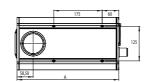
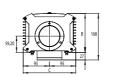
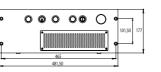


D Duo Series







					D-DUO	& GREEN	DUO & U	V (DPSS	5)				
MODEL				Series D DUO				GREEN DUO PS				UV	
	POWER			6W	10W		OW	5W	10W	1,	5W	5	W
WAVELENGTH				1.064 µm				532 nm				355 nm	
LASER SYSTEM				D - 5000 DUO				GREEN				UV	
MAINS SUPPLY				100V - 240V 10			- 240V	100V - 240V		1001/ 2401/		100V - 240V	
					60 Hz	50 / 60 Hz		50 / 60 Hz		100V - 240V 50 / 60 Hz		50 / 60 Hz	
	1				ase + N)	(1 Phase + N) 400 VA		(1 Phase + N) 300 VA		(1 Phase + N) 400 VA		(1 Phase + N) 600 VA	
	Lucat				0 VA								
0	DIMENSIONS Head			601x190x141 mm 314x106x108 mm									
Rack				550x480.5x177 mm									
WEIGHT (Falta comprovar)				Net weight: 28Kg Gross Weight: 33Kg								Net weight: 18Kg Gross Weight: 20Kg	
COOLING				Air									
SYSTEM				Resonator of the laser source, DACs board, drivers of the scanners, and galvanometric scanners built into the laser									
				and marking head. Control and power electronics, CPU, power supplies and laser source pumping unit built into the									
				control rack.  D DUO GREEN UV									
	TECHNOLOGY			D DUO		l .			GR		1	UV	
	12011102001		F -	6	10	20	F -	5	10	PICO	F -	5	
	MA	WD	FL	BD	PD	PD	PD	BD	PD	PD	PD	BD	PD
	(mm)	(mm)	(mm)	(µm)		(KW/cm2)	(KW/cm2)	(µm)		(KW/cm2)		(μm)	(KW/cm2)
FOCAL	55x55	141	100	16	5825	9709	19417	10	12333	13875	2081	5	43278
SPECIFIC.		205	163	26				17	4642			9	
	100x100		254		2192	3654	7308	26		5222	783 323	-	16289
	168x168	347	346	41 56	903 487	1505 811	3009	35	1912	2151 1159	174	-	<del>                                     </del>
	212x212	458					1622	- 33	1030	1139	174	-	
	242x242	554	420	68	330	551	1101	-		-	-		-
	500x500	889	815	132	88	146	292		-		_	-	
	COFTIMA	DE		ScanLinux V5.2.7 and later.									
SOFTWARE  USER INTERFACE				Marca Software V5.6.9 and later.  Internal Provider									
				Internal Barcode.     Touch Screen.									
				Hand Held Terminal.									
				- Hario Helo Terminal.									
-				Hand Held Terminal with ScanLinux software.									
				Touch Screen with ScanLinux software.									
CONTROLLED BY				Full Graphics Interface: includes Marca software™, dongle and Ethernet cable (TCP / IP).									
				Full Graphics interface: includes Marca Software. doingle and Ethernet cable (TCP / IP).      Marca Lite Software: includes Marca™ software, doingle and Ethernet cable (TCP / IP).									
				End pumped Nd:YAG resonator by an optical fiber.									
	LASER SOL	JRCE		- Beam pointer (optional red diode).									
				Handheld Terminal-Touch Screen Terminal - Beam pointer - Encoder Kit - Photocell Kit - Alarm Kit Fume Extractor -									
	ACCESSOF	RIES		Mounting support - Mounting Bracket U-ARM - Marking paper - Protection									
-				goggles - Air Cooling Kit - Water Cooling Kit (only for UV)  +15°C (59°F) at 40°C (104°F) external temperature with 50% Duty Cycle or 36°C(100°F) external temperature with									
ENVIF	RONMENTAL (	CONDITIO	NS	100% Duty Cycle. Humidity between 10% and 95%, without condensation. UV working humidity: 30-80%.									
				No vibrations.									

<sup>\*</sup> MA: Marking Area | FL: Focal Length (The distance between the center of the lens and the surface to be marked.)







Coding, tracing and marking solutions worldwide

D DUO Series

# INDUSTRIAL DPSS LASER

High quality marking for plastics and delicate substrates





Macsa id a code you can trust







**D DUO Series** by MACSA Reliable. Smart. Easy



WD: Working Distance (The distance between the laser system base and the surface to be marked.)

