IDEO – LASER MARKING SYSTEM

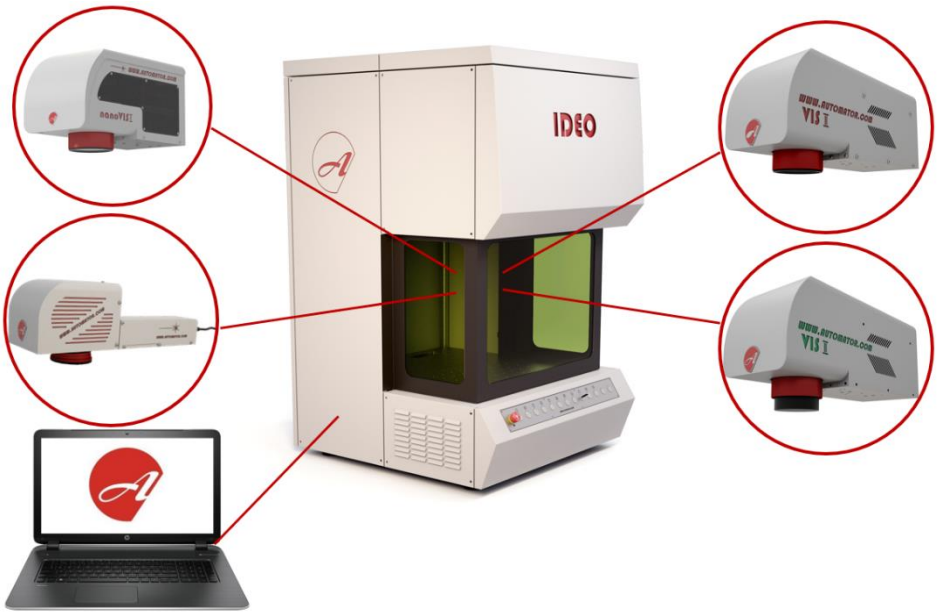
Safety class 1

The system

Laser marking system with perimeter pneumatic opening door and large loading area, equipped with standard 800 mm height software driven Z axis. Designed for medium and large productions, **IDEO** is a complete, stand-alone, flexible and easy to use marking system, which can perfectly adapt to simple applications or production lines. It is a **Class 1 safety device**. **IDEO** is equipped with a opening door with large windows on three sides, which allow the operator to check the laser marking activity, but it can also be set with the new Automator **SWYM™** (**See What You Mark**) vision system to control the marking activities live on the PC screen. Thanks to the proprietary **EuGENIUS™** marking software, it is possible to manage up to 32 optional external axes.

IDEO can set all the Automator laser marking sources: **nanoVIS^{II}**, belonging to the Automator **aWave™** products family with self-regulating frequency; **VIS^{II}**, innovative one-block laser with YVO4 source in OEM 10, 20, 30 and 40W version; **greenVIS^{II}**, innovative one-block green laser in 3, 5 and 10 W versions; **FYBRA^{II}**, 21, 31 and 52W active fiber laser. The marking software allows the operator to mark anything, even complex logos, serial numbers and datamatrix. **IDEO**, requires a PC, not included.

