

Solaris e-SolarMark

The perfect steered-beam CO₂ laser coder for high quality, real-time coding



LASER
MARKING



High Quality Marking

- The e-SolarMark provides excellent product traceability by delivering high quality, permanent and flexible marking of alphanumeric text, dates, serial numbers, barcodes, 2D codes and graphics.

Extreme Performance

- Highly versatile, capable of marking a wide variety of substrates, including: paper, cardboard, foils, coated metals, plastics, wood, glass and many more.
- High performance marking on either moving or stationary products.
- Perfect for marking products at demanding line speeds.
- Large storage capacity, up to 3,000 (10KB average size) messages can be held in the memory.
- Internal software on real time operating system.
- Easy connection to any network.

Easy Integration

- The e-SolarMark has an intuitive operating system which operates without a dedicated P.C.
- Online data exchange via network (LAN Ethernet) and serial (RS232)
- Flexible 90° bending modules allows for marking in any orientation.
- Compact design-fits easily into restricted production spaces.
- User friendly and simple to operate.
- A wide variety of options means the e-SolarMark can be customised to suit any application.
- Three levels of password protection provide exceptional security.
- Total package weighs 23kg (8kg control unit and 15kg marking head) making it easy to install and shift from line to line.

Robustness and Low Cost of Ownership

- Nil consumable costs (no inks or solvents as typically required by other technologies).
- Low operation cost.
- No maintenance.
- Shock and temperature tested..

*The e-SolarMark YAG laser

Available for special applications including high contrast permanent codes and images on difficult to mark materials such as metals and plastics.



code



check



capture



care 24x7

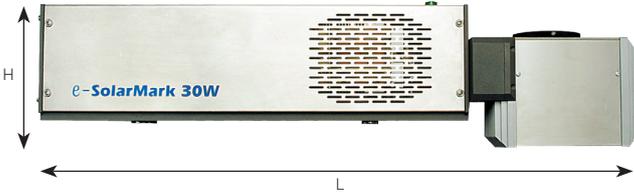
Technical Specifications Solaris e-SolarMark



LASER MARKING

Controllers

Side Elevation



Top Elevation



Marking Head

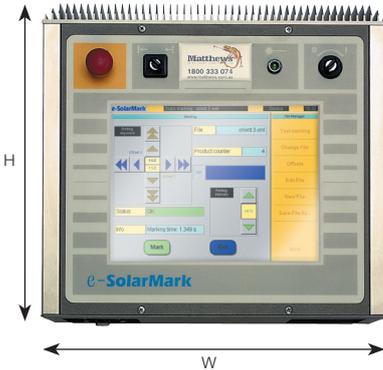
	L	H	D
5W	635	150	150
10W	826	150	150
30W	766	150	150
55W	849	133	133

*Including clearance

Back Elevation



Front Elevation



Side Elevation



Bottom Elevation



Invisible laser Radiation
Avoid Skin or eye exposure to direct or scattered radiation.

CO₂ laser
10,600 nm,
150 W Max
Class IV Laser Product



Controllers

	W	H	D
Touch Screen	355	327	183
Alphanumeric Keyboard Controller	350	327	150
Simple Controller	350	327	150
HD Control cabinet	500	500	210



code



check



capture



care 24x7

Performance	
Laser type	Sealed CO ₂ laser (tube life average 30,000hr)
Laser power	5w, 10w, 30w, +55w
Marking speed	1000 characters/sec, Character height 2mm, lens and Material Dependant
Marking on the fly & stationary	•

Performance			
	Touch Screen	Alphanumeric keyboard Controller	Simple Controller
Integral keypad	•	•	
High Brightness back lit LCD	•	•	•
Choice of operator languages	•	•	•
3 levels of password protection	•	•	•
WYSIWYG message display	•		

Programming & printing facilities	
Bar codes	•
2D codes	•
Logos	•
Graphics	•
Vertical / horizontal & circular printing	•
Upper and lower case characters	•
Sequential numbering	•
Shift codes	•
Batch coding & counting	•
Automatic date & time forward function	•
Variable date formats	•
Shot count	•

Connections/interfacing	
Shaft encoder	•
Product detector	•
Alarm outputs	•
RS232	•
Ethernet	•
Wireless IrDA	•
Remote stop start	•
System interlocks	•
Voltage free alarm connection	•

Physical characteristics	
Environmental protection rating	IP 52 +IP65
Wall mounting	•
Air cooled	•
Operating temperture	5-45°C
Humidity range (relative humidity, non condensing)	10-95%*
Weight: control unit/markng head	8kg/15kg
Electrical requirements	240V, 50Hz, 1pH

Safety	
Emission indicators	•
Master key control	•
Safety shutter	•
Safety shutdown	•
Interlock outputs	•

Options	
Scanning head extension modules	o
Beam bending modules	o
Mounting stands	o
Guarding to comply with AS/NZ 2211	o
Conduit length to 15m	o
Dust & fume extraction	o
Product detector	o
Encoder	o
Customised software on request	o
Water chiller	o
Increment decrement shot count (batch count)	o

Regulatory approvals	
• CE • CDRH	

Marking specs.					
Lens Type	LF2	LF3	LF4	LF5	LF6
Marking field (mm)	50 x 50	80 x 50	100 x 100	120 x 120	200 x 200
Minimum line width (mm)	0.10	0.15	0.18	0.21	0.35
Resolution (mm)	0.012	0.019	0.024	0.029	0.048
Working Distance (mm)	104	127	183	213	389

Key: • standard o option