

SmartLase C Series

CO₂ laser coders ■ ■ ■

POWER UP your packaging line



Re-inventing the laser technology for the coding needs of your industry:

- > **Fast**
More than 100,000 products coded per hour
- > **Innovative**
Up to 99.9% availability ratio with easy integration
- > **Robust**
Extended coder life time by 30%
- > **Customized**
Wide range of industry-specific models



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a **DOVER** company

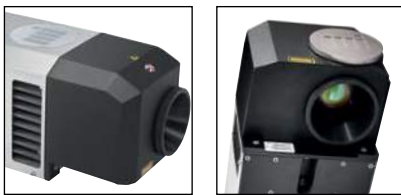


Fast

More than 100,000 products coded per hour

Introducing new, patented “*SmartLase Code Technology*” embedded into all SmartLase models. This innovative advance includes single and universal fonts as well as algorithms capable of scribing impeccable lines, curves and points faster than ever before. It delivers the following key benefits:

- > 30% greater printing performance with best scribing quality compared to market standards:
 - For the beverage industry: Output rate increases from 1,200 to 1,800 bottles/min.
 - For the food industry: Character printing capacity of one code increases from 30 to 120 characters, for improved traceability and anti-diversion.



Innovative

Up to 99.9% availability ratio with easy integration

- > Modular design for efficient integration in all production lines and versatility via customer configurable features:
 - 3 separate and compact modules: controller, laser head and user interface.
 - Switch between 90° and 0° head configuration in 10 minutes.
 - Change of scan head module in 10 minutes without alignments.
 - Pointing diode and integrated laser power meter option facilitate diagnostics.
 - Wide range of accessories: fume extractor, stand, guarding tunnel, photocell, encoder, alarm beacon, etc.
- > Intuitive touch screen user interface to reduce operator training and human errors:
 - WYSIWYG 7-inch remote touch screen. The user interface is integrated into the controller in the 10 watts version.
 - Job and file transfers through USB port.
 - Web user interface capability with quick access through PC.
 - Ability to adjust contrast and code position when printing.





*SL C150 10W model controller equipped with integrated user interface

Robust

Extended coder life time by 30%

The SmartLase range is designed to deliver unmatched reliability and performance in very demanding production environments. Key features include:

- > Laser head benefits from an IP55 dust/humidity protection rating as standard.
- > SmartLase operates up to 45°C (113°F) due to head and controller optimized cooling flows. No plant air is required for cooling.
- > Extended longevity of the laser source due to reduced laser duty cycles.
- > Optional IP65 head for very dusty environments.
- > Over 80% recyclable materials in line with global green initiatives (eg. WEEE directive).

Customized

Wide range of industry-specific models

SmartLase C series offers the right configuration for each industry, always providing a solution whatever the rate, size and substrate of the product (wide choice of lenses, scan heads and laser sources). Market solutions:

- > **Food industry:** SL C150, SL C350 and SL C350 L are designed for markets such as frozen food, chocolate confectionery and dried process food that need to code paper-based containers. SmartLase models are capable of covering coding and scoring applications simultaneously on flexible packaging.
- > **Beverage industry:** SL C150 S and SL C350 S are designed to code on PET, reducing the risk of piercing containers, even lightweight thin-walled bottles. SL C350 is perfect to code on labels.
- > **OEMs:** SmartLase C series features web user interface capability, 0/90° laser head configuration, pointing diode for easy integration into packaging machines and are compliant with ISO 13849 Pld and PackML.



