



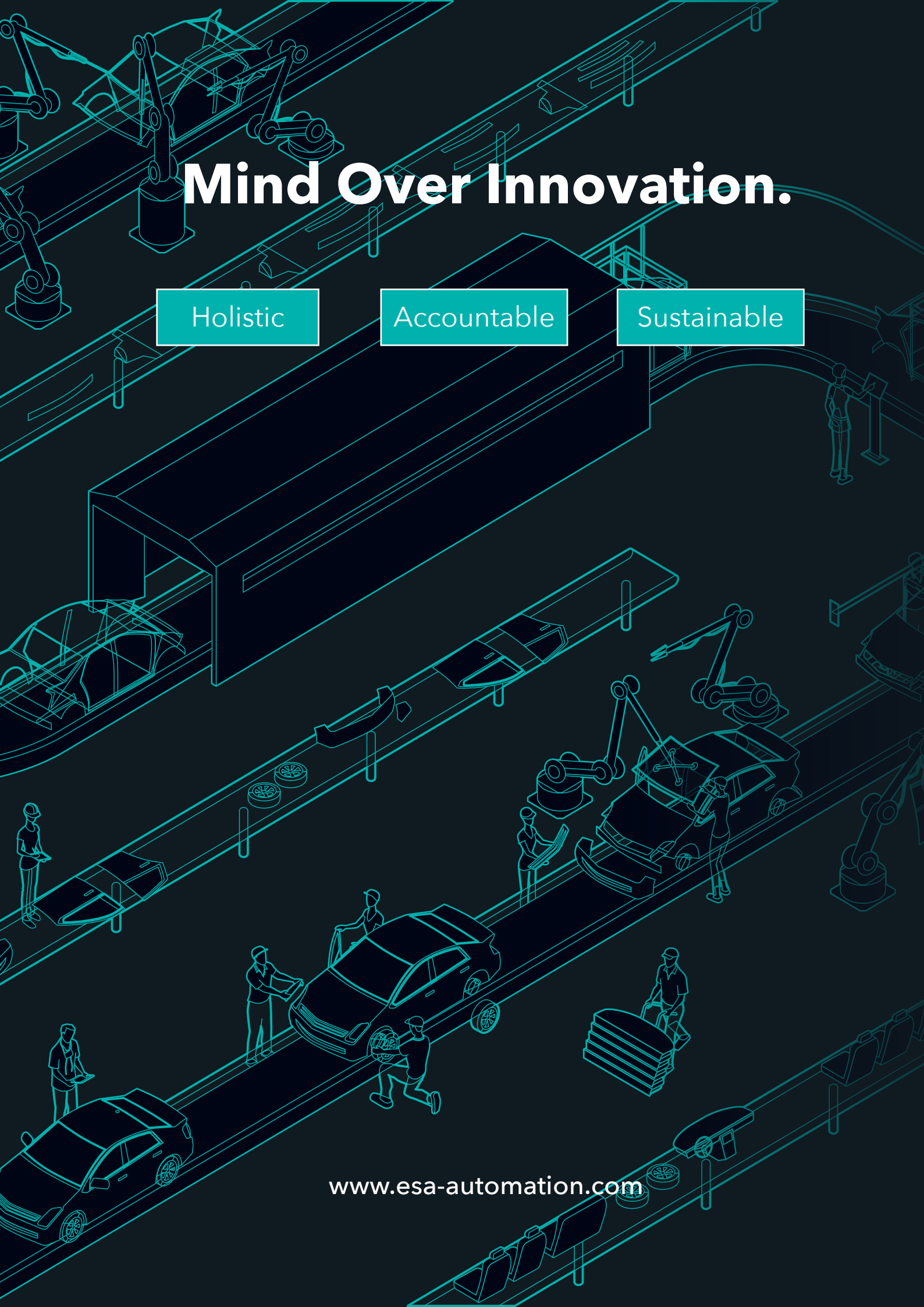
Mind
Over
Innovation.