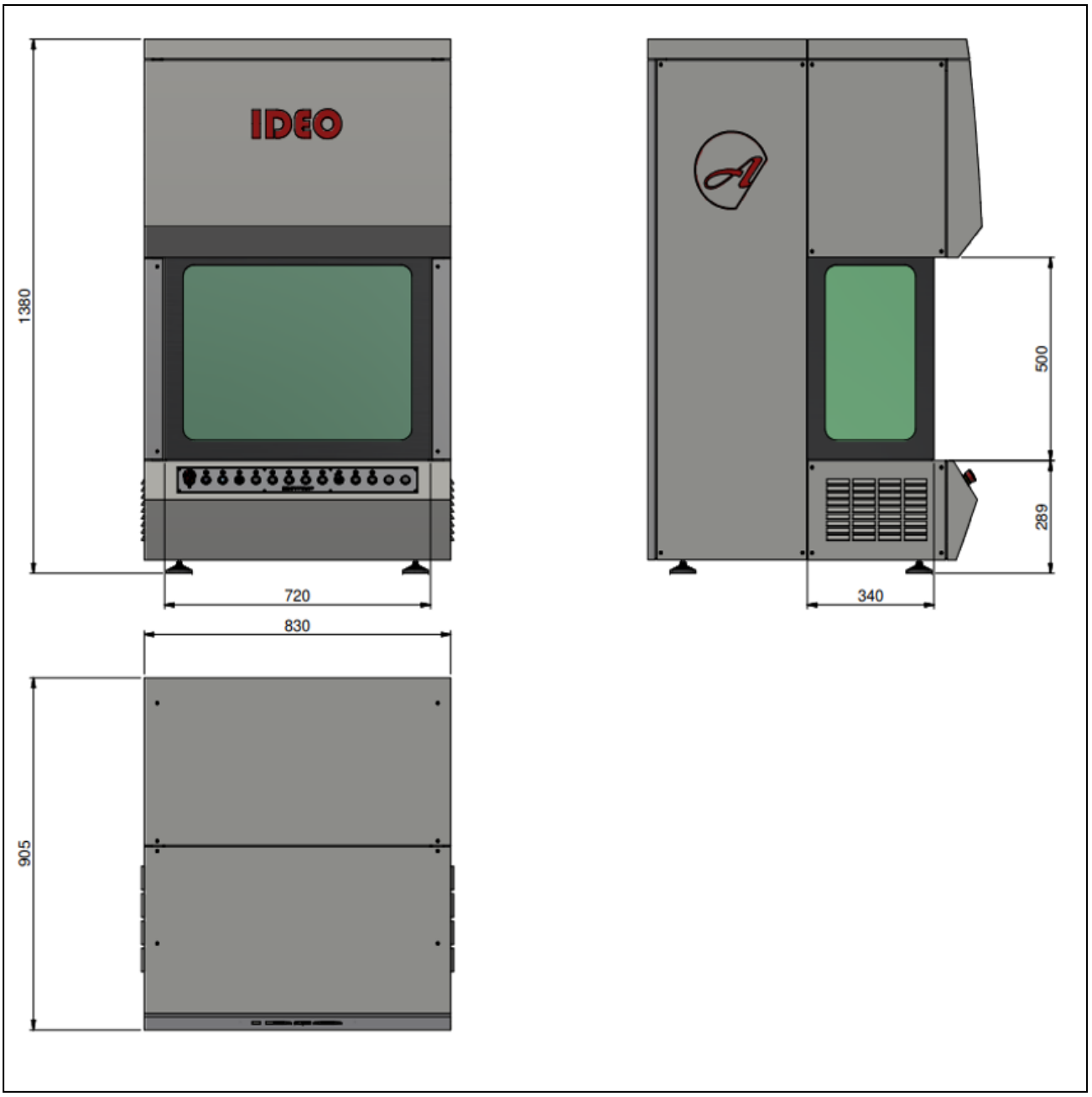
Configurazione



Optionals

Focal distance detecting devices, loading area LED lighting system, rotating Theta axis, rotary table, up to 32 external axes.