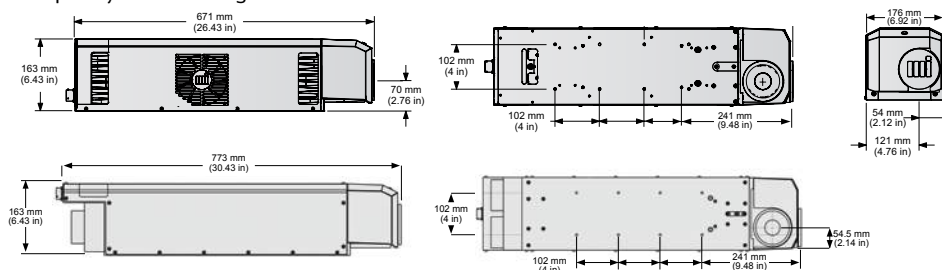
SmartLase range specifications ■ ■ ■

Model name Laser tube power	SmartLase C150 / C150 S 10 W sealed CO ₂	SmartLase C350 / C350 L / C350 S 30 W sealed CO ₂
Production line speed (max.)	125 m/min.*	250 m/min.*
Marking speed (max.)	900 characters/s	1,800 characters/s
Print features	- Number of text lines: limited only by character height and allowable print area - Character height: from 1 to 500 mm - Choice of characters: Chinese, Latin and Unicode fonts - Wide selection of languages: English, French, Spanish, German, Italian, Portuguese, Brazilian, Chinese, Korean, Japanese, Russian, Arabic, etc.	
Standard coding area and focal distance (mm)	- Lens 100 x 100 / fd 140 - Pointing diode function standard offering on all laser heads	
Operations	7" WYSIWYG color touch screen, QWERTY or AZERTY virtual keyboard, navigation via icons including on-line help file - Message storage capacity of 500 jobs - Upload and download of messages via USB Flash Drive - Quick connect/disconnect of laser head and accessories (photocell, encoder, alarm) - Standard I/O: Ethernet interface, USB, encoder, sensor, extractor controls, alarms, remote interlocks (dual channels)	
Other characteristics	2 separate modules: controller including the user interface, and laser head - Controller weight: 10.6 kg - Head weight: 17.3 kg - Dust/humidity protection: IP54 controller and IP55 laser head	3 separate modules: controller, laser head and optional user interface - Controller weight: 10.2 kg - User interface weight: 2.1 kg - Head weight: 18.5 kg - Dust/humidity protection: IP55 laser head, IP54 controller and IP54 user interface
Options	- Controller: stainless steel - Head: stainless steel and protected coated materials - User interface: protected coated materials - Operating temperature range: 5 to 45°C - Humidity: 5 to 90% non-condensing - Interconnecting cable length: controller to laser head: 6 m - Electrical power supply: 100-240 V with automatic switching - Frequency: 50/60 Hz - C350 Power consumption 7 A; 700 VA - C150 Power consumption 3 A; 300 VA	
Accessories	- Coding area and focal distance (mm): Lens 55 x 55 / fd 80 - Lens 70 x 70 / fd 100 - Lens 120 x 120 / fd 175 - Lens 155 x 155 / fd 220 - Lens 205 x 205 / fd 290 - Remote user interface - IP65 laser head (no plant air using FS400 cooler.) Optional IP65 Adapter kit available for plant air solution - Integrated laser power meter - Optional 90° printhead cable adaptor 9-meter interconnecting cable length. 3-meter cULus listed interconnecting cable. 6-meter option also available - Industrial interface option board: RS-232/422 connectivity, 20 configurable operator I/O (12 inputs / 8 outputs), 2 voltage free relays, USB (optional scanners) - Signal tower relay board	
Software	- Dust and gas extractor, stand (controller, laser head and user interface), guarding tunnel, photocell, encoder, alarm beacon - Web user interface provided as standard - Compatible with CoLOS Create Professional and CoLOS Enterprise - Logo creation with CoLOS Graphics - Compatible with Weihenstephan standard	

* Depends on the size and the complexity of the message as well as the nature of the surface marked

Laser head

SL C150 / SL C150 S
SL C350 / SL C350 S
SL C350 L

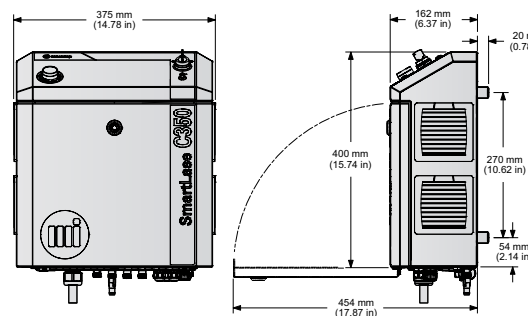


Laser head

SL C150 IP65
SL C350 IP65

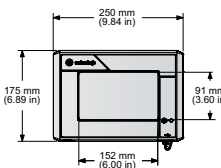
Controller

SL C350 / SL C350 S
SL C350 L / SL C350 IP65

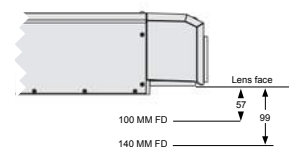


User interface

SL C350 / SL C350 S
SL C350 L



Lens focal distance FD:



To learn more, visit www.markem-imaje.com



We reserve the right to amend the design and/or specifications of our products without notice.

Markem-Imaje
Global Sales & Marketing Division
9, rue Gaspard Monge
B.P. 110
26501 Bourg-lès-Valence Cedex - France
Tel: +33 (0) 4 75 75 55 00
Fax: +33 (0) 4 75 82 98 10



a DOVER company