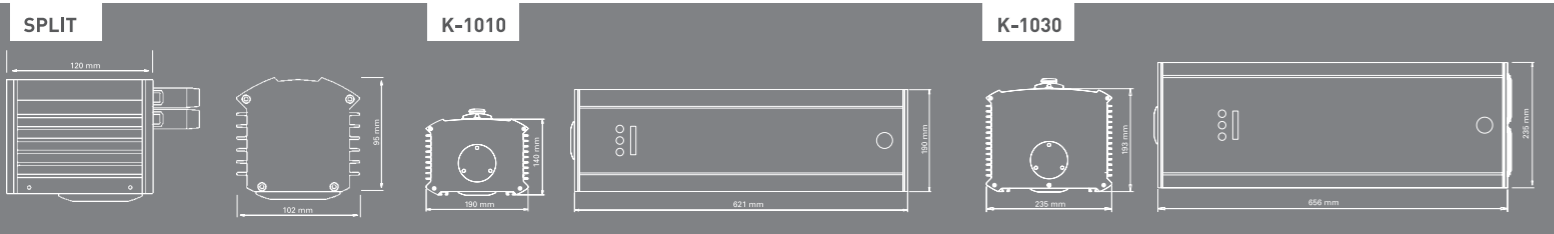


SERIE **K-1000** CO₂ - AIR COOLED



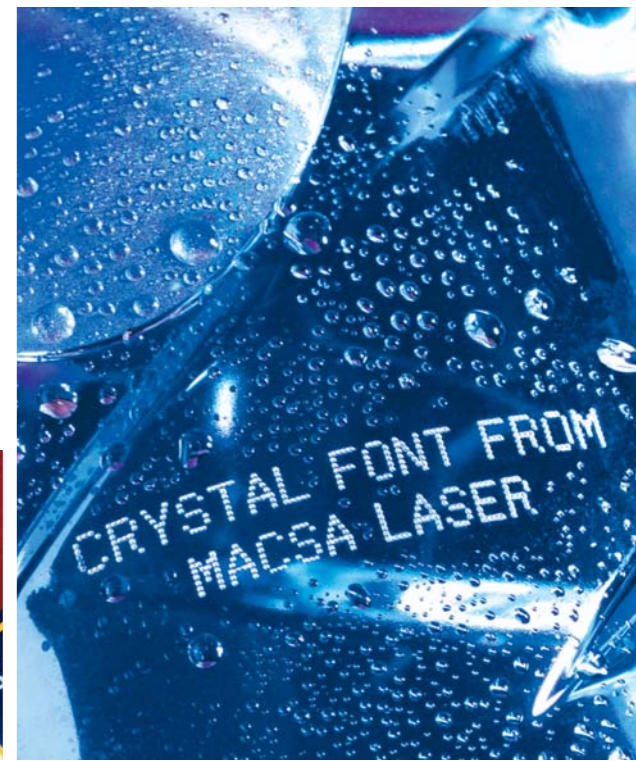
MODEL				KS-1010 SP KS-1010 PLUS	K-1030 SP K-1030 PLUS
NOMINAL POWER				10W	30W
WAVELENGTH				9,3µ10,6µ	9,3µ10,6µ
MAINS SUPPLY				125V / 230V 50 / 60 Hz 1 Phase + N 330 VA	125V / 230V 50 / 60 Hz 1 Phase + N 660 VA
MARKING HEAD	KS-1000 - 9,3 µm: CO ₂ sealed laser tube / R.F. technology / Wavelength: 9,3 microns K-1000 - 10,6 µm: CO ₂ sealed laser tube / R.F. technology / Wavelength: 10,6 microns				
SYSTEM CABINET	Laser, Control Electronics, computer and Scanners built into the laser system				
FOCAL SPECIFICATIONS	WORKING DISTANCE	FOCAL DISTANCE	MARKING AREA	BEAM DIAMETER PLUS	SP
	85 mm	95 mm	60x60 mm	<160 µm OPT	<310 µm STD
	115 mm	125 mm	75x75 mm	<220 µm STD	<790 µm OPT
	190 mm	200 mm	100 mm	<350 µm OPT	-
	320 mm	240 mm	150 mm	<420 µm OPT	-
	310 mm	320 mm	200 mm	<560 µm OPT	-
	400 mm	410 mm	250 mm	<720 µm OPT	-
	µm = microns / STD: Standard / OPT: Optional / Built in 90º marking as standard (easily convertible in 0º marking).				
	USER INTERFACE				• Hand Held Terminal / Touch Screen / PC
CONTROL BY				• Hand Held Terminal with ScanLinux software • Touch Sreen with ScanLinux software • Full Graphics Interface: includes Marca™ software, protection key and Ethernet cable (TCP/IP) • Marca Lite: includes Marca Lite™ software, protection key and Ethernet cable • (TCP/IP)	• Hand Held Terminal with ScanLinux software • Touch Sreen with ScanLinux software • Fonts: - Crystal Font 7x5 - Newpal - Crystal Font 5x5 - Newpal 2
SOFTWARE				PLUS • ScanLINUX from V. 1.8b • Marca Software from V.4.9 • Marca Lite Software • 21 CFR Part 11 Software	SP • ScanLINUX
SPEED	SCANNERS SPEED	MARKING TYPE	CHARACTERS PER SECOND		
	1500 mm/s	Static	231 c/s		
		Dynamic	207 c/s		
	2500 mm/s	Static	297 c/s		
		Dynamic	255 c/s		
	3500 mm/s	Static	333 c/s		
		Dynamic	300 c/s		
	8000 mm/s	Static	640 c/s		
		Dynamic	600 c/s		
	mm/s: millimetres per second · c/s: characters per second · Speeds calculated with 2 text lines of 7 characters + 8 characters of 2.5 mm of height.				
Example 1: Dynamic marking with K-1030 PLUS with 100x100 lens. / Aprox. speed of 71m/min, which means at least 35,000 bottles per hour.					
Example 2: Dynamic marking with K-1060 PLUS with 60x60 lens. / Aprox. results: Crystal Font 5*5 with Line Speed of 71m/min: at least 75,000 bottles/hour. / Aprox. results: Vector Font: with Line Speed of 71m/min: at least 90,000 bottles/hour.					
ACCESORIES	Diode marking area indicator / Encoder kit / Mounting support / Photocell kit				
ENVIRONMENTAL CONDITIONS	10°C (50°F) to 35°C (95°F) external temperature / Humidity <95% non-condensating / No vibrations				
WEIGHT				Net Weight: 19 kg Gross Weight: 24 Kg	Net Weight: 32 kg Gross Weight: 40 Kg

