Macsa id
a code you can trust

100%

SUSTAINABLE

SMALL CHARACTER LASER CODER BY MACSA

THE NEW SPARK by **MACSA**

Clean. Smart. Revolutionary.

THE NEW SPARK

Macsa id, the specialist in laser coding technology.

Macsa id is the industry leader in laser marking & coding. Holding patents in more than 30 countries around the world, Macsa id has always been at the forefront of innovation, sustainability, and affordability. Beginning with the development of the first laser for dynamic coding on production lines, to the first fiber laser for inline marking, Macsa id was the first company worldwide to design a laser specifically for small character coding.

All of this is made possible by Macsa id's commitment to innovation and by investing 10% of revenue in R&D&I. Not only does Macsa id develop products and services which enable its customers to be environmentally compliant, it also spearheads the implementation of Industry 4.0 solutions.

The new SPARK is the result of 35 years of our continuing pursuit of excellence.

The new handheld interface technology is only one of the industry leading improvements. More than just a simple touch screen, it is the gateway to a multitude of features at your fingertips: from total control of the full capabilities of SPARK, to vital information related to your production line.

Incredibly easy to use, SPARK can be mastered in little to no time. Combining intuitive state-of-the-art software with online tutorial videos, even those without prior technical knowledge can quickly unleash the full potential of SPARK.

THE CODING AND MARKING LASER SOLUTION THAT REDUCES YOUR CARBON FOOTPRINT.

Climate change and the need to reduce carbon emissions are the number one global priority today. With the declaration of climate emergencies by governments at all levels, companies are striving to find ways in which they can contribute, either by reducing their own emissions or by supplying goods and services to enable others to do likewise.

Laser coders are attractive alternatives to inkjet where carbon emissions are concerned because they consume less energy and because there are no solvent emissions. Furthermore, Macsa id is working with its key component suppliers to reduce the carbon emissions associated with the manufacture of their products.

In addition to this, the use of laser technology also has a positive impact on the environment due to the fact that no waste is produced, therefore eliminating the need to recycle potentially harmful residual products.

Lasers are the smart choice

1. **Clean.** Lasers use green technology with no waste and no risk of ink spills.
2. **Versatile and reliable**. With fast and precise printing in both micro and large formats.
3. **Easy to use.** Anyone can quickly learn to control a laser.
4. **Permanent mark**. Ideal to avoid counterfeiting and to ensure brand protection.
5. **Cost-effective.** After just over a year, the laser will have cost less than an inkjet system.

THE NEW SPARK
IS EXTREMELY RELIABLE

With high quality performance and at a very competitive price. This is your chance to change.

EASY TO INSTALL
It is compact, lightweight and easy to connect. The new WIZARD reduces set-up time avoiding the trial and error approach of other equipment.

EASY TO INTEGRATE
The new digital galvos and drivers together with its new dual processor makes it easy to be integrated even in the most demanding production lines

EASY TO COMMUNICATE
Multiple communication options enable easy Ethernet connectivity to control the equipment remotely and equipment status management.

EASY TO MANAGE
Ready to work with Integranet 4.0. The status of all equipment can be remotely controlled to monitor the efficiency of your production lines and to plan maintenance.

EASY TO USE
The new user interface and message creation software enable quicker and easier operation. New templates reduce message creation times by up to 50%.

EASY TO SERVICE
Its advanced laser technology and consumable-free operation reduce maintenance budgets to a minimum. On-line video tutorials enable quick and easy maintenance.

LED status indicator

Full metal cover

EASY TO OWN
The competitive total cost of ownership of an SPARK laser coder challenges myths about the cost of laser systems. An SPARK laser coder is significantly more affordable than an equivalent inkjet printer.

THE ULTIMATE IN LASER MARKING & CODING TECHNOLOGY.

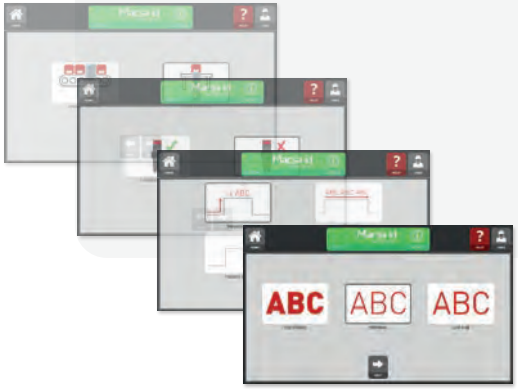
The latest Macsa technological innovation in your hands

The new handheld terminal is one of many important improvements delivered by the SPARK. It is more than a touch screen: it is your point of access to the power and full functionality of the laser and to information related to your production line.

