

UV-Cabinet

Laser Marking Machine

DLM-UC

Laser Power:

5W / 10W / 15W / 20W (Optional)

Marking Range:

110*110 / 150*150 / 175*175 /
220*220 / 300*300mm (Optional)



Machine Introduce

DLM-UC UV cabinet-type laser marking machine features a large worktable, strong expandability, and wide adaptability. It is widely used in various production needs such as factory processing and large-scale marking.

High beam quality: UV laser belongs to cold light source, with low heat during laser operation and minimal damage to material surface. It can be used for ultra fine and special material marking.

High precise: UV laser has the characteristics of small spot size and concentrated beam quality, which can achieve higher resolution and finer marking effects.

High speed: The UV laser marking machine has a high marking speed and is suitable for mass production.

Common Material Range:

UV laser has a short wavelength and can be absorbed and reacted by various common materials.

Commonly used in various materials such as plastic, glass, metal, silicone, wood, bamboo, paper, film, ceramics, leather, acrylic, as well as DIY applications such as leaves and food surfaces.

Application areas:

Widely used in precision instruments, medical equipment, electronic components, integrated circuits, various packaging materials, flexible PCB boards, silicon wafer micro hole and blind hole processing, as well as glass and metal coating marking.

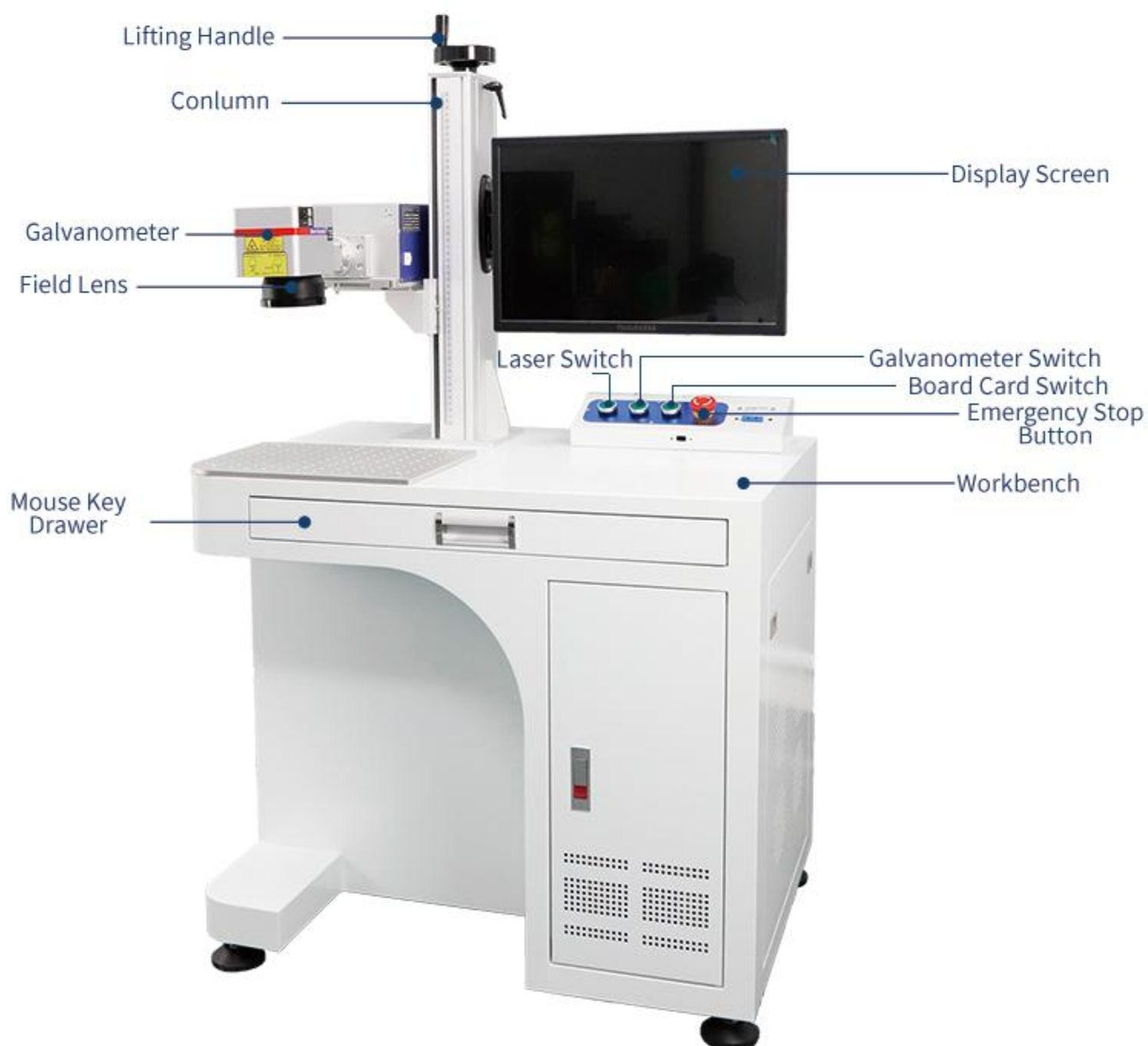
Machine Size



Machine Front



Machine Side



Component Introduction

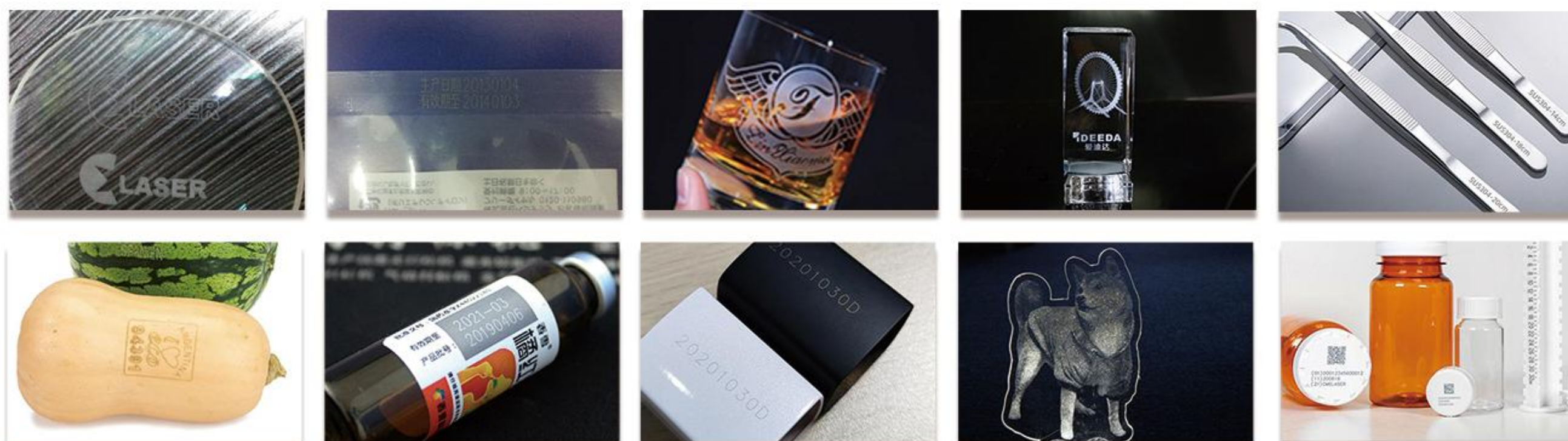


	Machine	Chiller
Size	600*800*1390mm	580*290*520mm
Weight	70kg	20kg
Packing Size	760*960*1200mm	650*360*560mm
Packing Weight	108kg	22kg

Parameter Information

Model	DLM-UC					
Laser Parameter	Laser wavelength	355nm				
	Output power	5W	10W	15W	20W	
	Repetition frequency	20~100kHz			40~300kHz	
	Pulse width range	15~25ns @ 30Hz （View brand）				
	Q Pulse width	1~33ns				
Galvanometer	Marking speed	7000mm/s				
	Marking depth	≤0.1mm （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	F=330mm	F=420mm
	Marking range	110*110mm	150*150mm	175*175mm	220*220mm	300*300mm
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 / Water cooling				Water cooling
	Power supply	110V-220V 50HZ-60HZ				
	Power consumption	≤0.65kW·h				

