




| MODEL   |  |                                      |        | SPA2 C-10  |         | SPA2 C-30   |         | SPA2 C-40  |         |             |
|---|--|--------------------------------------|--------|--|---------|---|---------|--|---------|-------------|
| IMAGE   |  |                                      |        |  |         |  |         |  |         |             |
| SYSTEM  |  | Power                                |        | 10 W   |         | 30 W  |         | 40 W   |         |             |
|   |  | Technology                           |        | CO2 Sealed Tube CW<br>RF Technology  |         |   |         |  |         |             |
| WAVELENGTH  |  | 10,6 microns for BIO materials       |        | Std.   |         |   |         |  |         |             |
|   |  | 10,2 microns for FILM materials      |        | -  |         | Opt.  |         |  |         |             |
|   |  | 9,3 microns for PET bottles          |        | Opt.   |         |   |         |  |         |             |
| MAINS POWER SUPPLY                                      |  |                                      |        | 110 / 240 V AC   |         |   |         |  |         |             |
|   |  |                                      |        | 50 / 60 Hz   |         |   |         |  |         |             |
|   |  |                                      |        | (1 Phase + N) 300 VA   |         | (1 Phase + N) 600 VA  |         | (1 Phase + N) 600 VA   |         |             |
| COOLING   |  | Air/Water                            |        | Air (SE/DE), Forced Air (WD)   |         |   |         | Forced Air   |         |             |
|   |  | Filtered Blower (200m3/h)            |        | Opt. (DE, WD)  |         |   |         | Opt.   |         |             |
|   |  | Filtered Blower (350m3/h)            |        | Opt. (DE, WD)  |         |   |         | Opt.   |         |             |
|   |  | Cooling Dryer                        |        | Opt. (WD)  |         |   |         | Opt.   |         |             |
|   |  | Vortex                               |        | Opt. (WD)  |         |   |         | Opt.   |         |             |
|   |  | TCU                                  |        | Opt. (DE, WD)  |         |   |         | Opt.   |         |             |
| WARMING   |  | Warming Blower                       |        | Opt. (DE, WD)  |         |   |         | Opt.   |         |             |
| FOCAL SPECIFICATIONS FOR LENSES without BE for XQS Head |  | M. Area                              | WD     | FL   | BD [µm] | PD [kW/cm²]   | BD [µm] | PD [kW/cm²]  | BD [µm] | PD [kW/cm²] |
|   |  | 40x40                                | 60 mm  | 65 mm  | 301     | 14,1  | 421     | 21,5   | 421     | 28,7        |
|   |  | 60x60                                | 95 mm  | 95 mm  | 441     | 6,6   | 617     | 10,0   | 617     | 13,4        |
|   |  | 75x75                                | 115 mm | 125 mm   | 583     | 3,8   | 816     | 5,7  | 816     | 7,7         |
|   |  | 100x100                              | 165 mm | 160 mm   | 743     | 2,3   | 1040    | 3,5  | 1040    | 4,7         |
|   |  | M. Area                              | WD     | FL   | BD      | PD  | BD      | PD   | BD      | PD          |
| FOCAL SPECIFICATIONS FOR LENSES with BE for XQS Head    |  | 40x40                                | 60 mm  | 65 mm  | 150     | 56,3  | 168     | 135  | 168     | 180         |
|   |  | 60x60                                | 95 mm  | 95 mm  | 220     | 26,2  | 247     | 62,8   | 247     | 83,7        |
|   |  | 75x75                                | 115 mm | 125 mm   | 291     | 15,0  | 326     | 35,9   | 326     | 47,9        |
|   |  | 100x100                              | 165 mm | 160 mm   | 372     | 9,2   | 416     | 22,1   | 416     | 29,4        |
|   |  | 150x150                              | 235 mm | 240 mm   | 555     | 4,1   | 622     | 9,9  | 622     | 13,2        |
|   |  | 200x200                              | 320 mm | 320 mm   | 743     | 2,3   | 833     | 5,5  | 833     | 7,3         |
|   |  | 250x250                              | 430 mm | 410 mm   | 950     | 1,4   | 1064    | 3,4  | 1064    | 4,5         |
|   |  | 500x500                              | 700 mm | 720 mm   | 1670    | 0,5   | 1871    | 1,1  | 1871    | 1,5         |
| FOCAL SPECIFICATIONS FOR LENSES with BE for HPD Head    |  | M. Area                              | WD     | FL   | BD      | PD  | BD      | PD   | BD      | PD          |
|   |  | 40x40                                | 55 mm  | 65 mm  | -       | -   | 105     | 344  | 105     | 458         |
|   |  | 60x60                                | 85 mm  | 95 mm  | -       | -   | 154     | 161  | 154     | 215         |
|   |  | 100x100                              | 150 mm | 150 mm   | -       | -   | 242     | 65,4   | 242     | 87,2        |
