

EOX

EOX is the CO2 Laser family for laser coding and marking applications. EOX family offers high quality permanent marking on Wide range of materials including cardboard, ceramic, wood, plastics and painted or anodised metal. Combining excellent laser beam quality and advanced control unit, EOX family is suitable for accurate Industrial Traceability as well as high productivity Coding applications.

FEATURES & BENEFITS

- Complete air cooled industrial compact design
- Excellent marking performance
- Integrated diagnostics, easy communication and connectivity
- Flexible scan-head configurations
- Highly Customizable
- Extreme reliability and flexibility
- State of the art components
- Embedded controller and marking software (Lighter & iMark)



LASER MARKING

EOX 10W & 30W

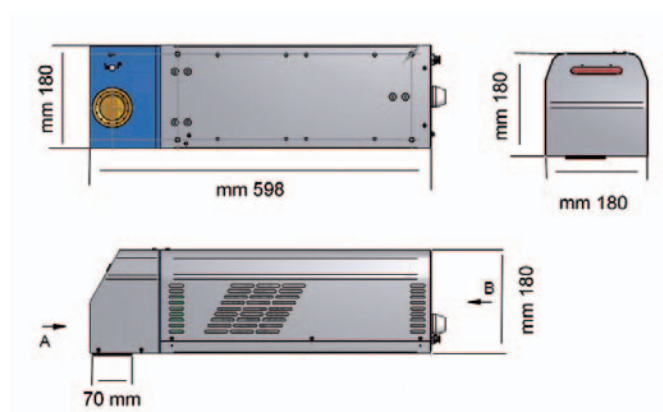
CO2 laser family is available in 2 laser emission versions: 10W and 30W with the same Marking Platform but with different mechanical configurations because of power categories. 10W versions is offered in ALL-IN-ONE case with very compact dimensions. 30W versions benefits of a compact Marking Head combined with a Control Rack equipped with power supply and control unit.

Both 10W and 30W versions provide axys controls and Encoder port for Marking On Fly (MOF) typically required for Coding applications. Advanced MOF features allows complete synchronisation between Marking head and object movement applicable even in accelerated or start-stop movement conditions. MOF increases production lines throughput with linear speed up to 75mt/min and 12.000 pcs/hour. CO2 marking system is very attractive for Coding application thanks to Low cost operation as a result of almost to no maintenance and no requirement for expensive consumables. EOX meets flexibility requirements thanks to extended marking area up to 140x140mm (focal lens depending). Reliable and safe, EOX family provides a clean technology with short return of investment and minimal maintenance.

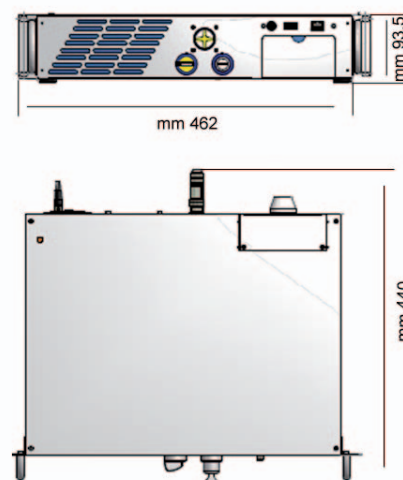
EOX 30W

	EOX 10W	EOX 30W
Wavelength	10,6 μm	10,6 μm
Average Output Power (typical)	10W	30W
Laser source	Sealed CO2	
Repetition Rate Range	10-25000 Hz	
Aiming beam	Class 2M Red Laser Diode; λ =635nm +/-5nm; 3mW	
Temperature Range	Operative 15°C to 40°C Storing -10°C to 60°C	
Cooling System	Air cooled	
Power Supply	Integrated power supply 100-240V VAC/800W	
Connectivity	Control I/O signals and RS232, Photocell, Encoder; Ethernet LAN, USB 2.0, Keyboard and Mouse, VGA, 4 Axis control	
Laser Power Consumption	Typical 400W Maximum 600W	Typical 600W Maximum 800W
Resonator Dimension & Weight	mm 180x185x634 kg 22	mm 184x180x598 kg 17
Rack Dimension & Weight	Not present	mm 88,5x430x335 kg 9
Standard marking configuration	BEX 2X; F-Theta 100mm; Mechanical Shutter, photocell and encoder cables, external connectors and SW	
Options	F-Theta 200mm; BEX 1X, 3X or 4X; Photocell; Encoder	

