TECHNICAL DATA

MODEL				SPA 2 D-6 DPSS		SPA 2 D-10 DPSS		SPA 2 D-20 DPSS		SPA 2 D-5 GREEN		SPA 2 D-10 GREEN		SPA 2 D-1,5 GREEN PS		SPA 2 D-4 GREEN PS		SPA 2 D-5 UV		SPA 2 D-15 UV	
IMAGE																					
SYSTEM	Power			6 W		10 W		20 W		5 W		10 W		1,5 W		4 W		5 W		15 W	
	Technology			Compact Q-Switched DPSS laser Nd:YVO$_4$						Compact Q-Switched DPSS laser Nd:YVO$_4$				DPSS PS				Compact Q-Switched DPSS UV Nd:YVO$_4$			
WAVELENGTH	nanometers			1.064 nm						532 nm								355 nm			
PULSELENGTH	nanoseconds			3 to 80 ns						2 to 10 ns				0,7 to 3 ns				< 18 ns			
MAINS POWER SUPPLY				100 / 240 V AC						100 / 240 V AC								100 / 240 V AC			
				50 / 60 Hz						50 / 60 Hz								50 / 60 Hz			
				(1 Phase + N) 450 VA		(1 Phase + N) 500 VA		(1 Phase + N) 500 VA		(1 Phase + N) 450 VA		(1 Phase + N) 600 VA		(1 Phase + N) 350 VA				(1 Phase + N) 700 VA			
COOLING	Air/Water			Air (SE) / Forced Air (DE)						Air								Air (SE) / Forced Air (WD)		Water	
	Filtered Blower (200m³/h)			Opt. (DE)						Opt.								-		-	
	Filtered Blower (350m³/h)			Opt. (DE)						Opt.								-		-	
	TCU			Opt. (DE)						Opt.								-		-	
	Chiller			-						-								-		1000 W	
FOCAL SPECIFICATIONS FOR LENSES without BE for XQS Head	M. Area	WD	FL	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD
	20x20	95 mm	56 mm	_	_	_	_	_	_	_	_	_	_	_	_	_	_	7	13973	7	41919
	60x60	126 mm	100 mm	25	1184	34	1110	34	2220	23	1226	30	1380	23	368	23	981	_	_	_	_
	65x65	133 mm	103 mm	_	_	_	_	_	_	_	_	_	_	_	_	_	_	12	4146	12	12439
	100x100	201 mm	160 mm	41	463	54	434	54	867	25	987	34	1110	25	296	25	789	_	_	_	_
	105x105	220 mm	170 mm	_	_	_	_	_	_	_	_	_	_	_	_	_	_	20	1516	20	4549
	160x160	345 mm	254 mm	65	184	86	172	86	344	37	456	50	513	37	137	37	365	_	_	_	_
	175x175	347 mm	254 mm	_	_	_	_	_	_	_	_	_	_	_	_	_	_	31	679	31	2036
	195x195	440 mm	330 mm	_	_	_	_	_	_	_	_	_	_	_	_	_	_	40	403	40	1208
	212x212	446 mm	346 mm	88	98,7	117	92,6	117	185	41	385	54	434	41	116	41	308	_	_	_	_
	242x242	545 mm	420 mm	107	67,1	142	62,9	142	126	42	360	56	405	42	108	42	288	_	_	_	_
	290x290	580 mm	470 mm	_	_	_	_	_	_	_	_	_	_	_	_	_	_	57	198	57	595
	325x325	710 mm	570 mm	145	36,5	193	34,2	193	68,4	60	176	80	198	60	52,7	60	141	_	_	_	_
	560x560	955 mm	820 mm	208	17,6	278	16,5	278	33,0	84	91,2	111	103	84	27,4	84	73,0	_	_	_	_
MARKING HEAD	XQS Internal			Std.						Std.								Std.			
MARKING HEAD ACCESSORIES	Beam Exit at 0°			Opt.						-								Std.			
	Beam Exit at 90°			Opt.						Std.								Std.			
	Focal Distance Indicator			Std.						Opt.								Opt.			
	Marking Area Indicator			Opt.						Std.								Std.			
CONTROL	Touch Screen TSL-V3			Opt.						Opt.								Opt.			
	PC with Marca Software			Opt.						Opt.								Opt.			
SOFTWARE	ScanLinux			Opt.						Opt.								Opt.			
	MarcaTouch OS 2.00			Std.						Std.								Std.			
	Marca Full Graphics PC Softw.			Std.						Std.								Std.			
	TCPIP Protocol			Opt.						Opt.								Opt.			
	Profinet Protocol			Opt.						Opt.								Opt.			
	OPC-UA Protocol			Opt.						Opt.								Opt.			
	Internal Barcode Generator			Opt.						Opt.								Opt.			
SAFETY	ElectroMechanical Shutter			Opt.						Opt.								Opt.			
	Performance Level d Safety Kit			Opt.						Opt.								Opt.			
ACCESSORIES				Diode Marking Pointer - Encoder Kit - Mounting Support - Photocell Kit						Diode Marking Pointer - Encoder Kit - Mounting Support - Photocell Kit								Diode Marking Pointer - Encoder Kit - Mounting Support - Photocell Kit			
ENVIRONMENTAL CONDITIONS	Operating Temperature			15 °C (50 °F) to 40 °C (104 °F)						15 °C (50 °F) to 40 °C (104 °F)								15 °C (50 °F) to 40 °C (104 °F)			
	Humidity			< 95 %, non-condensing						< 95 %, non-condensing								< 95 %, non-condensing			
	Vibrations			No vibrations						No vibrations								No vibrations			
	Protection Rate			SE (Standard Environment)						SE (Standard Environment)								SE (Standard Environment)			
				DE (Dusty Environment)						-								WD (Washdown Environment)			
DIMENSIONS AxBxC	Head			196 x 146 x 563 mm						196 x 146 x 563 mm								196 x 146 x 662 mm			
	Cabinet			200 x 650 x 525 mm						200 x 650 x 525 mm								200 x 650 x 525 mm			
WEIGHT	Net Weight			28 kg						28 kg								18 kg			
	Gross Weight			30 kg														20 kg			

