REX^{II} - Marking Laser System

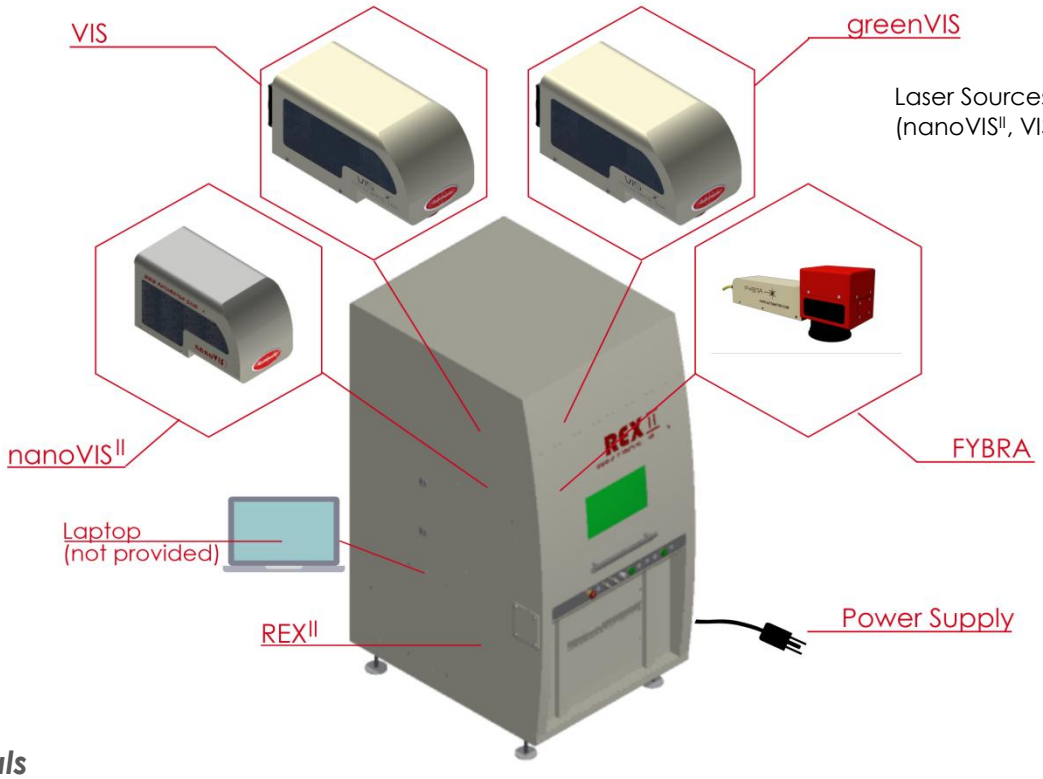
Safety class 1

System Overview

Laser marking system with manual opening front door and large loading area, with standard X/Y/Z software driven axis. Designed for medium and large productions, REX^{II} is a complete, stand-alone, flexible and easy-to-use marking system, that can perfectly fit both simple or massive production line applications. It's a Safety Class 1 device. On the front door a wide window allows the operator to control the laser marking activity, but it can be set with the new Automator **SmartMark™** vision system for checking the marking activity directly in the PC screen. The standard X, Y and Z axis are software-divren, but it can set up to 32 external axis. The Automator **PURA1** fume extractor is set as a standard feature.

REX^{II} sets all the Automator marking laser sources: **nanoVIS^{II}**, belonging to the new family of Automator's **aWave** products with frequency auto-control; **VIS**, innovative one-block laser with YVO4 source in OEM version 10, 20, 30 and 40W; **greenVIS**, innovative one-block green laser in version 3, 5 and 10W; **FYBRA**, the new powerful fiber laser with 22, 33 and 54W. The managing software allows the operator to mark anything, even complex logos, serial numbers and data matrix. REX^{II}, requires a PC, not included.