The SPARK is much easier to use thanks to the new, more intuitive software and visual aids in on-line video format with which anyone can master the SPARK quickly and without prior technical knowledge.

NEW WIZARD

This reduces laser set-up time thanks to a step-by-step guide. Operator time to configure a new system can be reduced by up to 90% by avoiding the trial and error system of other equipment.



NEW TEMPLATES

The SPARK incorporates many new templates including barcodes, expiry dates, QR codes and Datamatrix. These can reduce message creation times by up to 50%.

MAINTENANCE VIDEO TUTORIALS

The SPARK video tutorials available through the new handheld terminal guide the operator in the maintenance of the laser, graphically and intuitively. Such maintenance operations, which optimize the operation and efficiency of the laser, should take no more than 5 minutes.

EFFICIENCY AND MAINTENANCE

You can control the efficiency of your equipment and the maintenance of your SPARK from the same touch screen.

THE NEW SPARK

CLEAN. SMART. REVOLUTIONARY.

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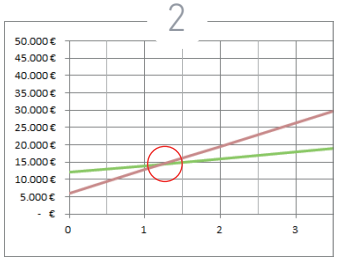

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NO CONSUMABLES

The SPARK uses neither ink nor solvents and this reduces running costs significantly as there is no need to budget for consumables. In addition to a cleaner and more hygienic working environment, the lack of solvent related carbon emissions and harmful waste also mean that production lines will be environmentally compliant.

FULLY AFFORDABLE

The SPARK is unique. Price is no longer an excuse for not choosing laser technology. The SPARK is a high quality laser at a very competitive price. After just over one year the laser will have cost less than an inkjet system.

** Total cost of ownership based on printing a 2-line message of 20 characters (10 per line), 100 products per minute, 2 shifts per day, 5 days per week.*

REALLY RELIABLE

The SPARK can be trusted. **It is based on Macsa id's more than 30 years of experience in laser technology.** Its reliability means that maintenance and repair costs are kept to a minimum. In addition, it works with most packaging substrates: labels, cardboard boxes, a wide range of plastics, glass, wood and textiles.

COMPACT AND VERSATILE

Because of its size and compact design, **the SPARK can be adapted to any installation**. It is suitable for dynamic and static applications. The new SPARK display enables easy control even when the laser is difficult to access directly.

PERMANENT AND CRISP CODING

There are no surprises. The SPARK laser marking is permanent throughout the life of the product and does not smudge like inkjet. Capable of consistently producing unique and highly defined marks such as QR codes, the SPARK can help to enhance customer engagement.

CHANGING TO LASER,
HAS NEVER BEEN EASIER.

6

FAST AND POWERFUL

The SPARK is a sprinter. It uses high-performance lenses, powerful hardware (both 10W and 30W versions are available) and advanced software that allow the laser to handle the high speeds of most packaging production lines.

7

SUSTAINABLE

There is no waste and there are no emissions. With the SPARK you can minimize your impact on the environment and maintain clean working conditions, helping to comply with environmental regulations and social corporate responsibility.

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EASY TO USE

Anyone can use the SPARK thanks to its new colour touch screen and more intuitive menu-driven software. A new Wizard tool allows easy configuration of the laser through a simple step-by-step process.

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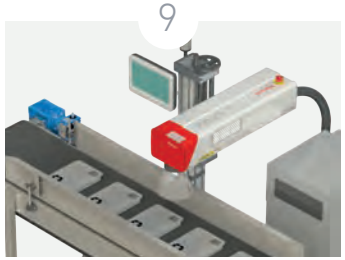

ACCESSORIES

Macsa id provides a wide range of accessories to integrate the SPARK to any type of equipment, adapting the laser system to the needs of most packaging production lines.

