

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 (200m ³ /h)	Opt. (DE)																Opt.																-				-																											
	Filtered Blower (350m ³ /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	BD	PD	BD	PD	BD	PD	BD	PD																																				
	20x20	95 mm	56 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																			
	60x60	126 mm	100 mm	25	1184	34	1110	34	2220	23	1226	30	1380	23	368	23	981	-	-	-	-	-	-	-	-	-	-	-	-	-																																			
	65x65	133 mm	103 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																				
	100x100	201 mm	160 mm	41	463	54	434	54	867	25	987	34	1110	25	296	25	789	-	-	-	-	-	-	-	-	-	-	-	-																																				
	105x105	220 mm	170 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																				
	160x160	345 mm	254 mm	65	184	86	172	86	344	37	456	50	513	37	137	37	365	-	-	-	-	-	-	-	-	-	-	-	-																																				
	175x175	347 mm	254 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																				
	195x195	440 mm	330 mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																				
	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																																				
	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.																															
	Beam Exit at 0°	Opt.																-																Std.																															
MARKING HEAD ACCESSORIES	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.																															
SAFETY	Internal Barcode Generator	Opt.																Opt.																Opt.																															
	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)																															
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																30 kg																20 kg																															

SPA2 D GREEN | UV

High quality marking for plastics and delicate substrates



Macsa id
a code you can trust

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 different 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 and high-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.



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

CO2

Available from 10 to 450W

PRECISION

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



ADAPTABILITY

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



Fiber

From 20W to 200W

VERSATILITY

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



SIMPLICITY

Videos and support material to facilitate its installation and integration.



Fiber Film

From 20W to 100W

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.



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.



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

SOFTWARE AND SERVICES



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 efficiency 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 ASSISTANCE

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 efficiency of the production lines.



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 Headquarters
- MACSA Branch Offices
- MACSA Distributors
- MACSA JV



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.