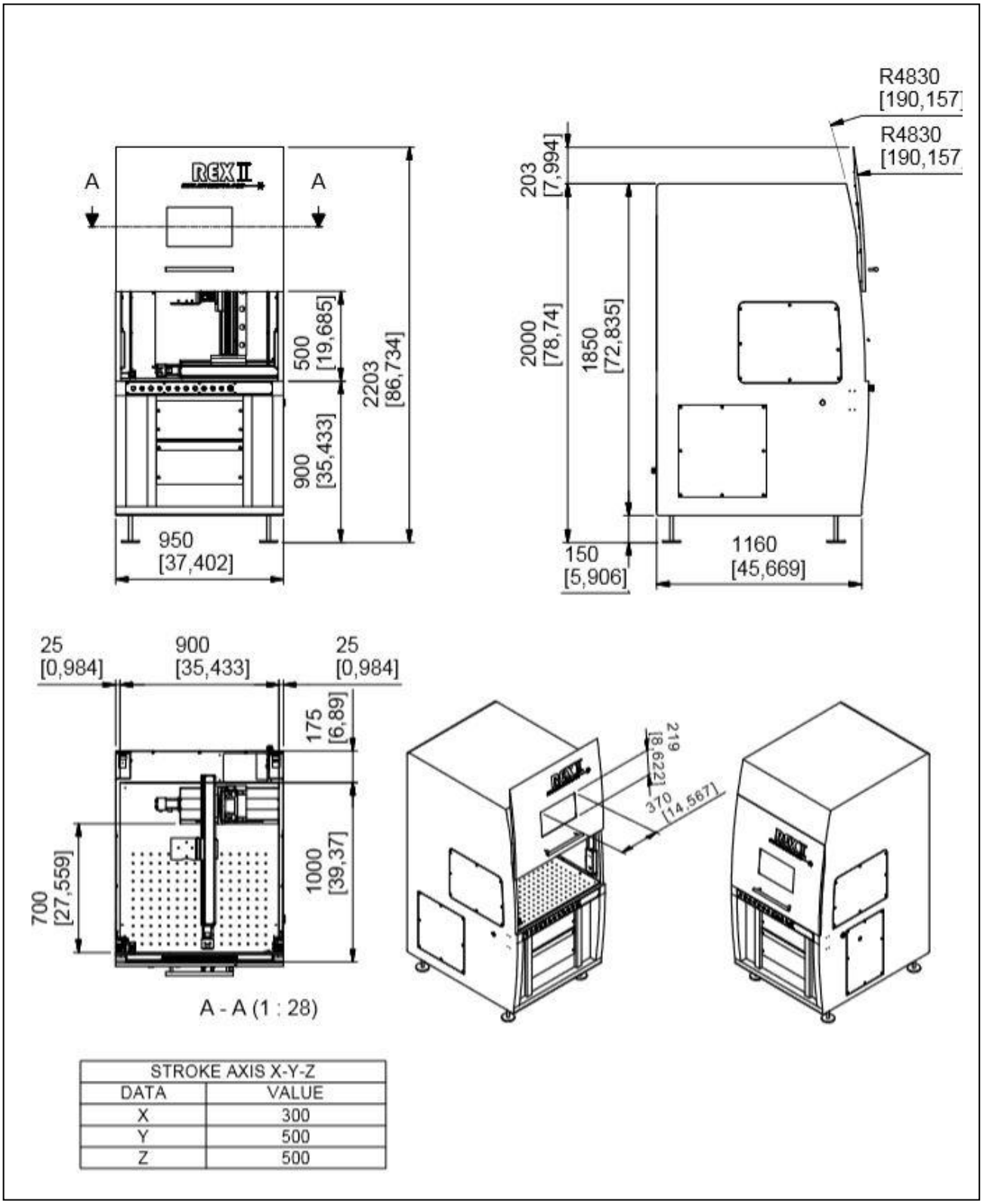
Configuration



Optionals

Focal length detection devices, loading area LED lighting system, rotating Theta axis, rotary table, up to 32 available external software driven axis.

