

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												
PULSELENGTH	Fixed Pulse length	Std.											
	MOPA (Selectable Pulse Length)	Opt.	Opt.	Opt.	-	-							
MAINS POWER SUPPLY	110 / 240 V AC												
	50 / 60 Hz												
COOLING	Air/Water	Air (SE, DE) / Forced Air (WD)											
	Filtered Blower (200m ³ /h)	Opt. (DE)	-	-	-	-							
	Filtered Blower (350m ³ /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
560x560	955 mm	820 mm	370	18,6	370	27,9	370	46,5	370	92,9	370	186	
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.											
ACCESSORIES	Performance Level d Safety 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

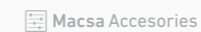
PRECISION

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



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



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.



NO CONSUMABLES
A clean technology that does not produce waste.

ENVIRONMENT FRIENDLY
No harmful emissions are generated, thus benefiting 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.