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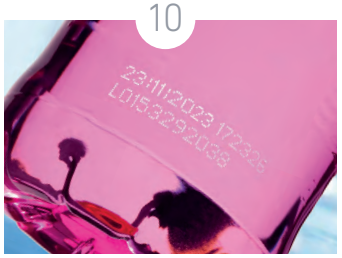


FULL SECURITY

Laser marking is permanent and indelible. In this way the printed code cannot be altered or manipulated, thus ensuring product traceability throughout the manufacturing process and supply chain.

A LASER SUITABLE FOR MOST PACKAGED CONSUMER PRODUCTS.

FOOD

The SPARK laser codes clearly and permanently on packaged food products: fresh and frozen, individual and in multi-packs.

PHARMACEUTICAL

The SPARK meets the high quality standards regarding the serialization requirements of the pharamaceutical industry for coding labels, products, tubes and boxes.

BEVERAGE

Water, wine, spirits and soft drinks. All beverage containers can be coded with the SPARK. Whether they are made of PET, glass, paper, labels or cardboard, the SPARK can handle it.

COSMETICS

Discreet, accurate and of high quality, the SPARK ensures perfect coding for personal care products which need to take great care of themselves.

HOME CARE

The SPARK offers high-speed, high-contrast solutions for the most complex applications in cleaning and home care packaging.

HIGH QUALITY MARKING

FOR A WIDE RANGE OF MATERIALS.

MATERIAL		TECHNOLOGY
Family	Substrate	CO2
		wavelength 10.6 µm
Wood, paper and board	Wood	●
	Thermal label	●
	Paper	●
	Board	●
	Metallised board	●
Food	Fruits and vegetables	●
Glass	Glass	●
	Glass Fiber	●
Ceramics	Ceramic	●
Plastics	Polypropylene (PP)	●
	Low density polyethylene (LDPE)	●
	High density polyethylene (HDPE)	●
	Polystyrene (PS; GPPS and HIPS)	●
	ABS	●
	Polyacetal (POM; polyoxymethylene)	●
	Polyamide (PA)	●
	Polycarbonate (PC)	●
	Polyethylene terephthalate (PET)	●
	Polybutylene terephthalate (PBT)	●
	Polyvinyl chloride (PVC)	●

● Excellent Reaction ● Good Reaction ● Poor Reaction

MATERIAL		TECHNOLOGY
Family	Substrate	CO2
		wavelength 10.6 µm
	Silicone coated	●
	Epoxy resins	●
	Phenolic resins	●
	Polyurethane	●
Plastic foams	Polystyrene foam	●
	Polyethylene foam	●
	Polyurethane foam	●
Plastic films and foils	Aluminized foil	●
	Polyethylene terephthalate (PET)	●
	Oriented polypropylene (OPP)	●
Metals	Coated metal	●
	Anodized aluminium	●
	Steel	●
	Aluminium	●
	Copper	●
	Gold	●
	Iron	●
	Metallised board	●
	Nickel	●
Rubber	Natural rubber	●
	Synthetic rubber	●

MACSA ID

SOLUTIONS AND EQUIPMENT FOR INDUSTRY 4.0.

PRODUCTS	SERVICES	DATA
Production line management and control	Remote support and preventive maintenance	Performance monitoring

TRACK & TRACE

Monitor all the production steps in real time in order to obtain and record extremely important information about where and how products are made. Implementing this process has become a necessity for manufacturers as their industry faces increasing economic and regulatory challenges.

EFFICIENCY AND OPTIMIZATION

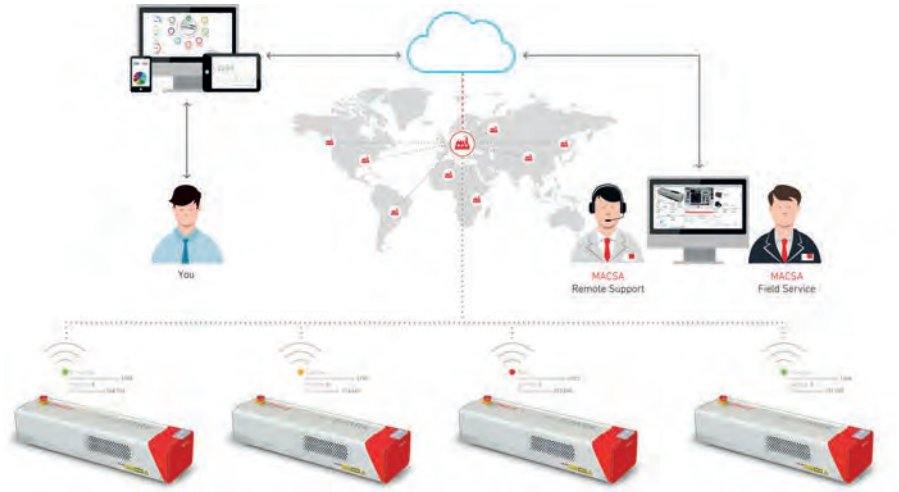
Visualize data using dashboards which reveal trends about your equipment's performance. By providing insight into the ways to improve your operating conditions, processes can be optimized and associated costs reduced.