Technical drawings



STROKE AXIS X-Y-Z	
DATA	VALUE
X	300
Y	500
Z	500

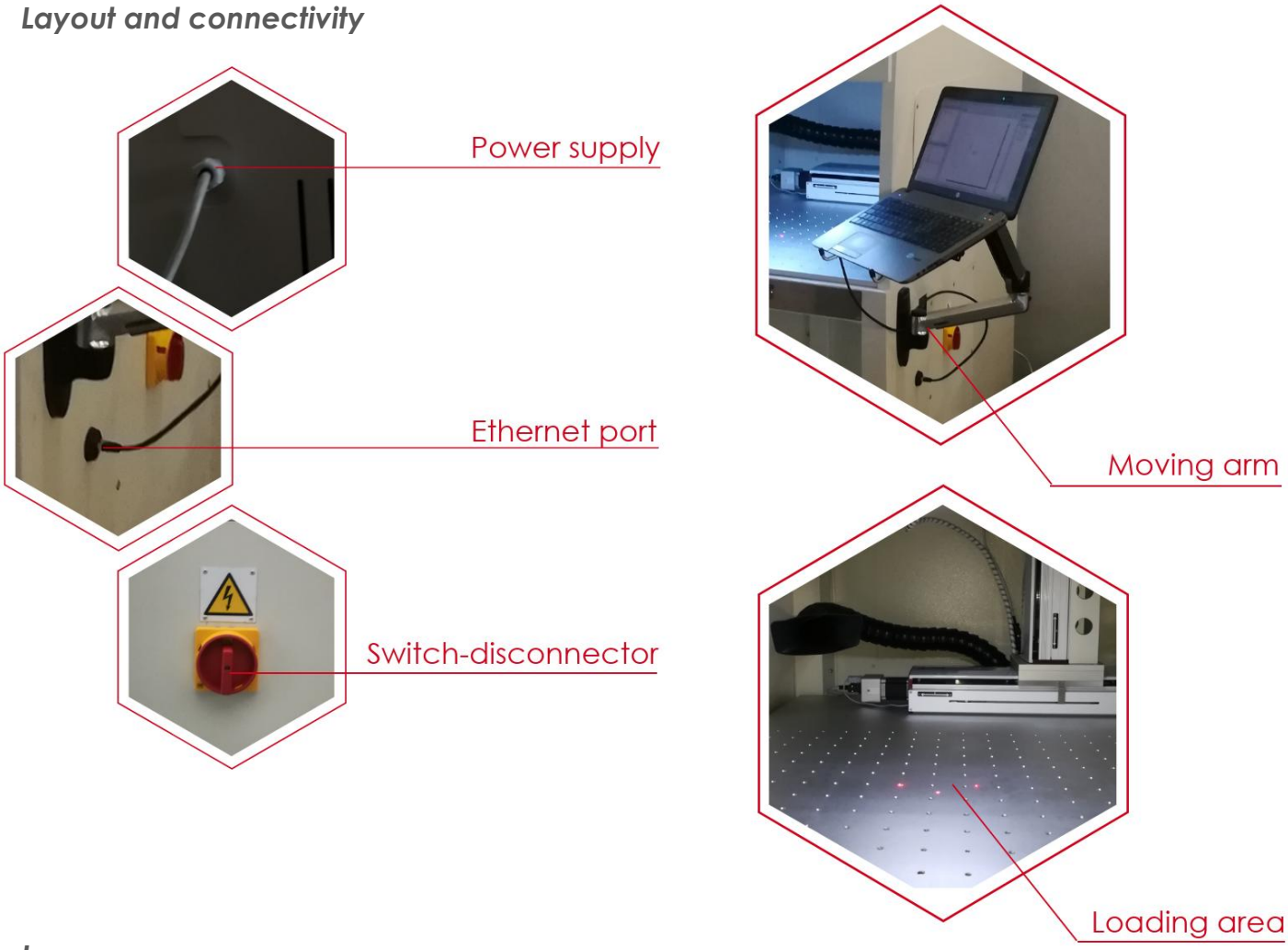
Technical data

Overall Dimensions: LxWxH (mm • in):	2020x1050x1300 • 79,5x41,3x51,20
Weight (kg - lb):	408 • 899,50
Maximum door opening height (mm • in):	500 • 19,68
Loading area (mm • in):	700x900 • 27,5x35,4
Maximum markable item height (mm • in):	With standard lens F160 = 400 • 15,74
Optical Isolator:	YES
External power supply:	100/240V 50/60Hz
X/Y stroke (mm • in):	300x500 • 11,81 x 19,68
Z axis standard height (mm • in):	500 • 19,68
External axis drive mode:	Step motor software driven
Operating temperature (°C • °F):	+15 - +39 • 52 - 102
Store temperature (°C • °F):	+5 - +60 • 41 - 140
Humidity (%):	30 - 85
Cooling system:	Forced air cooled
Connectivity:	Power supply, air supply, passwall, USB port
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
Available axis:	Up to 32

