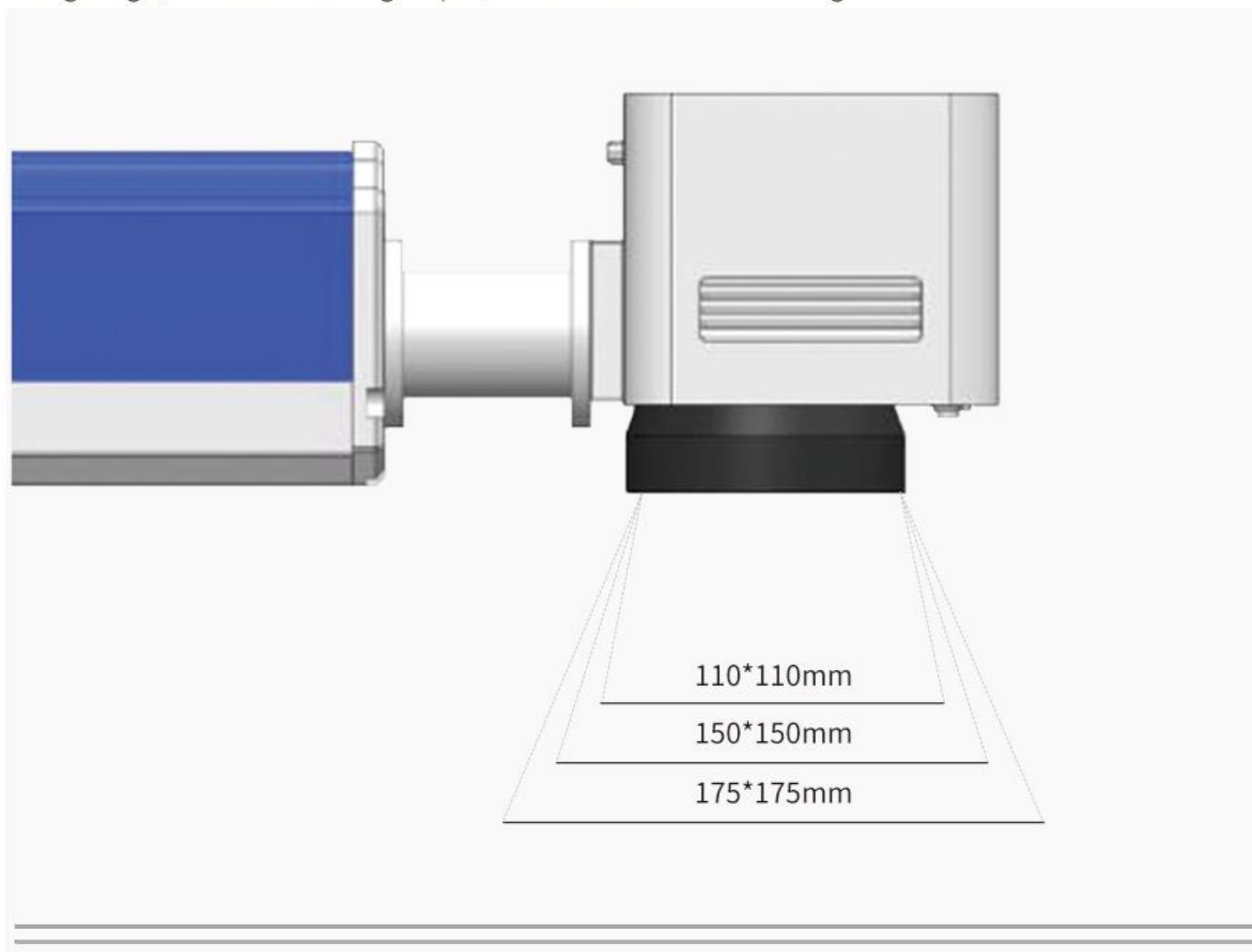
● High-speed (Optional)



● Dual Red Light (Optional)

Field Lens

The incident laser reflected by the galvanometer at different angles is focused on the same plane to ensure the accuracy of the process pattern throughout the entire area. Meanwhile, focal length of the field lens directly determines marking range. The shorter the focal length, the smaller the marking range, the smaller the light spot, and the clearer the marking effect.