LUMIA

Modular Solution

esa-automation.com



Mind Over Innovation.

Holistic

Accountable

Sustainable

www.esa-automation.com

Headquarters & Branches

Production & Development center

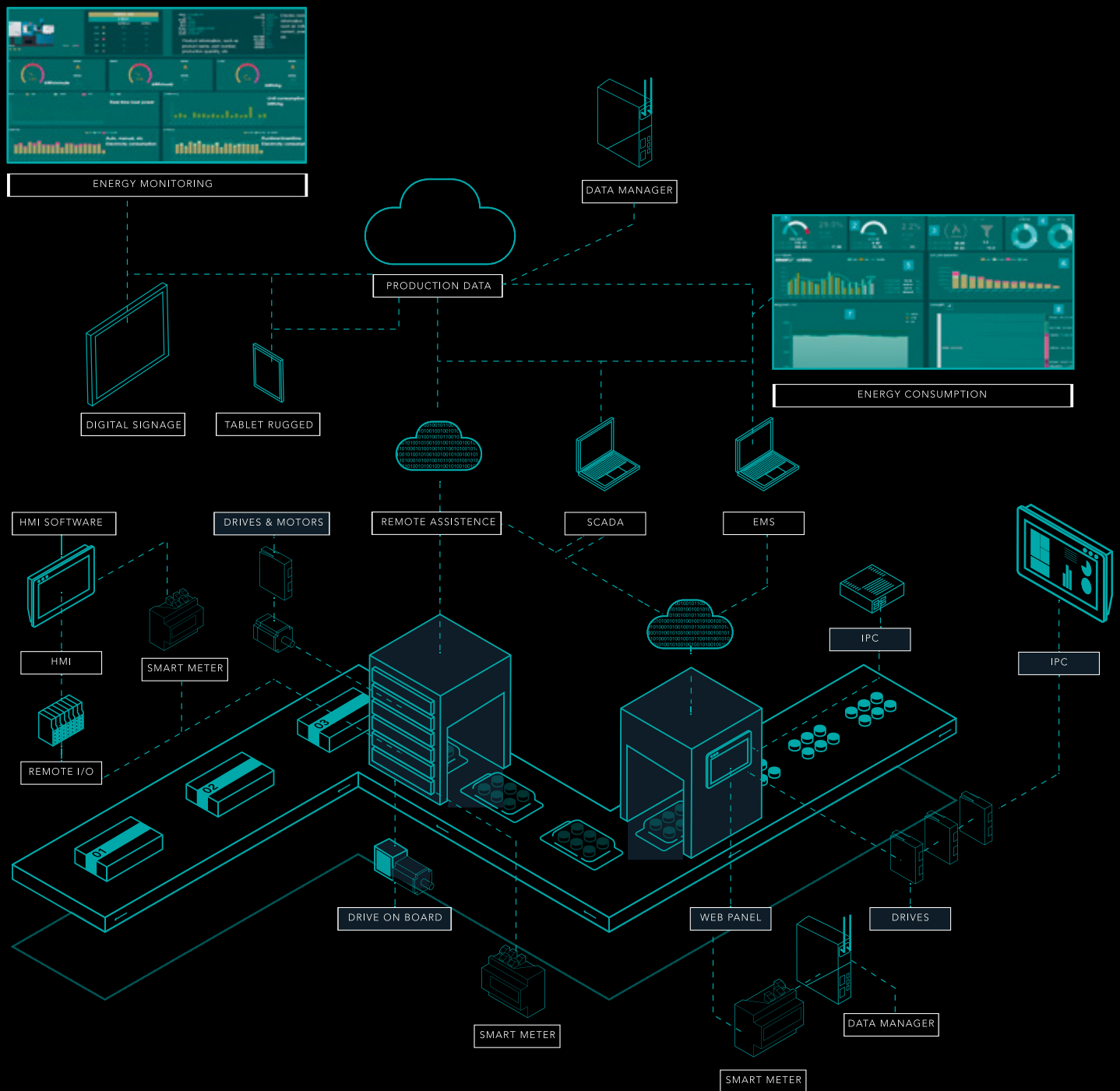
ISO 9001:2015
SINCE 1994

- + Italy
- + Germany
- + Spain
- + India
- + China



Digital Automation Mechatronic Innovation

IT meets OT



Markets

FOOD & BEVERAGE



WOOD



CHEMICAL & PHARMACEUTICAL



PACKAGING



AUTOMOTIVE



MARINE



Motion & Turnkey Applications

- + Axes Interpolation
- + Flying cut
- + Waterjet
- + Glass
- + Tooling
- + Robotic
- + Laser
- + Stone
- + Metal
- + Woodworking
- + Plastic