Red Pointer Diode

Inside the enclosure, the laser source produces a red, visible light, known as pointer, which allows visualizing the working area directly on the surface of the object, without altering it's nature or starting the marking.

Layout and connectivity



Lenses range

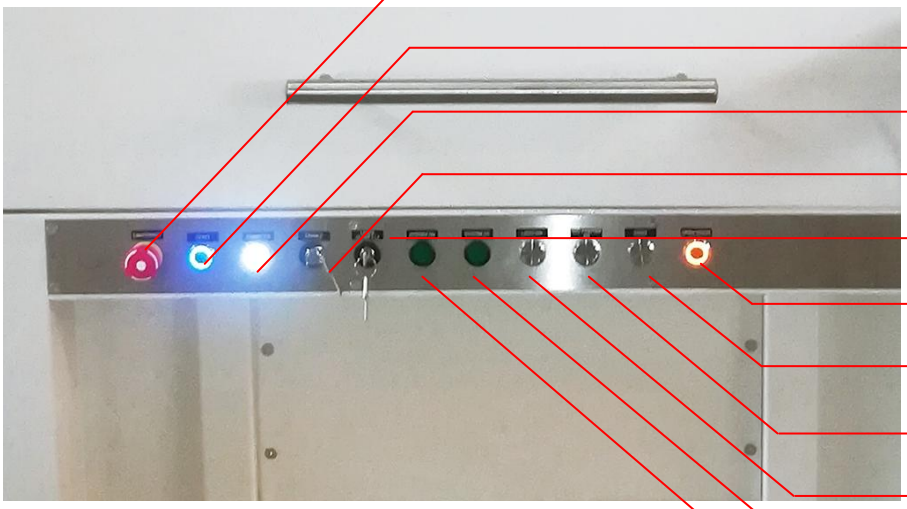
Standard Lens F160	Flat field focus – marking area 110x110 mm • 4,33"x4,33"
Lens F100	Flat field focus – marking area 60x60 mm • 2,36"x2.36"
Lens F254	Flat field focus – marking area 155x155 mm • 7"x7"
Lens F330	Flat field focus – marking area 220x220 mm • 8,66x8,66"
Lens F420	Flat field focus – marking area 300x300 mm • 12,59"x12,59"

Focus lenghts

Lens F160 (mm • in)	191 • 7,51
Lens F100 (mm • in)	140 • 5,51
Lens F254 (mm • in)	302 • 11,9
Lens F330 (mm • in)	400 • 15,78
Lens F420 (mm • in)	500 • 19,68

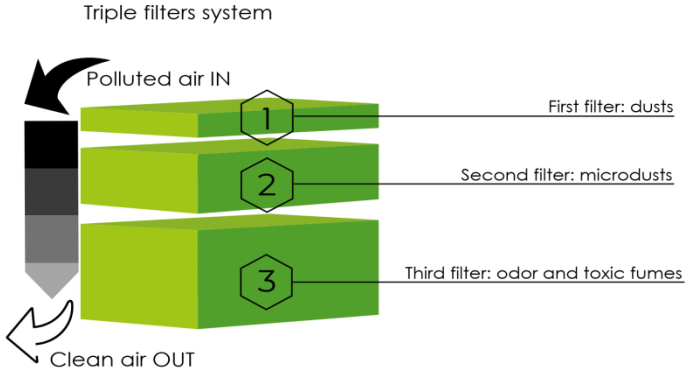
Console

REXII sets a front Console area with function buttons and LED signals and a moving arm that can be set on both sides of the enclosure, for allowing the operator to manage the marking activities.



PURA1 – Fume extractor

REXII sets a standard PURA1 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. PURA1 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.



Available Softwares

REX^{II} 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

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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

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