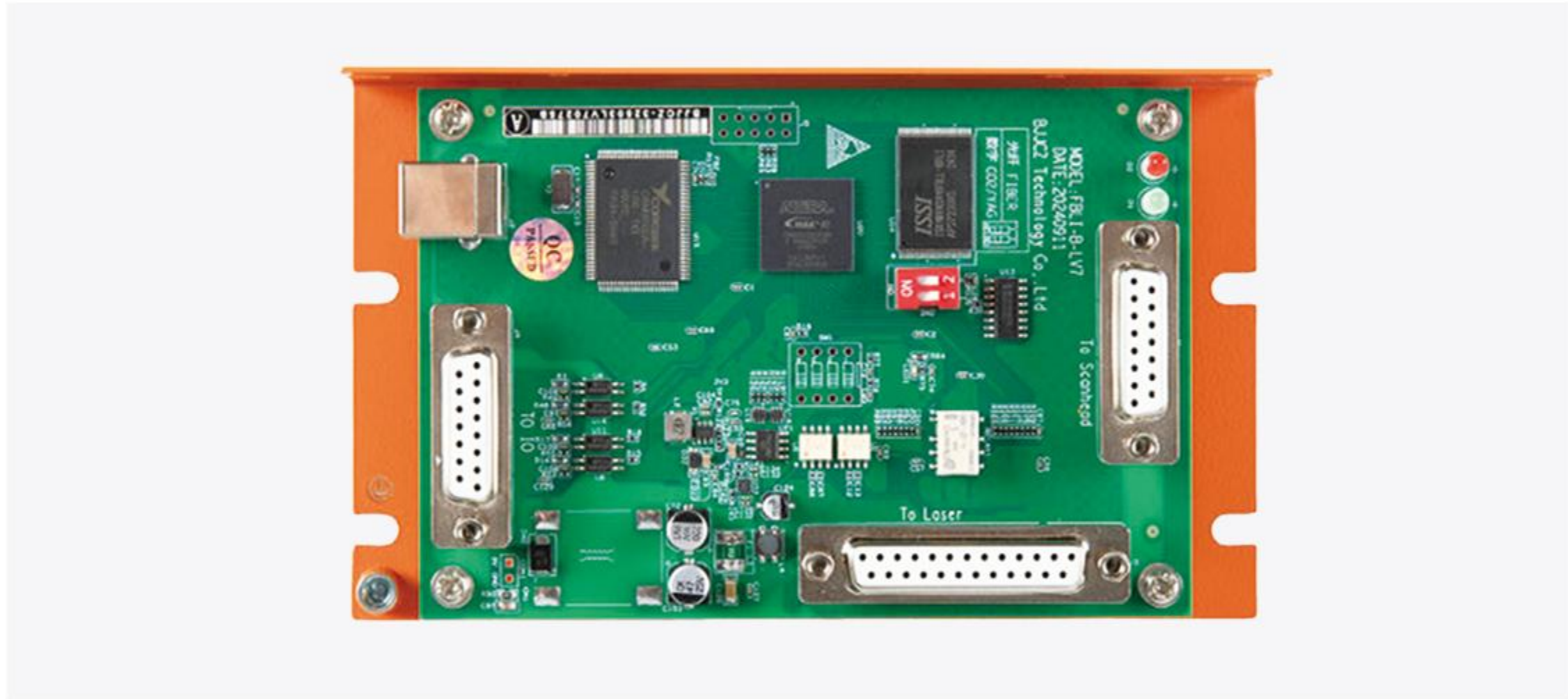


Comparison Table Of Field Lens Optional Range

Focal Length	F=163mm (Standard)	F=210mm	F=254mm
Scanning Range	110*110mm	150*150mm	175*175mm
Working Range	176.94mm	228.63mm	271.98mm

Control Card

JCZ Upgraded LV7 Control Card, compatible with multiple laser types and extended axis modes. Has strong anti-interference ability and can achieve precise marking control.