Technical drawings



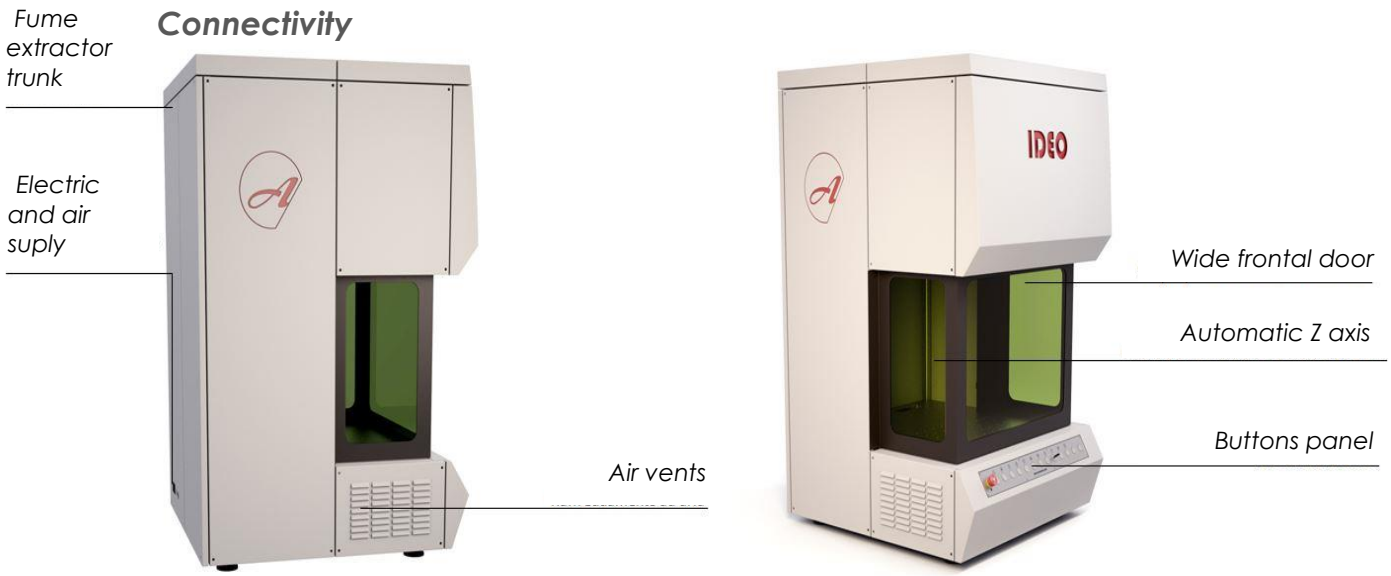
Technical data

Overall dimensions: LxWxH (mm | inches):	830x905x1380 | 32,6x35,6x54,3
Weight (kg | lbs):	200 | 441
Frontal door opening (mm | inches):	500 | 20
Loading area (mm | inches):	700x400 | 27,5x15,7
Markable piece maximum height with F160 lens(mm | inches):	500 | 20
Optical isolator:	yes
External power supply:	100/240V – 50/60Hz
Z axis height (mm | inches):	800 | 31,5
External axis power supply:	software driven step motor
Working temperature (°C | F°):	+15 / +39 |
Store temperature (°C | F°):	+5 / +60 |
Humidity (%):	30 - 85
Cooling system:	forced air
Connectivity:	power supply, air and RJ45
Directive 2011/65/EC - Restriction of Hazardous Substances (RoHS):	respectful
Safety class:	1
MTBF (Working hours):	140.000
IP Certification of the cover (CEI70-1)	30
External axis available:	up to 32

Red pointer diode and focal distance detection

Inside the enclosure, the laser source is set with an auxiliary visible red light at 632 nm (class III), with an about 2 mW power, used as a pointer, to preview the working area directly on the surface of the piece to be marked. A second pointer at the side of the source is used as a focal distance detection tool. When the red points of the two pointers touch, the focal distance is reached.

Connectivity



Available lenses

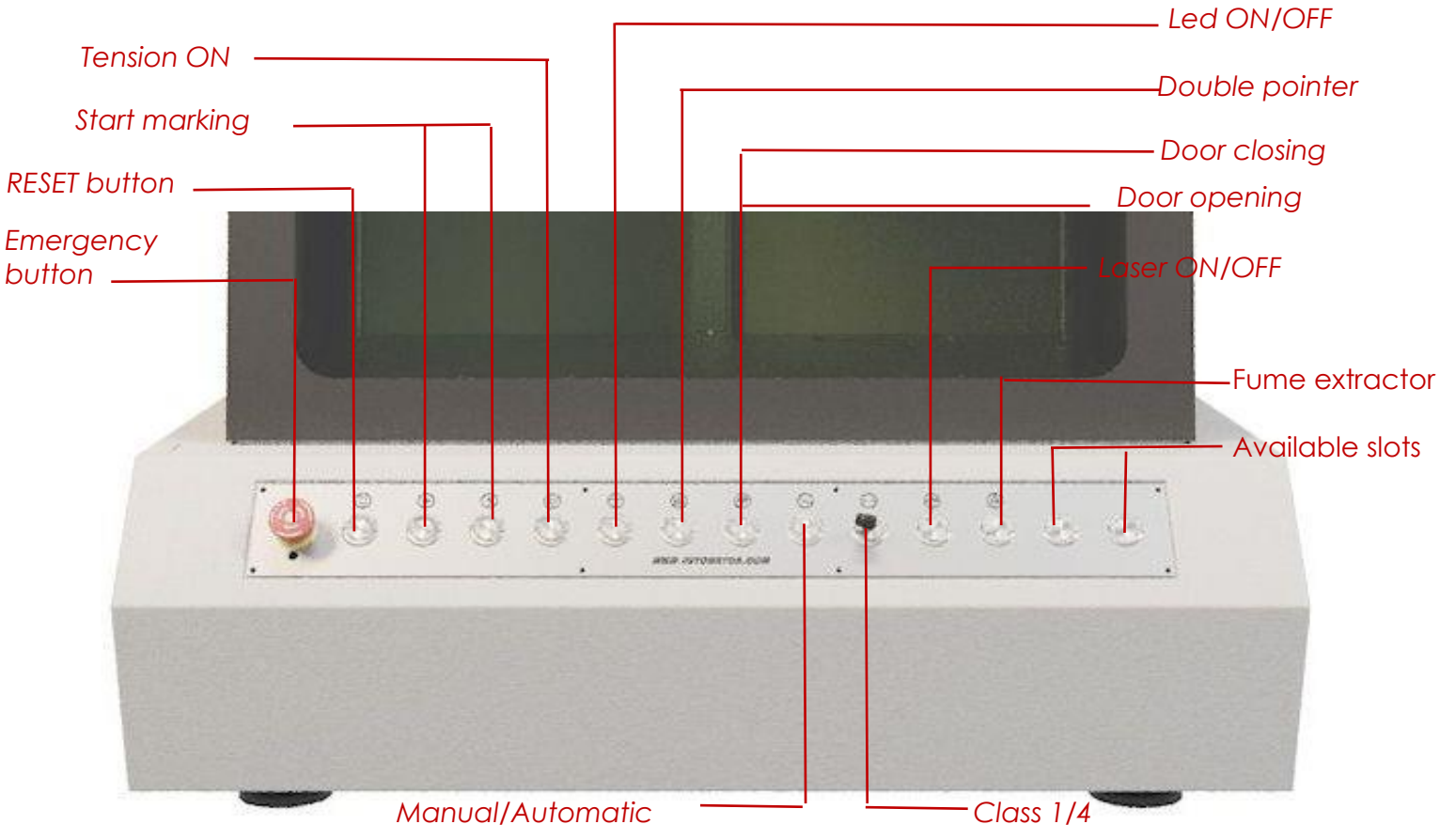
Standard F160	Flat field – marking area 110x110 mm	4,3" x 4,3"
F100	Flat field – marking area 60x60 mm	2,3" x 2,3"
F254	Flat field – marking area 155x155 mm	6,1" x 6,1"
F330	Flat field – marking area 220x220 mm	8,6" x 8,6"
F420	Flat field – marking area 300x300 mm	11,8" x 11,8"