Lumia

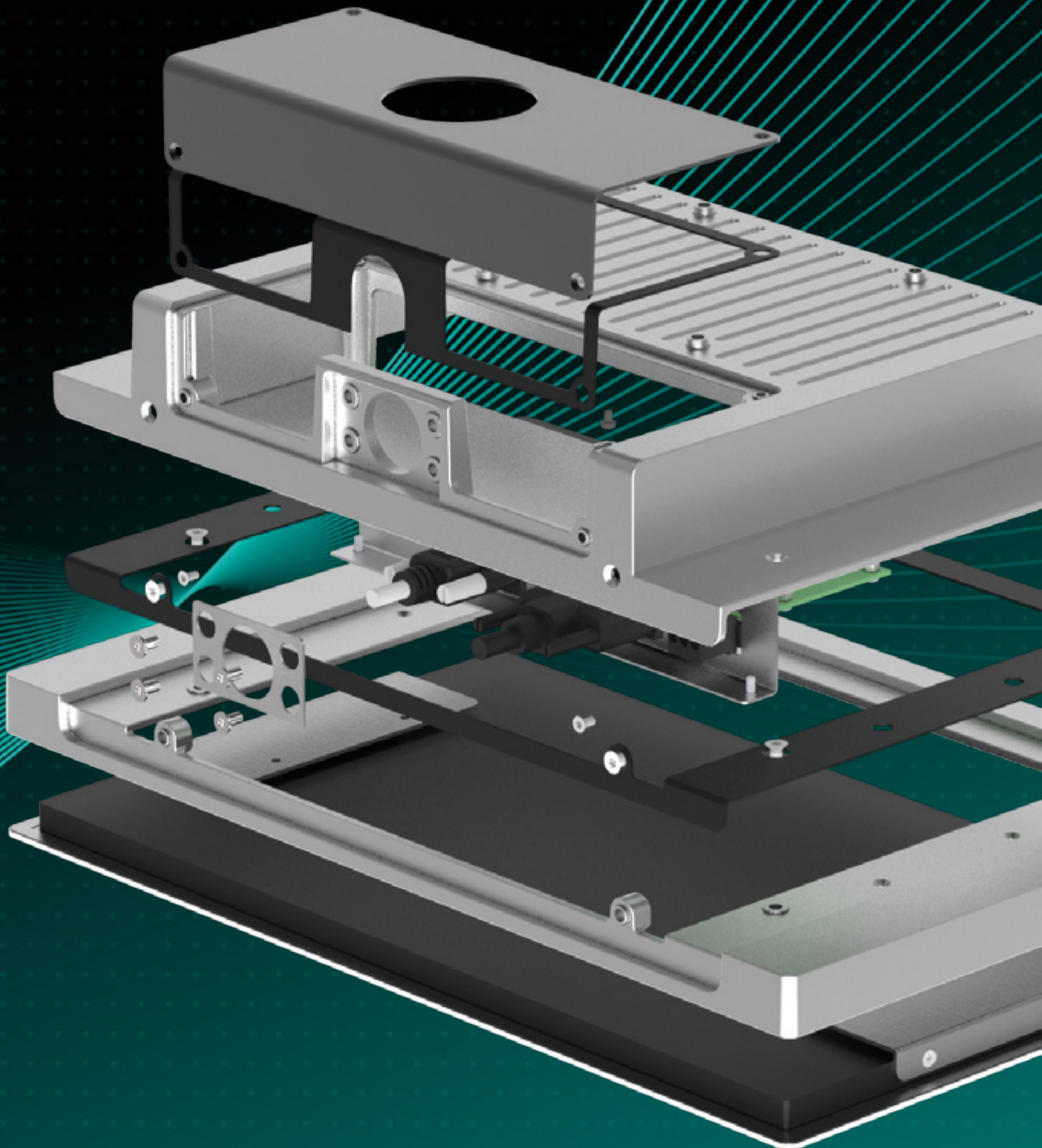
PANEL | VESA | ARM
Solution

LUMIA - Modular solution

With LUMIA the customer can select the electronic backside kit including: Embedded Linux Cortex ARM architecture, x86 (32 and 64 bit) and Monitor.

LUMIA is PANEL, VESA, ARM mounting from 7" up to 27" display and capacitive touchscreen.

Its modular solutions give extreme personalization based on customer needs.