Objective F-Theta mm	100mm	200mm
Working area (mmxmm)	70x70	140x140

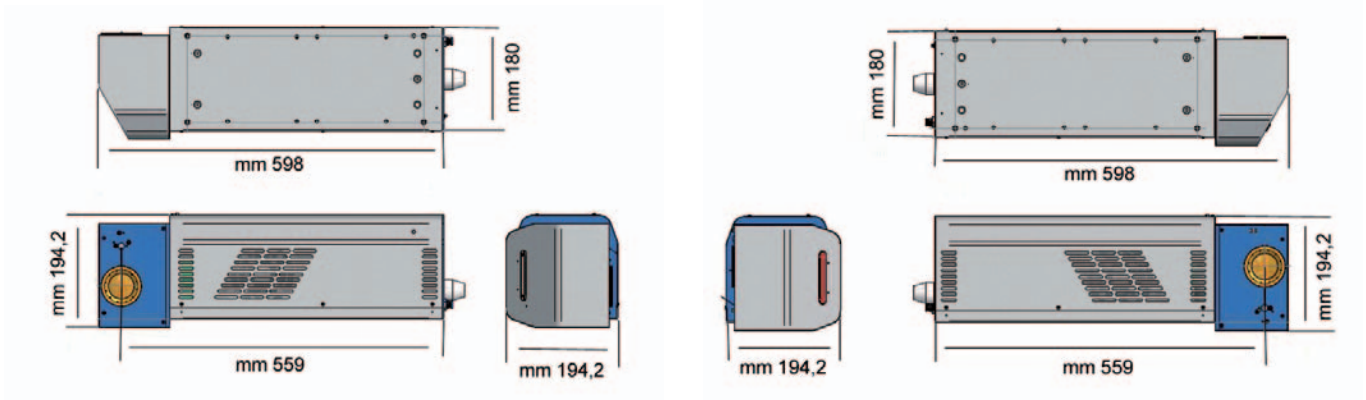


RESONATOR



CONTROL UNIT (RACK)
- only for EOX 30W -

OTHERS POSITIONING OF THE SCAN-HEAD

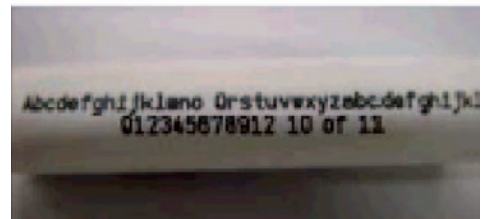


RESONATOR -90°

RESONATOR +90°

APPLICATIONS

This product has been developed to satisfy the requirements of the following reference applications:
Coding and marking applications in the food, pharma, and electronics industries.



MARKING KIT

The marking kit allows system integrators to easily interact with the laser marking system. The kit consists of two components: a PCI electronic board (iMarkPCI) that provides control signals to the laser and a powerful software (Lighter) that provides a graphical user interface to create marking layouts and automate the laser marking process through integration with legacy systems. The Lighter graphical editor creates and edits text strings, shapes, barcodes (e.g. 128, EAN/UPC, 2/5, 3/9, GS1-128, RSS) and matrix codes (Datamatrix, QR codes, micro QR codes). It can also import logos in vectorial and raster formats.

Lighter marking kit guarantees key advances in marking software functions and applications such as marking on fly, array marking, grey tones marking, mechanical axis control, rotating axis control and others. Lighter is scriptable: this means that it can be easily integrated with legacy systems through a wide range of combinations of transmission media, protocols and architectures (master/slave, client/server, ...). Lighter is extensible: its scripting features can be extended through custom-developed plug-ins to deal with specific integration-related issues (custom components or protocols, patent protected algorithms, etc.).



TECHNICAL SPECIFICATIONS IMARK MARKING KIT

User interface	Languages	English, Italian, German, Spanish, French, Polish, Japanese, Traditional Chinese, Simplified Chinese, Korean
PC compatibility	Supported OS	Windows 7 / Vista / XP
	Board slot	PCI Express (1x)
Galvo performance	Repeatability	< 10um short term positioning accuracy
	Precision	< 50um galvo positioning precision
	Long term drift	< 100um long term positioning drift
	Speed	Up to 10.000 mm/s
Character type	Font	Original single line, True Type, Open Type, Type1, Type42
	Languages	European, Asian, Arabic, Cyrillic and Hindi languages supported
	Text type	Fixed text, date and time, serial number, batch code, fully customizable code
Code type	Barcode	2to5, Code39, Code128, UPC, EAN (GS1 ready)
	Stacked	PDF417, Code16K, RSS Family
	Matrixcode	Datamatrix, QRcode, microQR
Logo image	Types	HPGL, PLT, DXF, DWG, BMP, JPG, TIF, GIF, PNG
Integration	Marking capabilities	Standing, Rotary axis, On the fly (marking in motion)
	Mechanical Axis	Up to 4 mechanical axis driving capabilities (stepper motor)
	I/O	Up to 16 digital inputs and 16 digital output fully programmable
	Encoder	Dual line high resolution encoder input (on the fly option)