LASER MARKING & CODING SYSTEM
macsa

K-1000
LASER SYSTEM



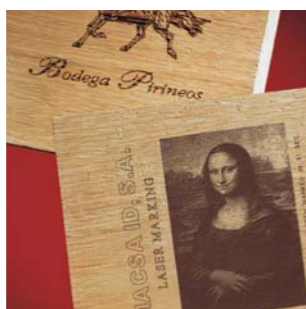
THE MACSA K-1000 SERIES IS THE
SOLUTION FOR MARKING YOUR PRODUCTS
WITH INCREDIBLY CLEAR MESSAGES AT
MINIMAL OPERATIONAL COSTS.



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FROM EVOLUTION TO INNOVATION



THE MACSA K-1000 SERIES IS THE SOLUTION FOR MARKING YOUR PRODUCTS WITH INCREDIBLY CLEAR MESSAGES AT MINIMAL OPERATIONAL COSTS.



Split head option for difficult access.

THE INCREDIBLY COMPACT DESIGN along with an adjustable marking head ensures that you can install this system on even the most complicated production lines. The system can even be integrated with other manufacturer's equipment.

THIS EASY TO USE SYSTEM works through a combination of extremely fast mirror tracking systems and the most modern software and hardware you can be assured of reliable high speed marking.

THE LATEST IN LASER TECHNOLOGY along with the fact that you don't need expensive replacements results in a system that requires little maintenance, minimal operational costs and no headaches.