BD: Spot Beam Diameter | PD: Power Density

# INDUSTRIAL DPSS LASER

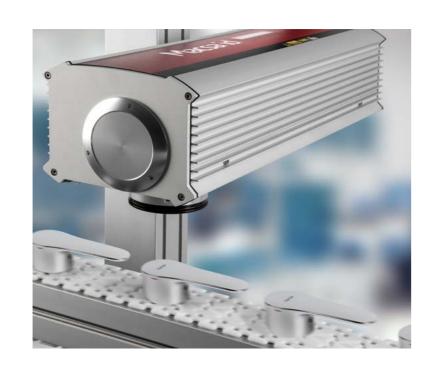
# D DUO Series

#### A family of industrial DPSS lasers.

D DUO lasers are designed for industrial laser marking applications. In-built motion control, TCP-IP communication and digital I/O make it possible to integrate the laser in to most production lines. Alternatively D-Duo lasers can be installed in workstations for standalone applications.

They are fast and powerful lasers designed for marking delicate substrates and for coating ablation. High contrast marks can be achieved with no thermal damage to the substrate.

The lasers are available in a range of different powers meaning that they can meet the needs of most applications at an affordable price.



Dual processor architecture for fast cycle times even with variable data.

D DUO lasers are short pulse, high peak power lasers and are available in 1064nm, 532nm (Green) and 355nm (UV) wavelengths.

Compatible with the iLaserBox range of workstations

## D DUO

#### For delicate substrates

The D-5000 SERIES is an end-pumped DPSS Laser system, on a Nd-YV04 active medium. Ideal for marking delicate substrates and coating ablation.

- D-5000 lasers have short pulse width to minimize thermal impact
- Compact head design is ideal for high-speed, on-line integration
- D-5000 lasers include full 3 axis motion control for driving external axes.



# D DUO UV

#### For thermo formed and exotic plastics

The D 5000 UV 5 is a DPSS Laser system, based on a Nd: YV04 active medium.

- Solid state Nd: YV04 laser  $\lambda = 355$ nm
- Wide range of materials Thermo-formed and exotic plastics.
- Water-cooled
- Single phase power input
- Easily integrated into automated production line or the iLaserBox range of workstations





## D DUO GREEN

### For marking plastics with minimal thermal impact

The gLASER series is a DPSS Laser system, based on a Nd: YV04 active medium. gLASER series deliveries a high beam performance at a wavelength of 532nm.

- D DUO Green lasers are short pulse, high peak power lasers
- Ideal for marking plastics with minimal thermal impact.
- Air cooled
- Single phase power input
- Available as PS model with shorter pulse widht and higher peak power
- Easily integrated into automated production line or the iLaserBox range of workstations









### Macsa lasers are very easy to use thanks to our powerful propietary marking software.

Marca makes it simple to code and mark precisely and consistenly. A userfriendly software to create text, 1D and 2D codes, 3D graphics, graphical files, etc...

















The modular software to control, manage and optimize the production line.



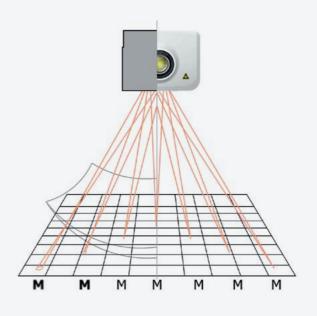
Solution of monitoring services, predictive maintenance, remote assistance and production support

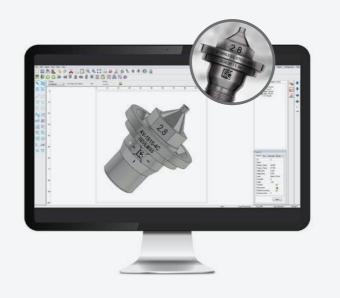
# 3D marking

2D marks can be mapped to regular 3D geometries such as cylinders, spheres and cones. Additionally irregular geometries can be loaded as 3D CAD files in to Marca software enabling 2D marks to be mapped to irregular 3D surfaces.

The Macsa 3D scan head greatly simplifies the mechanical handling of 3D geometries and can eliminate the need for rotary and robotic handling devices. This can significantly increase productivity.

3-D Print Head transform your 2D laser to 3D





# DUO by Macsa

Dual Processor Technology Lasers by Macsa allows high precision marks to be produced even with variable data with no loss of performance. This technology dedicates one processor to data processing and the other to controlling the laser.

MACSA LASER SYSTEM

