



Laser Marking



Laser Engraving



Laser Cleaning

### Damage-Free

### Small Spot Diameter

MCUA series uses ultraviolet light of 355 nm wavelength to mark materials, the 355 nm beam breaks down bonds directly using a photolytic degradation process, it is known as “cold marking” because it does not burn surface areas and uses minimal heat stress. MCUA is easy marking on sensitive materials like plastics, glass, resin and very thin metal.



Minimal-Maintenance



High-contrast



Damage-free



## UV Laser Marking Machine

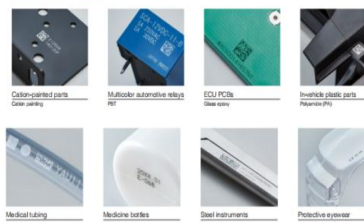
- ✓ The MCUA series is used in a wide variety of applications and sector, such as product identification, traceability in industry, marking tools, and engraving plates with characteristics.
- ✓ The high-energy photons generated by the UV laser enable photovoltaic degradation, a process that directly breaks molecular bonds. This allows for marking and processing without applying heat to the surface, thereby minimizing damage and making it suitable for sensitive materials.
- ✓ The MCUA series UV laser marking machine will open up a world of possibilities for customizing paper and cardboard, paper products are extremely versatile. special events like weddings, baby showers, and engagement parties often require personalized paper products like invitations.

### Traceability, Personality & Branding for industrial application

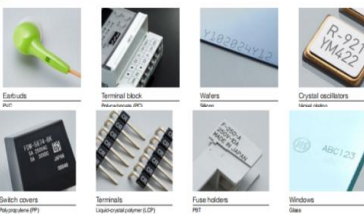
#### Marking Material

Resin	EP (epoxy resin)	Metal	SUS (stainless steel)
	ABS (ABS resin)		Fe (iron)
	PBT		Al (aluminum)
	PA		Ni (nickel)
	PC (polycarbonate)		Cu (copper)
	PP (polypropylene)		Au (gold)
	PE (polyethylene)	Others	Ceramic
	PET		Si (silicon)
	PPS		Paper
	PS (polystyrene)		Rubber
	PI (polyimide)		Glass
	PVC (polyvinyl chloride)		Glass epoxy

#### Automotive Industry



#### Electronics Industry



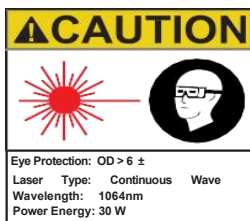
The MCUA series, classified as Class IV laser equipment, is designed with enhanced safety features to ensure secure and efficient operation across various industries and work environments. Given the high power and potential risks associated with Class IV lasers, MRodin strongly recommends using laser protective goggles, covers, and safety enclosures to maintain a high level of user safety. These precautions help minimize exposure to hazardous laser radiation, preventing accidents and ensuring compliance with safety standards in the workplace..

## SPECIFICATION

MRodin model	MCUA10005	MCUA10010
Laser source wattage	5W	10W
Machine power	500 Watt	800 Watt
Laser wavelength	355 nM	355 nM
Beam quality	$M^2 < 1.2$	$M^2 < 1.2$
Pulse width	$< 15\text{ns}@40\text{kHz}$	$< 15\text{ns}@40\text{kHz}$
Max. pulse energy	0.17mJ-30KHz	0.3mJ-30KHz
Beam-pointing Stability	$> 90\%$	$> 90\%$
Operating voltage	110V- 240V/50-60Hz/15A	110V- 240V/50-60Hz/15A
Marking speed	6000-8000 mm/s	7000-9000 mm/s
Marking area	110*110 standard 170*170/200*200 optional	
Focusing method	Double red-light manual focus	
Cooling	External water cooling	
Ambient temperature	15-30°C	
Ambient humidity	20-80 non-condensing	
Software	RodinCAD 16 multilingual & Lightburn is optional	
Electrical parameters	110V/220V Single-phase 50Hz	
Machine size	L 640*H1220*W800 mm	
Package & N/G weight	Wooden case 1300*750*900 mm About 125/130 kgs	



RodinCAD uses DSP (Digital Signal Processor) and support formats is compatible with PLT, DXF, BMP, AI, and SVG files which Includes marking design software, which offers 2D & 3D engraving, QR codes, serial numbers, bar codes and images.



Safety Guidelines for Operation:  
The 355 nm wavelength laser light emitted by this laser system is invisible and poses potential harm to the human eye. It is imperative to always wear appropriate laser safety eyewear during operation.



Additional requirements not covered in this listing can be provided upon request. For guidance in identifying the optimal capabilities to meet your specific needs, please reach out to MRodin Laser Machinery S.L. or visit our website at [www.mrodin.es](http://www.mrodin.es).