Focal distances

Standard F160	191 mm • 7,51"
F100	140 mm • 5,51"
F254	302 mm • 11,9"
F330	400 mm • 15,78"
F420	500 mm • 19,68"

Console

IDEO sets a frontal console with function buttons and LED signals and a movable arm that can be set on either side of the enclosure to allow the operator to manage marking activities.



Softwares

AURA laser system can mark everything by the original Automator **EuGENIUS™** laser marking software. **EuGENIUS™** Software has been projected and developed by Automator highly specialized team, consolidating the marked requests in the long term marking knowhow of more than 70 years in marking.

Versatile in the applications and friendly to use, even by operators without highly technical specific training, such as CAD knowledge.

- Multilanguage menu
- Management barcode "Datamatrix", 2D code, QR code, PDF Queues
- Easy import of vector drawings, DXF
- Easy import of raster graphics, BMP, JPEG, .JPG, GIF
- Complete set of laser parameters such as speed or power laser
- Texts, Text arcs, text on curved lines,
- Lines, rectangles, polygons, circles and arcs
- TTF Font ® (windows property)
- Graphic preview
- Texts with date, serial numbers, shift codes and year/month/day
- Multi fillings or single profile markings
- Templates (object to be marked as background)
- Proportion scale, move, rotate, group creation of each object on the screen
- Quick Test for an easy identification of the best laser parameters
- Automation & object tiling
- External axis commanded by software
- Shutter control
- Easy diagnosis of troubleshootings

Communication protocols
Available Communication Protocols: by TCPIP and RS232. The protocol depends by the motherboard installed on the laser:

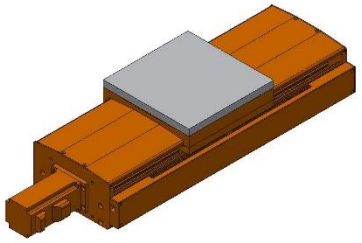
- In the BASIC and STAND-ALONE version (connected to the PC that runs the software) communicates with the Remote Interface Protocol. This Protocol can upload programs, update fields inside the program and controll the system's status

Accessories – CleanAir Fume Extractor

AURA can set a **CleanAir** fume extractor for laser marking activity. During marking operations, a large variety of harmful smokes, dust or gas materials that can be very dangerous for the human body. **CleanAir** is perfect for protecting the health of the operator: it adopts a multi-layer filtration system and high efficiency filter elements (composed of HEPA filtration part) and can make stepless precise air volume adjustment according to the amount of pollutant dusts production. It can effectively filter and intercept particles on 0.5 micron and absorb toxic gases, reaching a purification rate of 99% (HEPA). The clean air, after purification, can be directly discharged indoors.

Accessories – Automatic X axis

IDEO can also be used with an additional automatic X axis, which allows the laser marking head to be moved longitudinally to be able to mark with greater freedom.



Accessori – Banco di sostegno

IDEO can be equipped with an aluminum support structure to reach the ergonomic height of the load, also available with wheels for moving the entire structure. Dimensions LxWxH, without wheels, 830mmx800x660 mm, with wheels 830mmx800mmx800 mm.