LUMIA

DISPLAY SOLUTIONS

7"
Panel



10.1"
Vesa | Panel



15.6"
Vesa | Panel | Arm

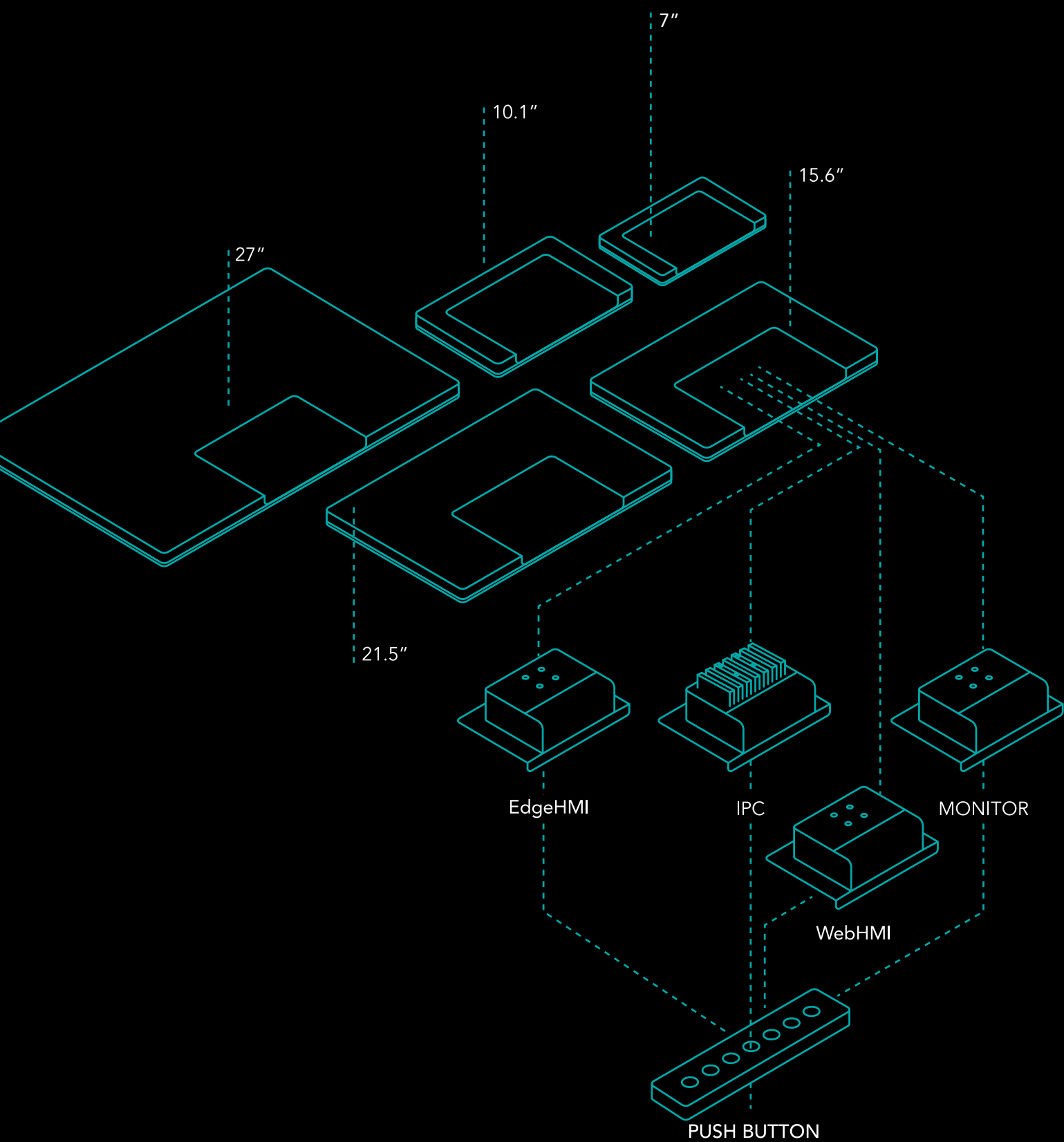


21.5"
Vesa | Panel | Arm



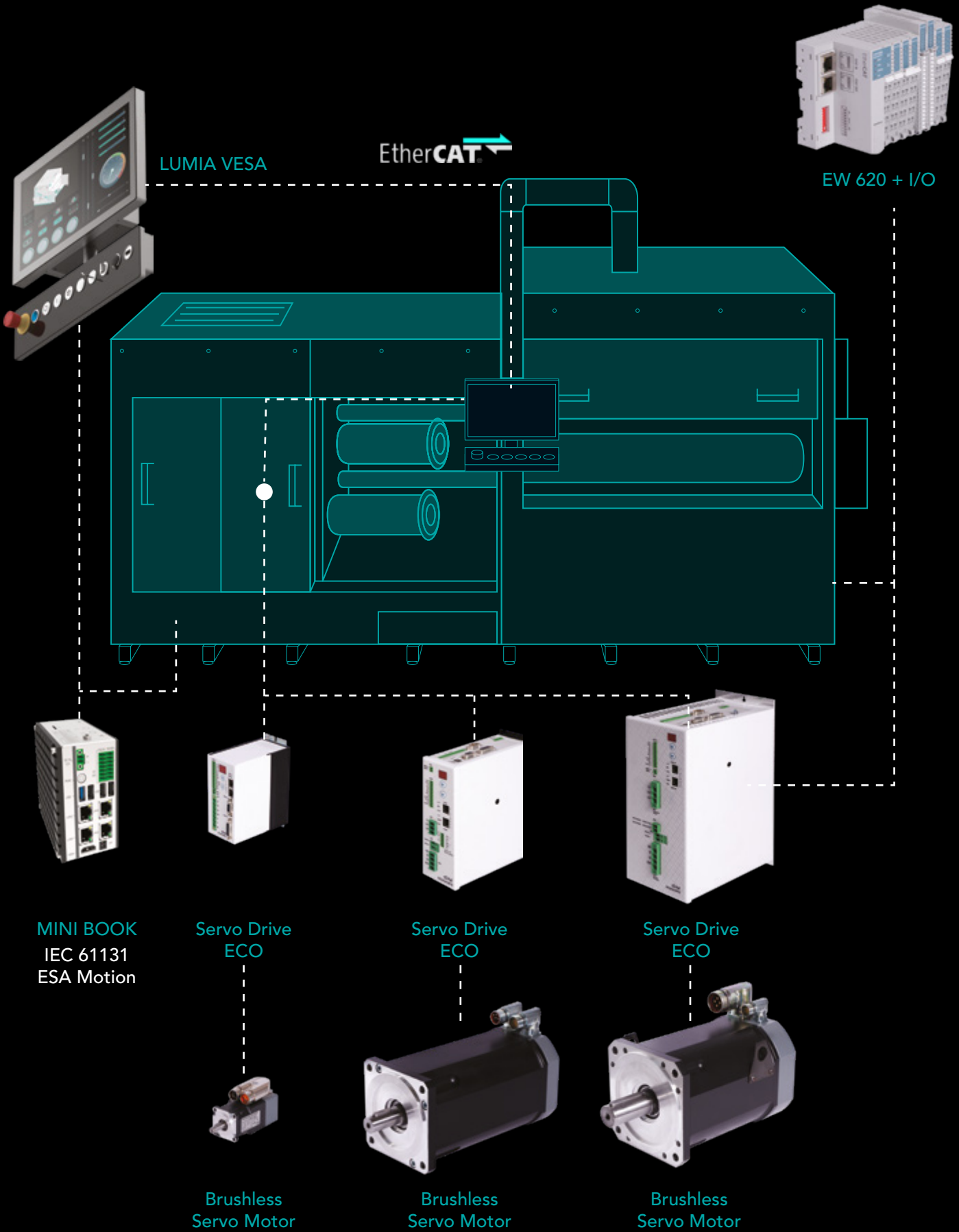
27"
Vesa | Panel | Arm







Kreo HMI
+ IEC61131