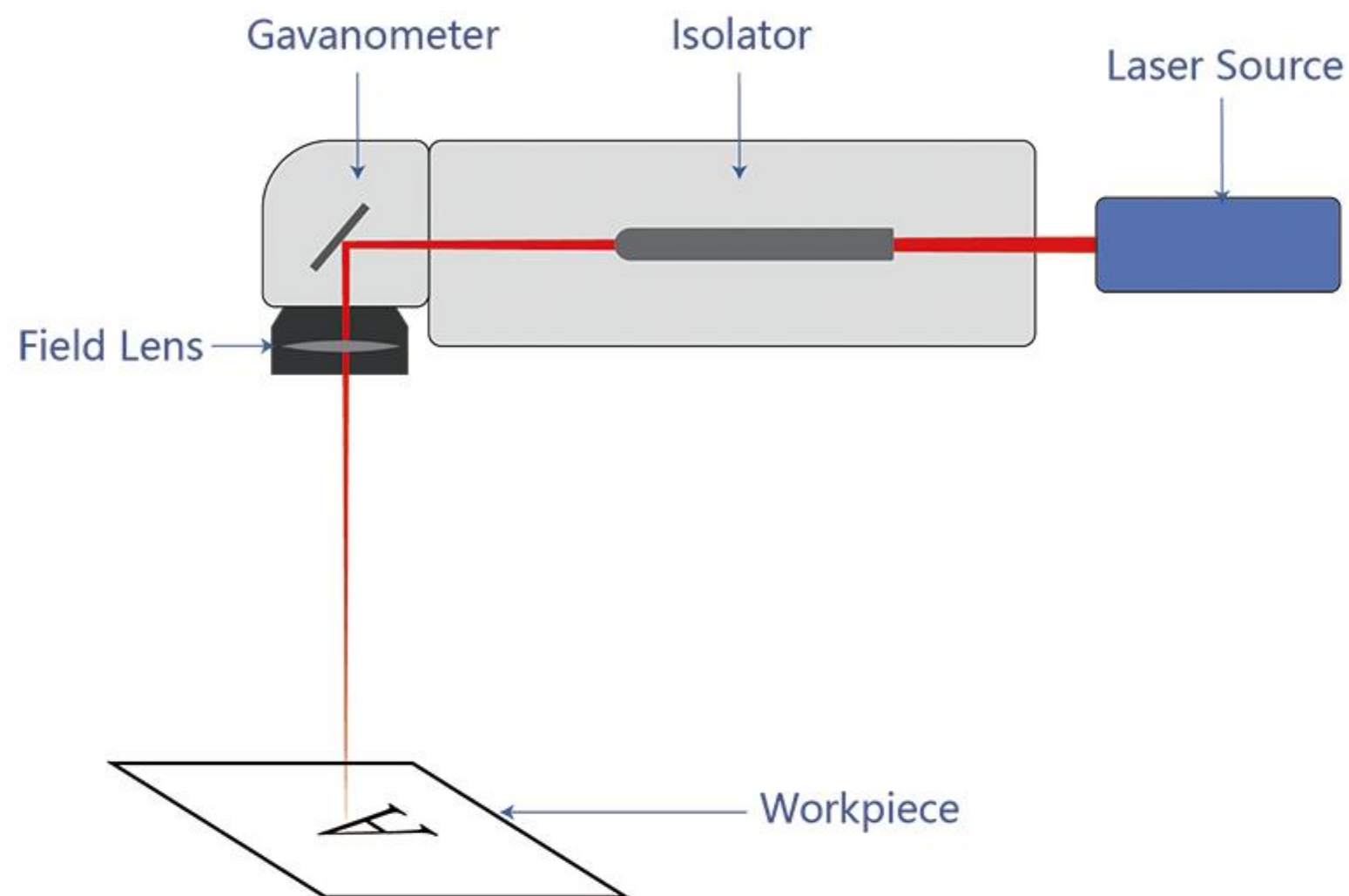
Sample



Core Component

Laser Source

The UV laser marking machine uses a 355nm UV laser to generate a laser beam of a certain wavelength. The laser beam is then focused on the surface of the workpiece through galvanometer scanning system, causing physical or chemical changes in the material and resulting in permanent marking. Meanwhile, UV laser can perform ultra fine marking due to its extremely small focused spot and minimal thermal impact during processing.



