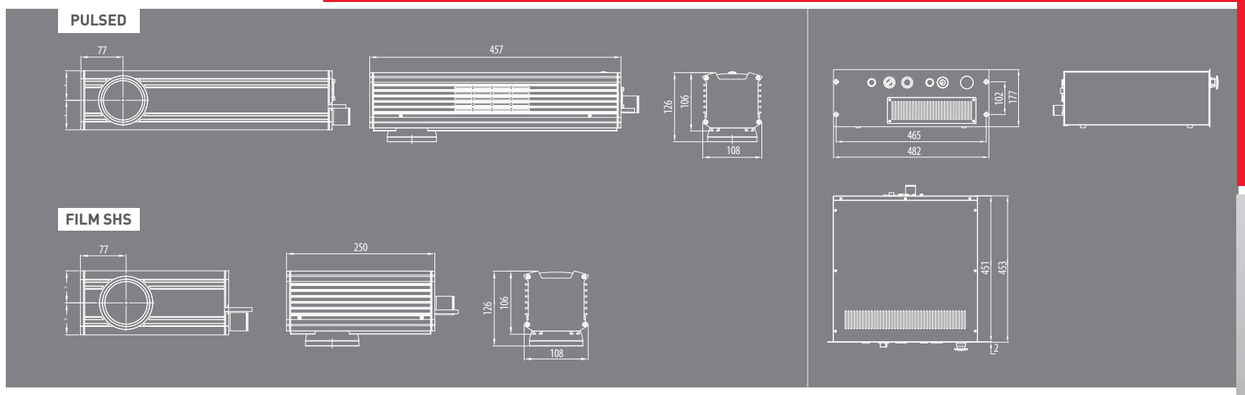
SERIE **F-9000** 10W/20W/50W - FIBRE - AIR COOLED- PULSED/FILM

LASER MARKING & CODING SYSTEM

macsa

F-9000
LASER SYSTEM

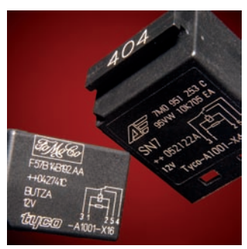


THIS VERSATILE FIBRE LASER SYSTEM ALLOWS MARKING A WIDE RANGE OF MATERIALS, FROM FLEXIBLE FOIL AND PLASTICS TO METAL.

MODEL	**F-9010 / F9020 / F9050 - PULSED**	**F-9010 FILM SHS / F-9020 FILM SHS / F-9050 FILM SHS**
NOMINAL POWER	10W – 20W - 50W (wavelength:1,06 microns)	10W – 20W – 50W (wavelength: 1.07 microns)
Q-SWITCH FRECUENCY	F-9010 / F-9020 / F-9050: 20 to 80 KHz	F-9000 FILM: CW
SYSTEM CABINET	**Series F-9000 PULSED** Laser, Scanners and Scanner boards built into the laser output head. Control electronics and power supplies built into the cabinet.	**Series F-9000 FILM** Laser and Scanners built into the laser output head. Control electronics, Scanner boards and power supplies built into the cabinet.
MAINS SUPPLY	F-9010: 115 / 230V AC–50/60Hz 1Phase + N – 400VA F-9020: 115 / 230V AC–50/60Hz 1Phase + N – 500VA F-9050: 115 / 230V AC–50/60Hz 1Phase + N – 700VA	F-9010 FILM: 115 / 230V AC–50/60Hz 1Phase + N – 350VA F-9020 FILM: 115 / 230V AC–50/60Hz 1Phase + N – 450VA F-9050 FILM: 115 / 230V AC–50/60Hz 1Phase + N – 650VA
MARKING HEAD	Fibre Laser. Marking area indicator (red diode) 635nm optional. Marking optimized beam quality.	Fibre Laser. Marking area indicator (red diode) 635nm optional. Marking optimized beam quality.
ACCESORIES	Mounting support Encoder and photocell kit	Mounting support Encoder and photocell kit
AMBIENT CONDITIONS	F-9010: 5ºC (41ºF) to 40ºC (104ºF) external temperature. F-9020: 5ºC (41ºF) to 36ºC (97ºF) external temperature. F-9050: 0ºC (32ºF) to 35ºC (95ºF) external temperature. Suspension particles ← 3mg/m3 10% ← Humidity ← 95% non-condensing No vibrations	F-9010: 5ºC (41ºF) to 40ºC (104ºF) external temperature. F-9020: 5ºC (41ºF) to 36ºC (97ºF) external temperature. F-9050: 0ºC (32ºF) to 35ºC (95ºF) external temperature. Suspension particles ← 3mg/m3 5% ← Humidity ← 95% non-condensing No vibrations
WEIGHT	F-9010 PULSED: Laser head 5Kg Cabinet 21Kg F-9020 PULSED: Laser head 5Kg Cabinet 21Kg F-9050 PULSED: Laser head 5Kg Cabinet 21Kg	F-9010 FILM: Laser head 3Kg Cabinet 20Kg F-9020 FILM: Laser head 3Kg Cabinet 20Kg F-9050 FILM: Laser head 3Kg Cabinet 20Kg
CONTROL BY	•• Handheld Terminal with ScanLinux software •• Touch screen with Hand Held Terminal emulator software •• PC with Full Graphics Interface: includes Marca™ software, protection key and Ethernet cable (TCP/IP) •• PC with Network interface: includes Marca Lite™ software, protection key and Ethernet cable (TCP/IP)	