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SPA2 D

GREEN | UV

High quality marking for plastics
and delicate substrates

One platform, multiple substrates

DPSS lasers for coding in the packaging sector. They provide legible markings of the highest quality, which are permanent and sustainable in all production environments.

Available in dfferent enclosures in order to mark plastics, delicate substrates and for laser coating ablation in the FMCG markets.

PRODUCT BROCHURE

SPA2 is much more than a laser system

The SPA2 range of laser coders is the next generation of Macsa's successful SPA, Smart Packaging Application, laser platform.
The SPA2 range adds more power options including pulsed CO2 lasers.

SPA2
SMART PACKAGING APPLICATIONS

SPA2 D
GREEN | UV

SMART | RELIABLE | CUTTING-EDGE

SPA2 D diode pumped solid state lasers are widely used in packaged goods applications including bottles, tubs and liquid dispensers. They are typically used to code plastic substrates (excluding PET and PVC).

- UV and Green wavelength options enable challenging substrates to be coded and for marking plastics with minimal thermal impacts.
- Ideal for marking delicate substrates and for laser coating ablation.
- DUO dual processor technology enables high-speed andhigh-quality printing with variable data.
- 10.1-inch touch screen controller with context sensitive HELP and on-line instruction videos.
- Protection enclosure is available for washdown (IP65) environments.

SE Standard Environment

SPA 2 D DPSS / SPA 2 D GREEN / SPA 2 UV

DE Dusty Environment

SPA 2 D DPSS

WD Washdown IP55 / IP65

SPA 2 UV

Why Macsa id?

Macsa id is one of the 4 leading companies in the world in coding and marking lasers. It offers the widest range of lasers to code and mark both in the productive sectors (food, beverages, pharmaceutical, healthcare, cosmetics ...) as well as in the industrial ones (industry, automotive, aeronautics, defense, construction materials ...).

Macsa id is recognized as a world leader in technological innovation in lasers for marking and coding. The company invests more than 10% of its turnover in R&D every year.

Macsa id
in more than
80 countries

- MACSA Headquaters
- MACSA Branch Offices
- MACSA Distributors
- MACSA JV

The most complete range of CO2, Fiber and DPSS lasers on the market

CO2
Available from 10 to 450W

Fiber
From 20W to 200W

Fiber Film
From 20W to 100W

DPSS
From 6 to 20W
(also Green & UV available)

PRECISION
Several features including Macsa's propietary VCS to ensure high print quality even on high-speed production lines.

VCS® Vibration Compensation System

VERSATILITY
Integrated into any production line, it can encode over a wide range of materials using 3D printing options.

3D printing

RELIABILITY
Production environments can test the reliability of laser systems. SPA2 lasers are designed to operate reliably in dusty or damp environments even when subject to extreme temperatures.

RAF® Reverse Air Flow

ADAPTABILITY
Wide range of essential and extra accessories to optimise the laser's performance.

Macsa Accesories

SIMPLICITY
Videos and support material to facilitate its installation and integration.

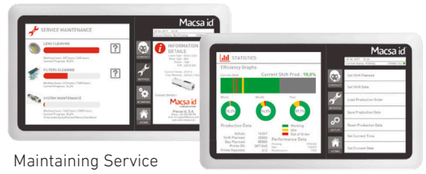
MARCA software®

CONNECTIVITY
The lasers include the TCP/IP protocol in order to have complete control of the system from most standard communications.
The new SPA2 platform includes the integration of the most widely used industrial communication protocols such as Profinet and OPC-UA. These are both available in all models upon request.

PROFINET® OPC UA

SOFTWARE AND SERVICES

integranet 4.0



Maintaining Service

Equipment performance

MONITORING AND PREDICTIVE MAINTENANCE

From any place and at any time, data is provided in real time to increase productivity, improve e ciency and reduce downtime. It allows monitoring of the status of the equipment from any remote device which can allow the reception of alerts. IntegraNET allows our service engineers to receive Diagnostics in real time to detect problems before they occur and prevent expensive downtimes.

REMOTE ASSISTENCE

IntegraNET allows field technicians and Macsa id engineers to interconnect and exchange information through video calls.

INCREASED EFFICIENCY

The collected data is integrated with the different software of Macsa id modules for production management, traceability and effciency of the production lines.

ecoding
Driven by Nature

NO CONSUMABLES
A clean technology that does not produce waste.

ENVIRONMENT FRIENDLY
No harmful emissions are generated, thus benefitting the work environment and the planet.

CLEAN
For a cleaner and healthier workspace.

ENERGY EFFICIENT
Maximum quality and coding speed with just the right amount of energy.