D310-Series

CO_2 Laser Marker

Super-compact vector laser for consistently clear coding on a wide range of materials.

The D310 Series features flexible, compact, and lightweight 30 W laser markers, ideal for meeting today's high-speed marking needs on aluminum, paper, cardboard, glass, PET, and other plastics. It is typically used to create codes that include multiple elements such as text, shapes, images, dates, times, and machine-readable codes, using a variety of 1D and 2D code formats, including QR codes and Data Matrix codes. It can produce an unlimited number of lines of text and images in any orientation (including multilingual characters such as Unicode) without the need for fluids or consumables.

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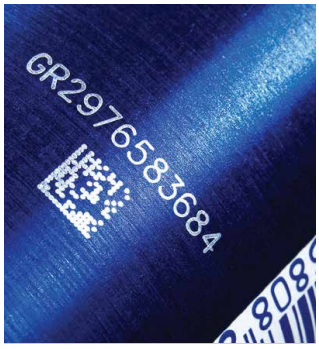
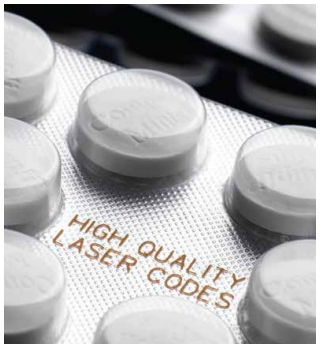
CODING AND MARKING

EASY TO INTEGRATE, EASY TO USE, AND COMPLIANT WITH INDUSTRY REGULATIONS

- The D310e is available with a vertical mounting option for space-constrained environments and with an optional IP55 protection rating for harsh operating conditions.
- The electronics integrated into the laser head eliminate the need for an additional external unit.
- LM Editor software, included with every laser, provides an intuitive operator interface and an easy-to-use editor for creating and managing labels. It also enables fast updates of information when frequent format changes are required.
- Easy to install, even on existing production lines, with an integrated controller.
- Designed and tested in accordance with international standards for electromagnetic compatibility (EMC), electrical safety, and laser safety.
- Designed with an integrated safety interlock certified to ISO 13849-1, Performance Level D (PLd).
- Optional DPX fume extractor available to improve cleanliness, performance and laser lifespan.





TECHNICAL SPECIFICATIONS D310

Coding functions	D310	D310e
Characters per second *	1,000	
Line speed *	350 m/min	
Number of text lines *	unlimited	
Characters	Multilingual, including Unicode	
Marking area (mm)	58x58 - 68x68 - 84x84 - 102x102 - 136x136 - 180x180	
User interface language	English, Italian (Selectable by the operator)	
Operating system	Laser: Linux | User Interface: Windows 10-based	
User interface software	LM Editor	
Laser specifications		
Laser tube type	Black	Red / Blue
Laser power	30 W	25 W / 20 W
Laser wavelength	10.6 µm	10.2 µm / 9.3µm
Power consumption (max)	1,000 VA	
Integrated aiming range	No	Yes **
Axial Option	No	Yes **
Laser source lifespan	30,000 h (MTBF)	
Laser housing	Stainless steel and anodized aluminum	
Laser class	Class 4	
Weight and dimensions	21 kg - 170x170x650 mm	25 kg - 200x180x800 mm
Inputs and Outputs		
Product detection inputs	NPN / PNP / 24V Sensor	
Product speed detection	Differential Encoder / NPN / PNP	
Input signal	Laser start / mark control / mark on / programmable input / user input	
Output signal	Laser Ready/Busy; fume extractor control (and compressed air for the D310e); user output; beacon	
Interface	Ethernet - 1 x RJ45	
Optional User interface	10" touchscreen ControlPanel (IP65) - Windows 10 PC/HMI	
Environmental Conditions		
Laser system	Standard (fan-cooled)	IP55 (compressed air cooling)
Operating temperature	5-45°C	
Relative operating humidity	Max. 90% RH, non-condensing	
Optional	Emergency stop, signal lights, laser support, fume extractor, guards.	

* Characters per second and production line speed depend on the material's surface and the coding content.
** Aiming beam not available with 80 mm and 100 mm lenses.

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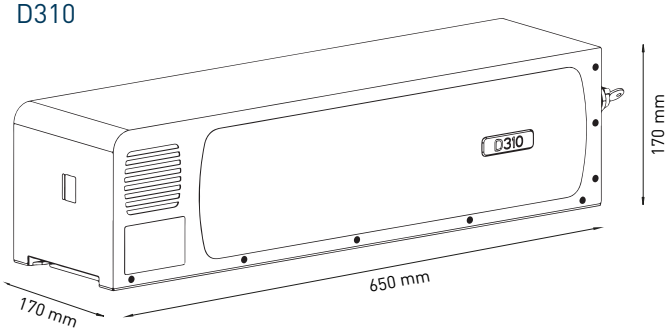
Line Strategy by nimax

Line Strategy is the application that gives you full control of your production line from a single workstation

MyNimax Service Portal is your central platform for managing your Nimax machine fleet

D310



D310e