FOCAL SPECIFICATIONS

Focal Distance	Working Distance	Marking Area	Beam Diameter	Options
100mm	128mm	55x55mm (2.2X2.2 inch)	<50-80 microns	Optional
162mm	205mm	100x100mm (4.0x4.0 inch)	<70-100 microns	Standard
254mm	321mm	160x160mm (6.3x6.3 inch)	<100-150 microns	Optional
346mm	427mm	200x200mm (7.9x7.9 inch)	<100-150 microns	Optional



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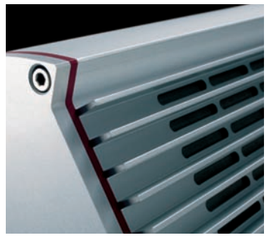
FROM EVOLUTION TO INNOVATION



THIS VERSATILE FIBRE LASER SYSTEM ALLOWS MARKING A WIDE RANGE OF MATERIALS, FROM FLEXIBLE FOIL AND PLASTICS TO METAL.

ITS COMPACT DESIGN with adjustable marking head enables this laser to be installed on even the most complex production lines or in tight spaces where other lasers just won't fit.

DYNAMIC "ON THE FLY" Yag marking is a reality with this system thanks to MACSA's sophisticated software and many years' experience of high speed applications.

LOW COST OPERATION thanks to an innovative diode pumped YAG laser tube which requires no maintenance and no consumables.

SUPERIOR QUALITY MARKING provides you with sharper bar codes and more precise logos and technical drawings.

OPERATOR FRIENDLY using different user interfaces with special softwares to design and control all your marking requirements.

RELIABLE & CLEAN laser technology results in less maintenance and less worries about "downtime".

A WIDE RANGE OF MATERIALS including even highly reflective metal surfaces as well as plastics provide excellent results.

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.

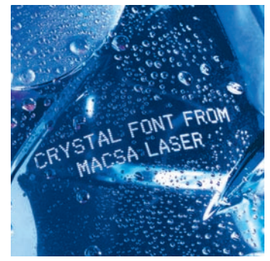
TOUCH SCREEN

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



SCANLINUXTM V 3.3 INTERNAL SOFTWARE CONTROLLING THE LASER MARKING SYSTEM

ScanLINUX is the internal software running on LINUX managing the laser marking system • controling 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 • Unicote Enable. Allows SHS.