|   |  | 150x150                              | 230 mm | 230 mm   | -       | -   | 373     | 27,4   | 373     | 36,5        |
|   |  | 200x200                              | 310 mm | 300 mm   | -       | -   | 486     | 16,1   | 486     | 21,5        |
|   |  | 250x250                              | 400 mm | 400 mm   | -       | -   | 651     | 9,0  | 651     | 12,0        |
|   |  | 320x320                              | 435 mm | 450 mm   | -       | -   | 729     | 7,2  | 729     | 9,6         |
|   |  | 500x500                              | 700 mm | 715 mm   | -       | -   | 1160    | 2,8  | 1160    | 3,8         |
| MARKING HEAD  |  | XQS Internal                         |        | Std.   |         |   |         |  |         |             |
|   |  | XQS Split                            |        | -  |         | Opt. (SE, DE)   |         | -  |         |             |
|   |  | HPD Split                            |        | -  |         | Opt. (SE, DE)   |         | -  |         |             |
|   |  | XQS Split WD (IP65)                  |        | Opt. (WD)  |         | Opt.  |         | Opt.   |         |             |
|   |  | HPD Split WD (IP65)                  |        |  |         | Opt.  |         | Opt.   |         |             |
| ACCESSORIES MARKING HEAD                                |  | Beam Exit at 0°                      |        | Opt.   |         |   |         |  |         |             |
|   |  | Beam Exit at 90°                     |        | Std.   |         |   |         |  |         |             |
|   |  | Split Elbow                          |        | -  |         | Opt.  |         | Opt.   |         |             |
|   |  | Focal Distance Indicator             |        | Opt.   |         |   |         |  |         |             |
|   |  | Marking Area Indicator               |        | Opt.   |         |   |         |  |         |             |
| CONTROL   |  | Touch Screen TSL-V3                  |        | Opt. (SE, DE)  |         |   |         | -  |         |             |
|   |  | Touch Screen TSL-V3 IP65             |        | Opt. (WD)  |         |   |         | Opt.   |         |             |
|   |  | PC with Marca Software               |        | Opt.   |         |   |         |  |         |             |
|   |  | ScanLinux                            |        | Opt.   |         |   |         |  |         |             |
| SOFTWARE  |  | MarcaTouch OS 2.00                   |        | Std.   |         |   |         |  |         |             |
|   |  | Marca Full Graphics PC Softw.        |        | Std.   |         |   |         |  |         |             |
|   |  | TCPIP Protocol                       |        | Opt.   |         |   |         |  |         |             |
|   |  | Profinet Protocol                    |        | Opt.   |         |   |         |  |         |             |
|   |  | OPC-UA Protocol                      |        | Opt.   |         |   |         |  |         |             |
|   |  | Internal Barcode Generator           |        | Opt.   |         |   |         |  |         |             |
|   |  | ElectroMechanical Shutter            |        | Opt.   |         |   |         |  |         |             |
| SAFETY  |  | Performance Level d Safety Kit       |        | Opt.   |         |   |         |  |         |             |
| ACCESSORIES   |  |                                      |        | Diode Marking Pointer - Encoder Kit - Mounting Support - Photocell Kit           |         |   |         |  |         |             |
| ENVIRONMENTAL CONDITIONS                                |  | Operating Temperature                |        | 5 °C (50 °F) to 40 °C (104 °F)   |         |   |         |  |         |             |
|   |  | Humidity                             |        | < 95 %, non-condensing   |         |   |         |  |         |             |
|   |  | Vibrations                           |        | No vibrations  |         |   |         |  |         |             |
|   |  | Protection Rate (3 types available)  |        | SE (Standard Environment)  |         |   |         | -  |         |             |
|   |  |                                      |        | DE (Dusty Environment)   |         |   |         | -  |         |             |
| DIMENSIONS (AxBxC)                                      |  | SE&DE (Standard & Dusty Environment) |        | 146 x 196 x 732 mm   |         | 176 x 216 x 750 mm  |         | -  |         |             |
|   |  | WD (Wash-Down Environment)           |        | 168 x 220 x 710 mm   |         | 189 x 241 x 740 mm  |         |  |         |             |
| WEIGHT  |  | Net Weight                           |        | 17 kg  |         | 25 kg   |         |  |         |             |
|   |  | Gross Weight                         |        | 20 kg  |         | 28 kg   |         |  |         |             |