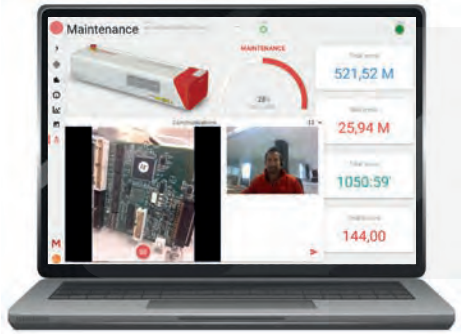
MAINTENANCE SERVICES

Connect with any piece of equipment or device in the plant through universal connectivity to collect real-time machine data whenever is needed. Track and monitor OEE and downtime performance and automate machine status.

IMPROVE PROCESSES

Create smart action plans for process improvement performance through data driven insights. The software also has the capacity to interact with other manufacturing systems for bidirectional information exchange.





integra™ Macsa id

integraoptima

integratrack&trace

integranet 4.0

SPARK by MACSA

Clean. Fast. Revolutionary.

MODEL	SPARK	
POWER	10W	30W
WAVELENGTH	10.6µm	
MAINS SUPPLY	115V / 230 V 50/60 Hz	
	(1 Fase + N) 300 VA	(1 Fase + N) 600 VA
DIMENSIONS (AxBxC)	699x196x164 mm	743 x 216 x 176 mm
WEIGHT	Net weight: 10 kgs Gross weight: 12 kgs	Net weight: 18,5 kgs Gross weight: 21 kgs
SYSTEM	Laser, scanners, power supply units, control electronics and CPU in the laser system.	
OPTICS	Beam diameter (µm): > 485	
	Power density (kWcm²): 52	Power density (kWcm²): 156
	Field size: 60x60 mm (2,36x2,36 in) / Working distance: 95 mm / Built in 90° marking	
MARKING HEAD	• CO2 sealed laser tube. • RF Technology • Wavelength: 10.6 µm	
SOFTWARE	• ScanLinux V5.6.5 and superior • Marca software	
USER INTERFACE	• Touch screen TSL-V3 • PC	
CONTROL	• Touch screen with MarcaTouch™ OS • Marca® software • ·TCP/IP Protocol over Ethernet	
ACCESSORIES / OPTIONS	Touch Screen Terminal for SPARK - Photocell Kit - Photocell - Encoder Kit - Alarm Kit - Fume Extractor - Plexiglas Protection - Floor Bracket - U-ARM Mounting Bracket - Bagpack - Tripod floor Stand - Horizontal tripod grip - Vertical tripod grip - Table protection - Marking papers - Safety glasses	
ENVIRONMENTAL CONDITIONS	• 10° C (50° F) to 40° C (104° F) external temperature • Relative humidity <95%, non-condensing • Vibration-free area	

CONTROLLER	TSL – V3 Touch Screen
DIMENSIONS (AxBxC)	264x186x45mm
TYPE	Capacitive Touch Screen Display
SIZE	10,1"
	1064 x 600
COLOUR	16,2M
LUMINANCE	340 cd/mq
CPU	MX6ULL 800MHz 128MB DDR
MEMORY	2 GB
VOLTAGE	12 VDC
CONNECTIVITY	TYCO Connector
SOFTWARE	MarcaTouch™ OS 2.0 or newer
LANGUAGES	26 languages (English, Arabic, Chinese, Czech, Deutsch, Danish, Finnish, French, Greek, Hebrew, Magyar, Indonesian, Italian, Japanese, Korean, Malaysian, Dutch, Polish, Portuguese, Russian, Serbian, Spanish, Swedish, Thai, Turkish, Vietnamese)
INTERFACE	WYSIWYG technology which displays what is going to be printed.
CABLE LENGTH	1,5m
COVER	Aluminium
IP RATE	IP54
ENVIRONMENT	-20 – 70°C, 80% Humidity