

SR & AL Series CO2 Laser Marking Systems

Laser marking methods offer several advantages when compared to traditional marking and labelling practices. A list of typical advantages might include ability to produce high-quality permanent and contamination-free marks, no character distortion since the method is non-contact, easily automated and integrated into manufacturing systems, and can have high speeds and throughputs. The flexibility of laser marking often helps improve the product quality, traceability, process control, and customer satisfaction. Laser marking systems are often more economical, especially when applied to high production line applications. Smart CO2 lasers and high-speed optical galvanometers are from USA. Our own powerful laser marking software is developed by our engineers. These laser marking systems are being widely used in laser marking of hard, fragile, cylindrical or soft products or materials in production lines.



M-SR-10



M-SR-50

Model	M-AL-12	M-SR-10	M-SR-25	M-SR-50	M-SR-100
Laser Head					
Laser tube model	AL-12	SR-10	SR-25	SR-50	SR-100
Laser wavelength (um)	10.6	10.6	10.6	10.6	10.6
Laser power (W)	12	±10	25	50	100
Power stability (%)	±10	±5	±5	±5	±6
Laser beam quality (M ²)	<1.1	<1.2	<1.2	<1.2	<1.2
Beam mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	95%, TEM ₀₀
Beam diameter (mm)	2.2	3.5	3.5	3.5	3.5
Beam divergence (mrad)	5.5	4	4	4	4
Polarisation	Linear	Linear	Linear	Linear	Linear
Max. beam pulse (kHz)	10	10	10	10	10
Cooling method	Air	Air	Air	Water	Water
Marking Head					
Scanner	High-speed optical galvanometers				
Marking field (mmxmm)	50x50, 70x70, 105x105, 140x140, 210x210, 255x255 (marking field up to 600x600mm or above available with a XY stage)				
Marking speed	300 characters/second or 10m/s				
Marking line (mm)	Min. 0.05				
Marking software					
Various fonts, pictures (PLT, DXF, BMP), automated series numbers, barcodes, DataMatrix					
Dimension (LxWxH, cm)	Laser head: 80x14x13 Control: 46x41x8	82x14x17	120x14x17	Laser head: 103x20x18 Mark head: 23x20x13 Control: 70x70x96	

Typical Applications:

1. Laser marking of non-metal materials and products: acrylic, ceramics, plastics, organics, wood, thermo-elastomer rubbers, paper
2. Electronic industry: capacitor, inductor, PCB, IC, connector, control panel, instrument
3. Others: button, cosmetics, food package, bottle, gift, advertisement & sign crafts, craft & gift making

Other CO2 lasers & customised laser marking systems available upon request.