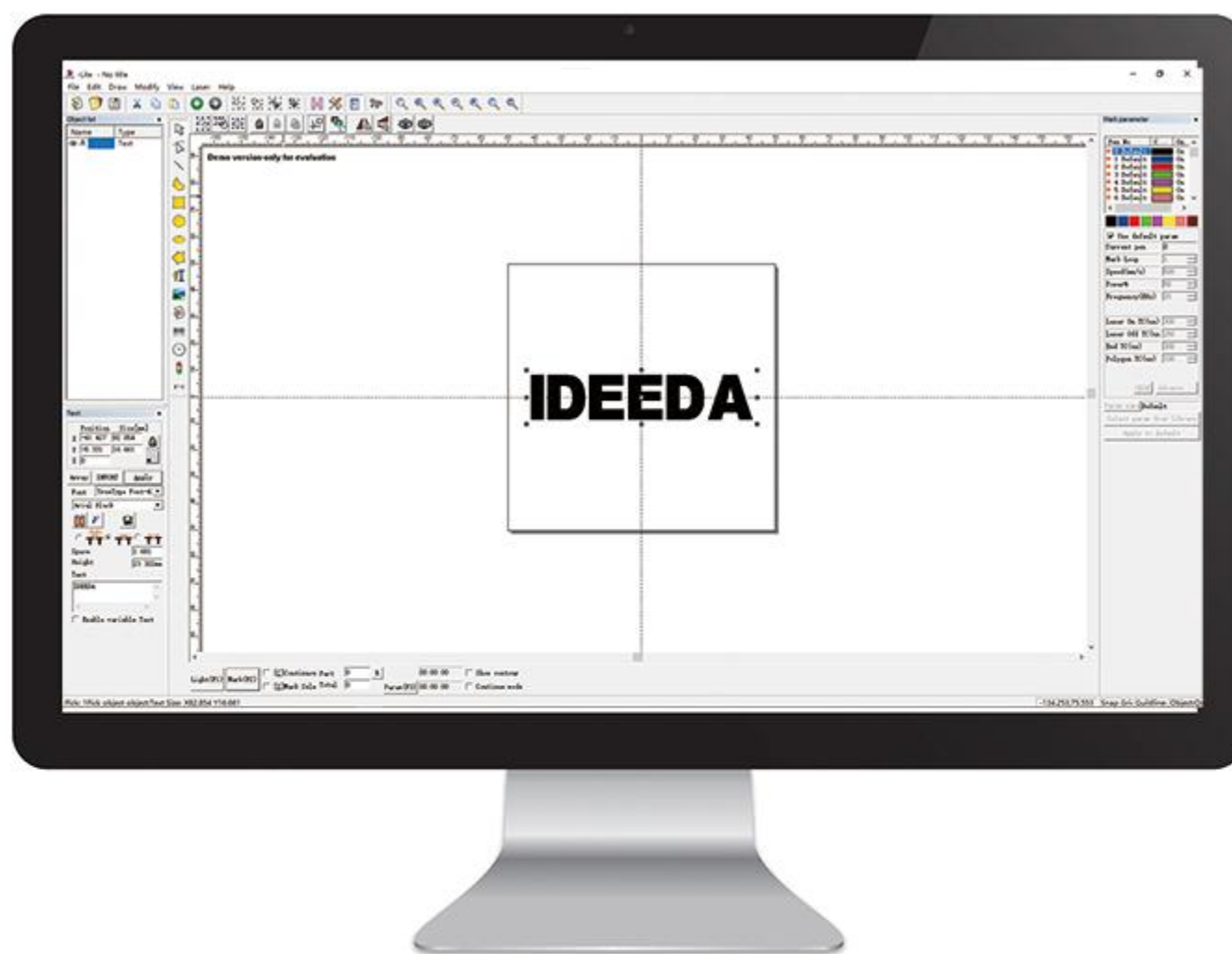


Ezcad2 (Compatible with LightBurn)

It adopts the Ezcad2 professional marking software, which is easy to operate and get started with.

Supports Windows system, compatible with LightBurn; Software support PLT/DXF/AI/SVG/JPG, GIF, BMP etc. file format;

Software supports text, characters, images, vector graphics, barcodes, QR codes and other contents, as well as regular code skipping contents such as serial numbers, dates and batch numbers.



