



Quality of Excellence, presented by Sintec Optronics

CO2 Laser Marking Systems

Laser marking methods offer several advantages when compared to traditional marking and labeling 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.



Applications:

1. Laser marking of non-metal materials and products: acrylic, ceramics, plastics, polycarbonate, organics, wood, thermo-elastomeric 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

Model	M-SR-10	M-SR-25	M-SR-30	M-SR-50	M-SR-100
Laser tube model	CO2-SR-10	CO2-SR-25	CO2-SR-30	CO2-SR-50	CO2-SR-100
Laser wavelength (um)	10.6	10.6	10.6	10.6	10.6
Laser power (W)	10	25	30	50	100
Power stability (%)	±5	±5	±10	±5	±6
Laser beam quality (M2)	<1.2	<1.2	<1.2	<1.2	<1.2
Beam mode	TEM00	TEM00	TEM00	TEM00	95%, TEM00
Beam diameter (mm)	3.5	3.5	3.5	3.5	3.5
Beam divergence (mrad)	4	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
Scanner	High-speed optical galvanometers				
Marking field (mmxmm)	50x50, 70x70, 105x105, 140x140, 210x210, 255x255 or others				
Scanning 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				
Required Power Input	220VAC, 50Hz				





Samples done:





Laser Diode/Bar Testing Equipment

We are manufacturing top notch turn-key quality assurance systems for Laser diode/ LED manufacturing industry and Research Institutes, ranging from manual lab instruments to fully automated high volume testers (ATE). Traditionally carried out manually, we will offer a total solution.

Model	Far Field Profilometer Instrument	Automated Laser Diode/Bar Characterization Testing Systems	Laser & Laser diode Burn-in and Life-time testers	Visual Inspection System
System image				
Features	<ul style="list-style-type: none"> ->Wavelength 400-1700 nm ->Input power up to 100W CW ->Max scan angle $\pm 90^\circ$ ->High resolution 0.03° ->High dynamic range of >60 dB ->Noise free ->USB connection ->Advanced plotting ->Tabular data display ->Export data ->Fixtures available ->Maintenance free 	<ul style="list-style-type: none"> ->Fully configurable ->All-in-one characterization Industrial and R&D ->Datasheet generation ->Failure analysis ->Research activities ->Customizable tool ->UV-LEDs compatible ->High power ->Camera assisted 	<ul style="list-style-type: none"> ->Simultaneous laser diode characterization ->Data sheet generation ->Laser bar optical power measurement ->Robust design ->Cost effective solution 	<ul style="list-style-type: none"> ->ST-VIS replaces operator in labour intensive facet inspection and provides key advantages ->Defects are found every day – every hour. ->System does not have bad days and it does not get tired. ->Simultaneous near field inspection provides enhanced way to find faulty devices ->All results are systematically logged and easily accessible afterwards.
Application	<ul style="list-style-type: none"> ->Light intensity vs output angle analysis ->NA characterization of optical components ->Designed for high power laser diodes ->Automated laser diode quality assurance ->Suitable for LED, laser diode, laser bar and fibers 	<ul style="list-style-type: none"> ->UV-LEDs measurement ->Laser diode measurement ->High power laser bar measurement 	<ul style="list-style-type: none"> ->Laser diode manufacturing ->High power laser diode burn-in testing ->High power laser diode quality assurance 	<ul style="list-style-type: none"> ->Facet and Near-Field inspection ->Overhang measurement ->Smile measurement

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