+ ESA Motion Control Library



LUMIA VESA

EtherCAT

EW 620 + I/O

MINI BOOK
IEC 61131
ESA Motion

Servo Drive
ECO

Servo Drive
ECO

Servo Drive
ECO

Brushless
Servo Motor

Brushless
Servo Motor

Brushless
Servo Motor



PANEL



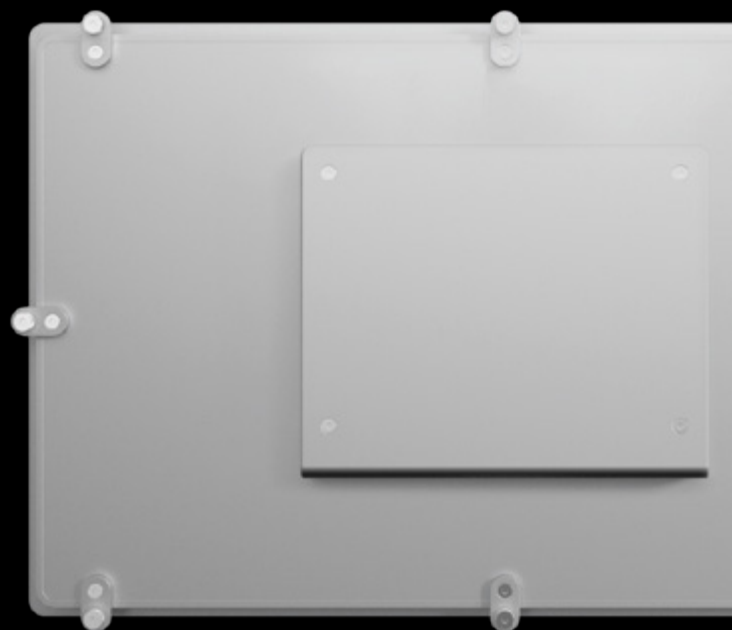
2.35 mm

7mm

- + Multi touch technology
- + True flat glass capacitive touch screen
- + Hygienic front design IP66



Front view



Rear view

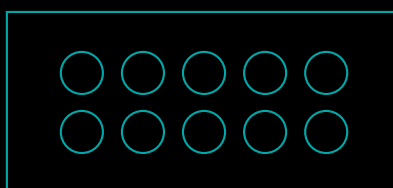
+ Configurable panel push button keyboard