B:76015 REG NO.255
BEST BEFORE:05/23/2025
MEG: 10/03/2022



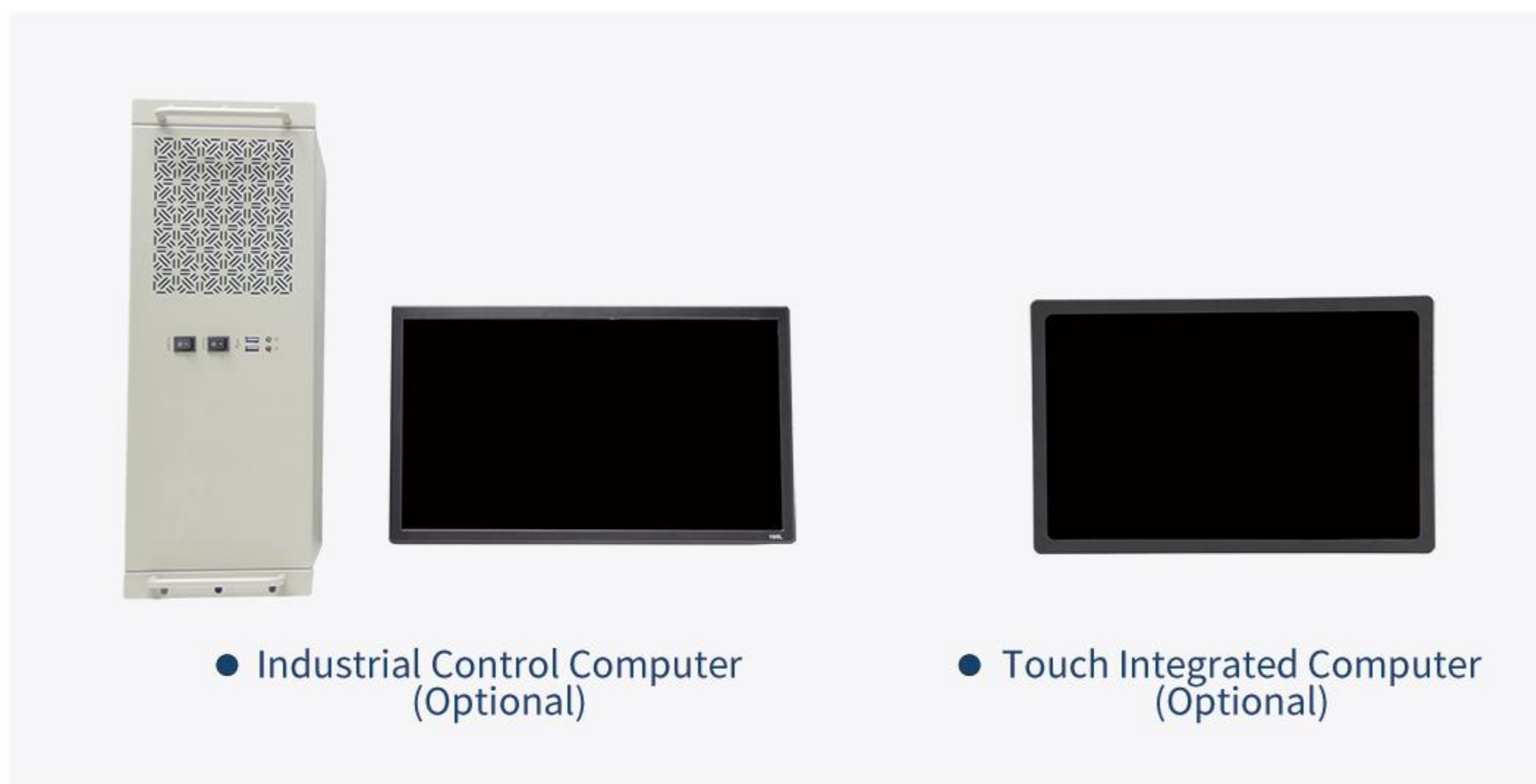
Conlumn

With a 500mm itinerary column, other specifications of columns such as 800mm itinerary and electric can be selected according to the marking range and workpiece size requirements.



Computer

Optional industrial control computer, touch integrated computer, built-in Windows system, compatible with rich, support a variety of software, can be connected to a variety of expansion.



Accessories

Standard Accessories



Protective glasses



USB flash drive



Calibration paper



Focusing film



Foot switch



Ruler



Hexagonal wrench



Positioning bar



Data line



Power cord

Optional Accessories



Rotating table



Chuck rotating fixture



Elastic rotating fixture



Roller rotating fixture