# SPA2 C

C-10W | C-30W | C-40W

Reliable laser coding in standard, dusty and washdown environments



## One platform, multiple substrates

CO2 lasers used in higher speed packaged goods applications including boxes, bottles and blister packs. 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 cardboard, glass,ceramics, PET and PVC 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 C ideal for packaged goods

SMART | RELIABLE | VERSATILE

SPA2 C 10W, 30W and 40W CO2 lasers are widely used in packaged goods applications including labels, boxes, bottles and blister packs. They are typically used to code paper and board, glass and ceramics, coated materials, PET and PVC.

- 10.6, 10.2 and 9.3 wavelength lasers are available to meet the coding needs of specific substrates such as film and PET.
- DUO dual processor technology enables high-speed and high-quality printing with variable data.
- Minimises power consumption choosing the most appropriate flow rate.
- 10.1-inch touch screen controller with context sensitive HELP and on-line instruction videos including Marca Touch OS.
- Extra protection enclosures are available for dusty (IP54) and washdown (IP65) environments.




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

| CO2                       | Fiber            | Fiber Film       | DPSS   |
|---------------------------|------------------|------------------|--|
| Available from 10 to 450W | From 20W to 200W | From 20W to 100W | From 6 to 20W<br>(also Green & UV available) |


**PRECISION**

Several features including Macsa's proprietary 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

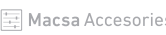
**RELIABILITY**

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 Accessories



**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**



SE Standard Environment IP31  
C-10W / C-30W

DE Dusty Environment IP54  
C-10W / C-30W

WD Washdown IP65  
C-10W / C-30W / C-40W



## Why Macsa id?

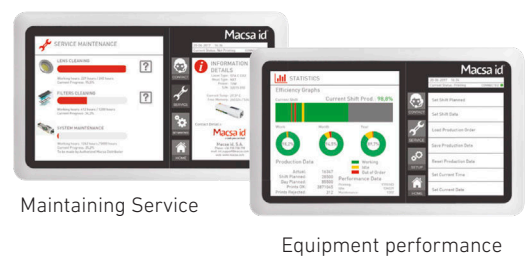
Macsa id is one of the 4 leading companies in the world in coding and marking lasers. It offers the widest range of lasers to code and mark both in the productive sectors (food, beverages, pharmaceutical, healthcare, cosmetics ...) as well as in the industrial ones (industry, automotive, aeronautics,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



**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 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.