Common Brand



● JPT Laser



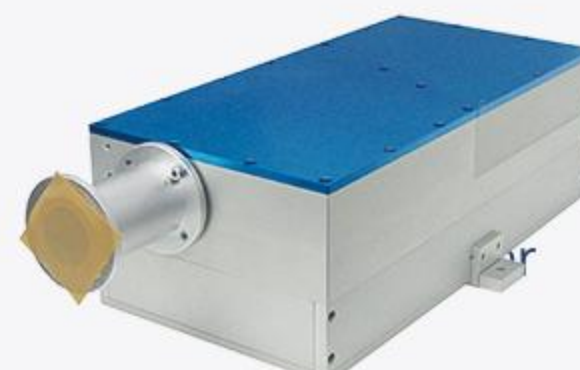
● Gainlaser



● HAN'S Laser



● RFH Laser



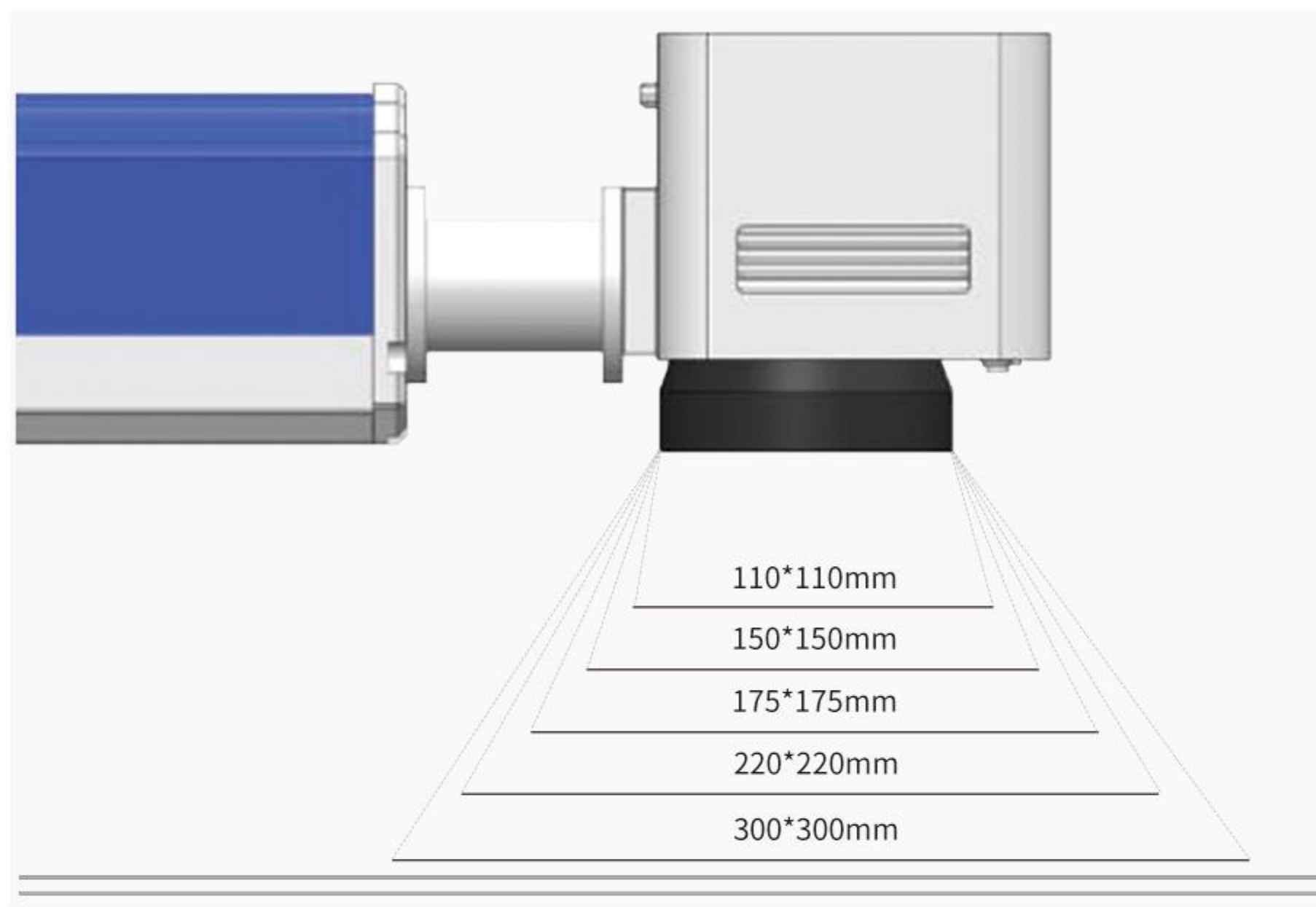
Galvanometer

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.



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.

