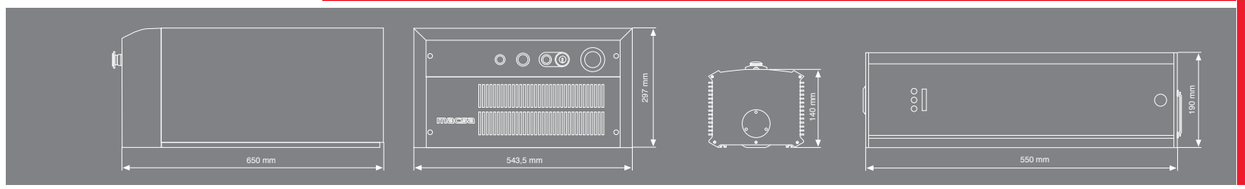
SERIE **D-5000** YAG-AIR & WATER COOLED



LASER MARKING & CODING SYSTEM

macsa

D-5000
LASER SYSTEM

MODEL	D-5005 / D-5010 / D-5020	D-5060 / D-5100
NOMINAL POWER	5W – 10W – 20W (wavelength:1,06 microns)	60W–100W (wavelength:1,06 microns)
Q-SWITCH FRECUENCY	D-5005: 22 kHz D-5010 / D-5020: 10 to 200 kHz	D-5060 / D-5100: 1 to 200 kHz
SYSTEM CABINET	**D-5000 Plus** Laser, Scanners and Scanner boards built into the laser tube. Control electronics and power supplies built into the cabinet.	Laser, Scanners and Scanner boards built into the laser tube Control electronics and power supplies built into the cabinet Chiller for water cooled included into the cabinet
MAINS SUPPLY	D-5005: 220V AC-50/60 Hz – 1Phase+N – 800W D-5010: 220V AC - 50/60 Hz – 1Phase+N – 1000W D-5020: 220V AC - 50/60 Hz – 1Phase+N – 1200W	D-5060: 230V AC - 50/60 Hz – 1Phase+N – 2000W D-5100: 220V AC - 50/60 Hz – 1Phase+N – 3800W
MARKING HEAD	Laser Tube Nd:YAG diode pumped through glass fiber. Marking area indicator (red diode) 635 nm included. Marking optimized beam quality.	Laser Tube Nd:YAG diode pumped through glass fiber. Marking area indicator (red diode) 635 nm included. Marking optimized beam quality. Water cooled by internal chiller sealed circuit includes.

FOCAL SPECIFICATIONS

mm	mm	mm	D-5005 BD	D-5005 PD	D-5010 BD	D-5010 PD	D-5020 BD	D-5020 PD	D-5060 BD	D-5060 PD	D-5100 BD	D-5100 PD
□ 55	WD 128	FL 100	34	5,6	34	11,3	34	22,5	68	14,1	102	10,0
-	-	-	-	-	-	-	-	-	-	-	-	-
□ 100	WD 205	FL 162	67	1,4	67	2,8	67	5,6	134	3,5	201	2,5
□ 160	WD 321	FL 254	101	0,6	101	1,3	101	2,5	202	1,6	303	1,1
□ 200	WD 427	FL 346	126	0,4	126	0,8	126	1,6	252	1,0	378	0,7

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, protetcion key and TCP/IP	
ACCESORIES	Mounting support Encoder and photocell kit	Mounting support Encoder and photocell kit
AMBIENT CONDITIONS	5ºC (41ºF) to 40ºC (104ºF) external temperature. Suspension particles ←3mg/m3 Humidity ←90% non-condensating No vibrations	10ºC (50ºF) to 35ºC (95ºF) external temperature Humidity ←90% non-condensating No vibrations
WEIGHT	D-5005: Laser head 10 kg cabinet 42 kg D-5010: Laser head 10 kg cabinet 46 kg D-5020: Laser head 10 kg cabinet 51 kg	D-5060: Laser head 20 kg cabinet 70 kg D-5100: Laser head 20 kg cabinet 116 kg

Specifications subject to change without notice.

Standard **FL** = Focal Length **WD** = Working Distance in mm **BD** = Beam diameter in microns **PD** = Power Density in W/mm² or KW/mm²

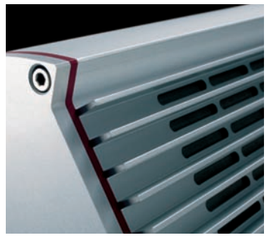
□ = Marking area in mm

THIS COMPACT DIODE PUMPED YAG LASER SYSTEM IS THE “STATE OF THE ART” SOLUTION FOR MARKING YOUR PRODUCTS WITH ULTRA CLEAR MESSAGES AT LOW OPERATING COSTS.

macsa LASER SOLUTIONS

MACSA ID, SA
Girona, 46-48 · 08242 Manresa (Barcelona)
SPAIN · PO BOX 383
Tel: + 34 93 873 87 98 · Fax: + 34 93 874 11 56
macsa@macsa.es www.macsalaser.com

FROM EVOLUTION TO INNOVATION



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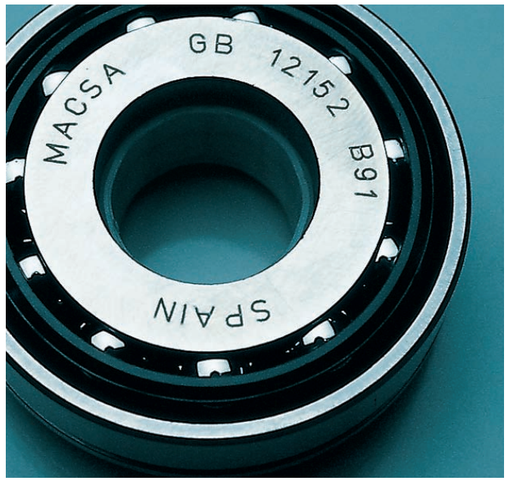


Split head option for difficult access.

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

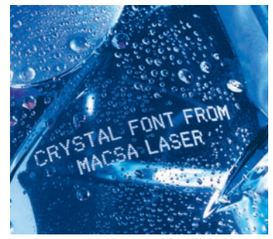
HAND-HELD TERMINAL
Connection via RS-232 with ScanLINUX software included in laser marking system • creation and editing of text messages • able to create up to 4 lines of text • 4 types of MFF fonts • modify size (max. 20 mm) and separation between characters • modify message XY position • time marking 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.