THE MARKING PROCESS is unimpeded because you don't need an expensive and space consuming PC on the production line. Furthermore in Macsa lasers, with MACSA's software, you can link several K-1000 laser systems together for even greater control and increased production or to increase the graphic features of the K-1000 laser connecting a PC through the full graphic interface kit.

ALL OF THESE FEATURES ensures that everyone of your products is marked with the same high degree of quality and permanence guaranteeing accurate identification for the lifetime of your products.

A DIVERSE RANGE OF MATERIALS can be marked utilizing the K-1000 system including labels, cardboard, PET, glass, coating and wood.



USER INTERFACE FOR LASER SYSTEMS

HAND-HELD TERMINAL

Connection via RS-232 with ScanLINUX software included in laser marking system • creation and editing of text messages • able to create up to 4 lines of text • 4 types of MFF fonts • modify size (max. 20 mm) and separation between characters • modify message XY position • time marking in multiple formats • clock adjustment • laser system control parameters • sequential numbers • password protection system • for both static and dynamic applications.

TOUCH SCREEN

Connection via RS-232 with ScanLINUX software included on marking laser system • Handheld Terminal emulator • allows control of the laser marking system from a remote touch screen • easy integration • easy and safe operator access for changing messages and parameters on line • for both static and dynamic applications.

PERSONAL COMPUTER

Connection via TCP/IP (Marca Lite™) or Ethernet TCP/IP (Marca™) with ScanLINUX software included on marking laser system • compatible with all kinds of operating systems Windows NT/Me/2000/XP • able to control the laser marking system from a remote PC • quickly transfer of messages from PC to ScanLINUX • confers powerful graphics capabilities • quick and easy access to the editing and graphics capabilities • able to create messages in all of the marking area • for both static and dynamic applications.



SOFTWARE FOR LASER SYSTEMS

SCANLINUX™ V 3.3 INTERNAL SOFTWARE CONTROLLING THE LASER MARKING SYSTEM

ScanLINUX is the internal software running on LINUX managing the laser marking system • controlling laser beam position • calculating printer laser position • controlling angular position of scanner mirrors • calculating corrections for marking on the fly • controlling electronic scanning board input/outputs • ScanLINUX allows the operation of the Handheld, Touchscreen, Marca Lite™ and Marca™ software • ScanLINUX includes Crystal Font™ dot matrix fonts • ScanLINUX software provides the option of changing the menu language of the Handheld terminal. It also allows the user to see the number of marks made during a printing session without going out of the printing menu.

MARCA LITE™ V 5.3 SOFTWARE FOR NETWORKING, STATIC AND DYNAMIC APPLICATIONS VIA TCP/IP

Easily installed • Software compatible with Windows NT/2000/ XP for networking, static and dynamic supplied with protection key • networking capabilities of several laser dynamic application systems via TCP/IP • basic graphic interface able to built in text and graphic in all the marking area • create simple logos • capable of downloading MFF fonts and DXF vector files • selection of the user message via RS-232 • alarm control • messages activated by hourly, daily or monthly changes.

MARCA™ V 5.3 SOFTWARE FOR HIGH RESOLUTION & STATIC/DYNAMIC APPLICATIONS VIA ETHERNET TCP/IP

Easily installed • Software compatible with Windows NT/2000/XP for high resolution & Marca™ software supplied with protection key • controls laser systems via Ethernet static/dynamic applications TCP/IP • powerful WYSWYG design editor in all the marking area • zoom • unlimited layering • bar codes • 2D barcodes • MFF font editor • character filling features • capable of downloading BMP, JPG, GIF, TIF, PCX and other graphic files • capable of downloading DXF vector files with multiple import options • objects and characters morphing • ODBC (database) features • fill object features • true type text fonts • messages activated by hourly, daily or monthly changes • networking capabilities of several systems via Ethernet TCP/IP • access registration for all the users • creation of reports of the registered marking in the CPU laser memory • synchronization of PC and laser clocks • "auto text" external messages • aligns the selected objects • power, frequency, resolution and speed adjustments by software • allows to configure function keys • Unicode Enable.