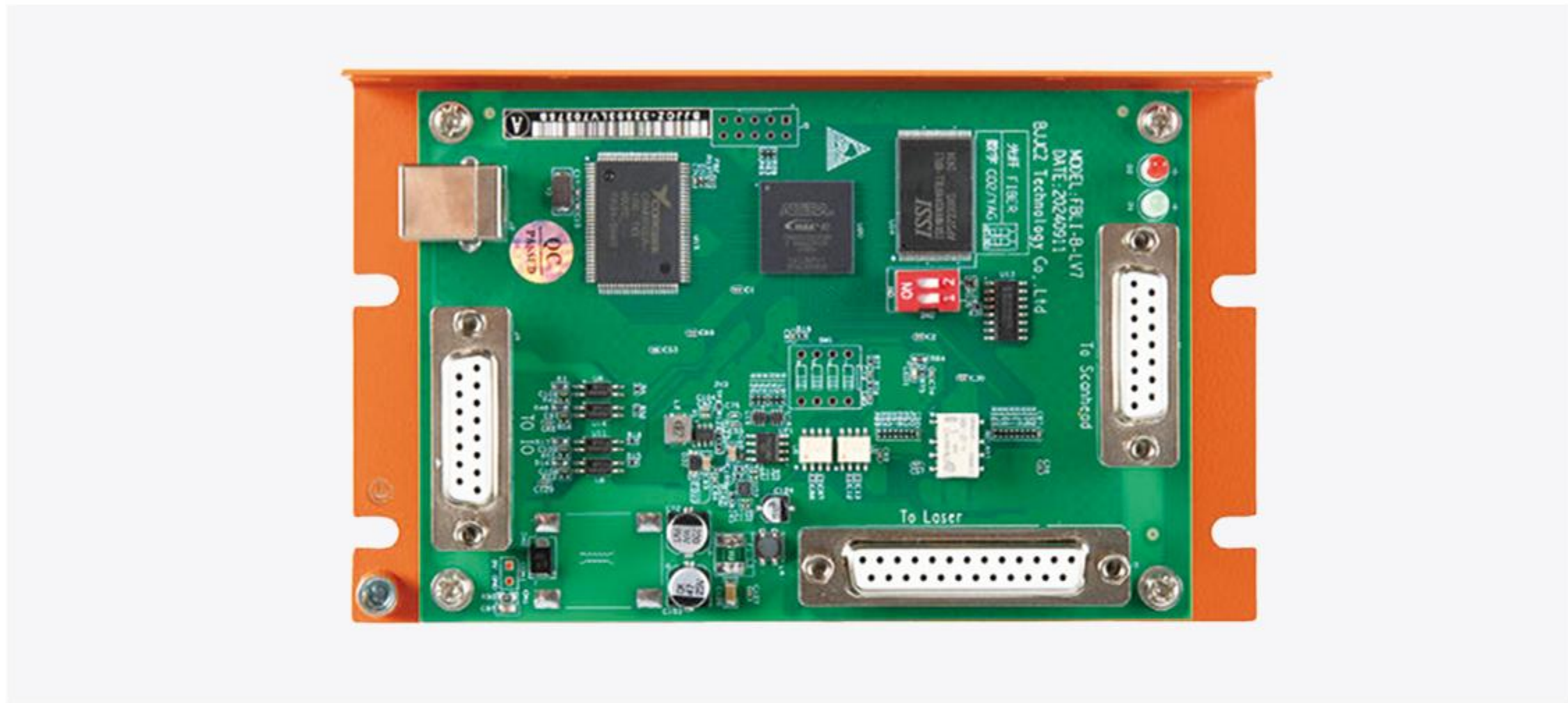


Comparison Table Of Field Lens Optional Range

Focal Length	F=163mm (Standard)	F=210mm	F=254mm	F=330mm	F=420mm
Scanning Range	110*110mm	150*150mm	175*175mm	220*220mm	300*300mm
Working Range	176.94mm	228.63mm	271.98mm	352.47mm	438mm

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.

