





TECHNICAL DATA

MODEL				SPA 2 F-20 PULSED				SPA 2 F-30 PULSED				SPA 2 F-50 PULSED				SPA 2 F-100 PULSED				SPA 2 F-200 PULSED			
IMAGE												  											
SYSTEM		Power		20 W		30 W		50 W		100 W		200 W											
		Technology		Ytterbium Pulsed Fiber Laser																			
WAVELENGTH		1.064 nm		Std.																			
PULSELENGTH		Fixed Pulse lenght		Std.																			
		MOPA (Selectable Pulse Lenght)		Opt.		Opt.		Opt.		-		-											
MAINS POWER SUPPLY				110 / 240 V AC																			
				50 / 60 Hz																			
				(1 Phase + N) 500 VA		(1 Phase + N) 600 VA		(1 Phase + N) 700 VA		(1 Phase + N) 825 VA		(1 Phase + N) 950 VA											
COOLING		Air/Water		Air (SE, DE) / Forced Air (WD)																			
		Filtered Blower (200m³/h)		Opt. (DE)		-		-		-													
		Filtered Blower (350m³/h)		Opt. (WD)																			
WARMING		TCU		Opt. (WD)																			
		Warming Blower		Opt. (WD)																			
FOCAL SPECIFICATIONS FOR XQS LENSES		M. Area	WD	FL	BD	PD	BD	PD	BD	PD	BD	PD	BD	PD									
		60x60	126 mm	100 mm	45	1249	45	1873	45	3122	45	6244	45	12488									
		100x100	201 mm	160 mm	72	488	-	-	-	-	-	-	-	-									
		107x107	203 mm	162 mm	73	474	73	710	73	1184	73	2367	73	4735									
		160x160	345 mm	254 mm	115	194	115	290	115	484	115	968	115	1936									
		212x212	446 mm	346 mm	156	104	156	156	156	260	156	521	156	1041									
		242x242	545 mm	420 mm	190	70.8	190	106	190	177	190	354	190	708									
		325x325	710 mm	570 mm	257	38.5	257	57.7	257	96.2	257	192	257	385									
MARKING HEAD		XQS Internal		Std.		Std.		Opt.		Opt.		Std. (SE, DE) / Opt. (WD)											
		HPD Split		-		-		Std.		Std.		Std. (WD)											
		XS Split WD (IP65)		Opt.		Opt.		Opt.		Opt.		-											
MARKING HEAD ACCESSORIES		Beam Exit at 90°		Std.																			
		Focal Distance Indicator		Opt.																			
		Marking Area Indicator		Std.																			
CONTROL		Touch Screen TSL-V3		Opt. (SE, DE)																			
		Touch Screen TSL-V3 IP65		Opt. (WD)																			
		PC with Marca Software		Opt.																			
SOFTWARE		ScanLinux		Std.																			
		MarcaTouch OS 2.00		Opt.																			
		Marca Full Graphics PC Softw.		Opt.																			
		TCPIP Protocol		Std.																			
		Profinet Protocol		Opt.																			
		OPC-UA Protocol		Opt.																			
SAFETY		Internal Barcode Generator		Opt.																			
		ElectroMechanical Shutter		Opt.																			
		Performance Level d Safety Kit		Opt.																			
ACCESSORIES				Diode Marking Pointer - Encoder Kit - Mounting Support - Photocell Kit																			
ENVIRONMENTAL CONDITIONS		Operating Temperature		10 °C (50 °F) to 40 °C (104 °F)																			
		Humidity		10 % < H < 95 %, non-condensing																			
		Vibrations		No vibrations																			
		Protection Rate (3 types available)		SE (Standard Environment)																			
				DE (Dusty Environment)																			
DIMENSIONS AxBxC		Head		108 x 105 x 506 mm (XQS-UHS HEAD) / 108 x 105 x 702 mm (3D HEAD)																			
		Cabinet		525 x 650 x 202 mm																			
WEIGHT		Net Weight		28 kg (XQS-UHS HEAD) / 29 kg (3D HEAD)																			
		Gross Weight		32 kg (XQS-UHS HEAD) / 33 kg (3D HEAD)																			

SPA2

FIBER PULSED

Versatility to mark a wide range of plastics and metals



One platform, multiple substrates

Pulsed fiber 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 a wide variety of substrates such as plastic and metals 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 FIBER the best solution for metal substrates

SMART | PRECISE | RELIABLE

SPA2 F pulsed fiber lasers are widely used in packaged goods applications including cans. They are typically used to code metal substrates.

- High-powered lasers enable them to code on the fastest production lines (up to 172,000 cans/hour).
- The XQS high precision printhead ensures clear and legible codes even on curved surfaces.
- DUO dual processor technology enables high-speed and high-quality printing with variable data.
- Extra protection enclosures and touch screen are available for dusty (IP54) and 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 IP31

SPA 2F-10 / SPA 2F-20 / SPA 2F-30 /
SPA 2F-50 / SPA 2F-100 / SPA 2F-200



DE Dusty Environment IP54

SPA 2F-10 / SPA 2F-20 / SPA 2F-30 /
SPA 2F-50 / SPA 2F-100 / SPA 2F-200



WD Washdown IP55 / IP65

SPA 2F-10 / SPA 2F-20 / SPA 2F-30 /
SPA 2F-50 / SPA 2F-100 / SPA 2F-200

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.



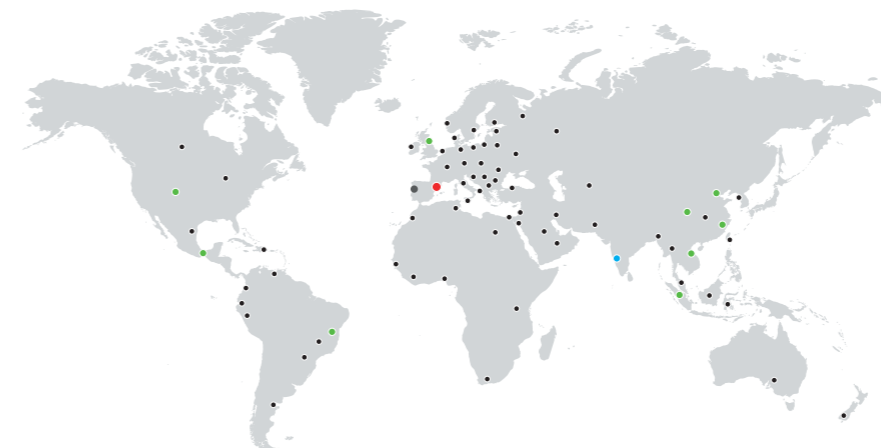
Why Macsa id?

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.