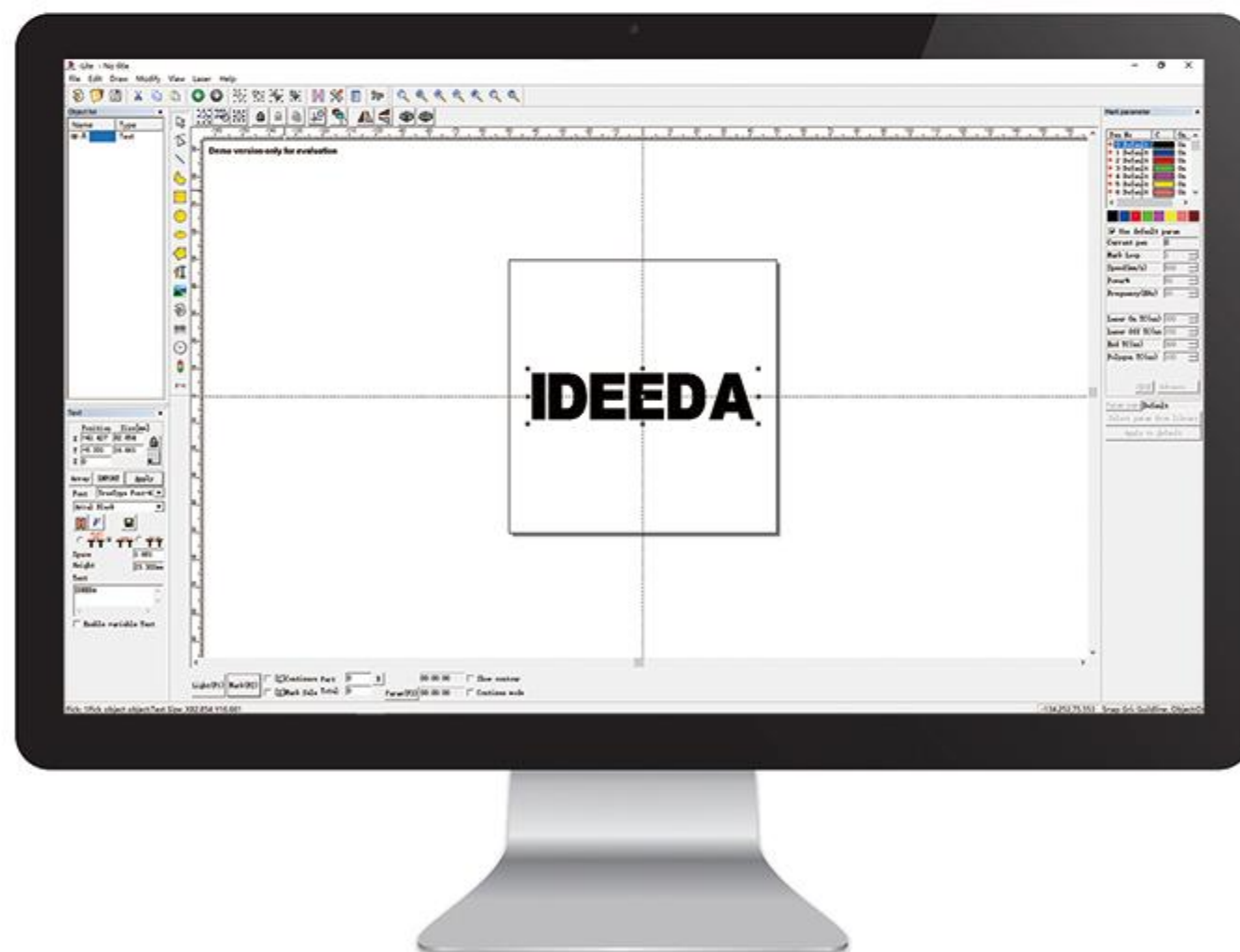


Ezcad2 (Compatible with LightBurn)

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.



Chiller

The intelligent chiller ensures the laser output power and beam quality through its precise temperature control and complete self-protection function, thereby extending the lifespan of the laser. In batch marking production, enhance the consistency of product processing and the yield of qualified products. Meanwhile, its automatic alarm function ensures the safe operation of the equipment and prevents sudden malfunctions caused by overheating during operation.



Accessories

Standard Accessories



Protective glasses



USB flash drive



Calibration paper



Focusing film



Foot switch



Ruler



Hexagonal wrench



Positioning bar



Data line



Power cord

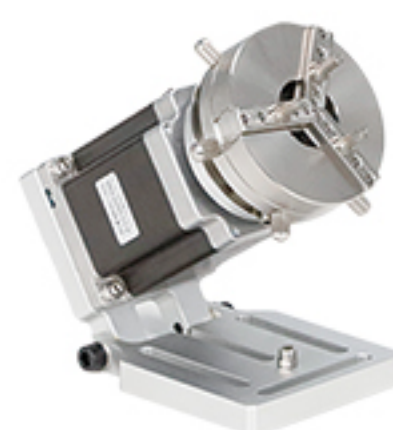
Optional Accessories



Lifting platform



Chuck rotating fixture



Elastic rotating fixture



Roller rotating fixture



Rotating disk



Fixed fixture



XY Moving axis



3D Galvanometer



Assembly line



Vision CCD

Other Type



Size	650*800*1640mm
Weight	81.4kg



Size	680*780*1640mm
Weight	80kg



Size	650*800*1640mm
Weight	81.4kg