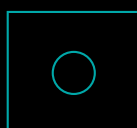
6x1



10x1



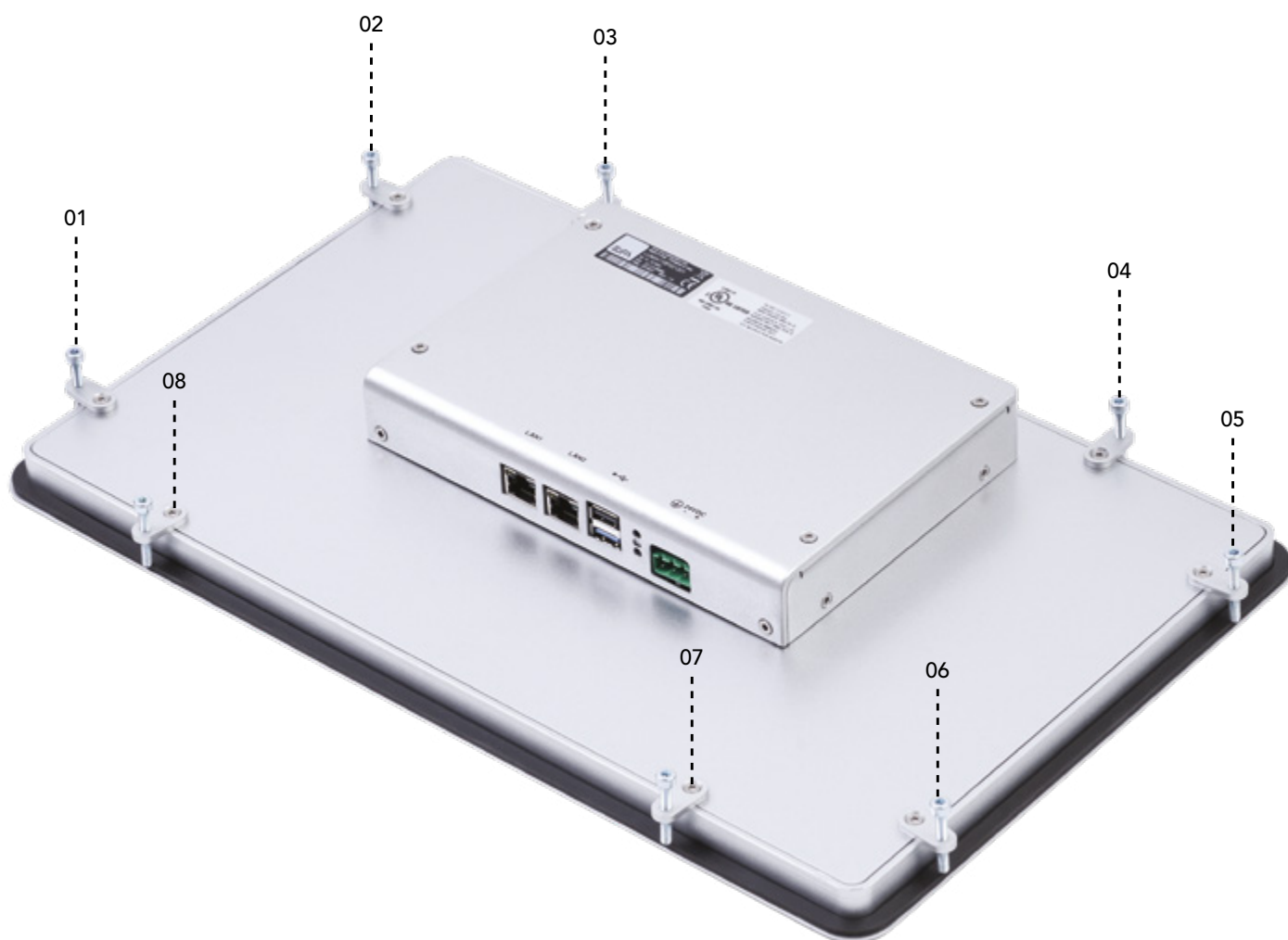
5x2



1x1

LUMIA - Panel solutions

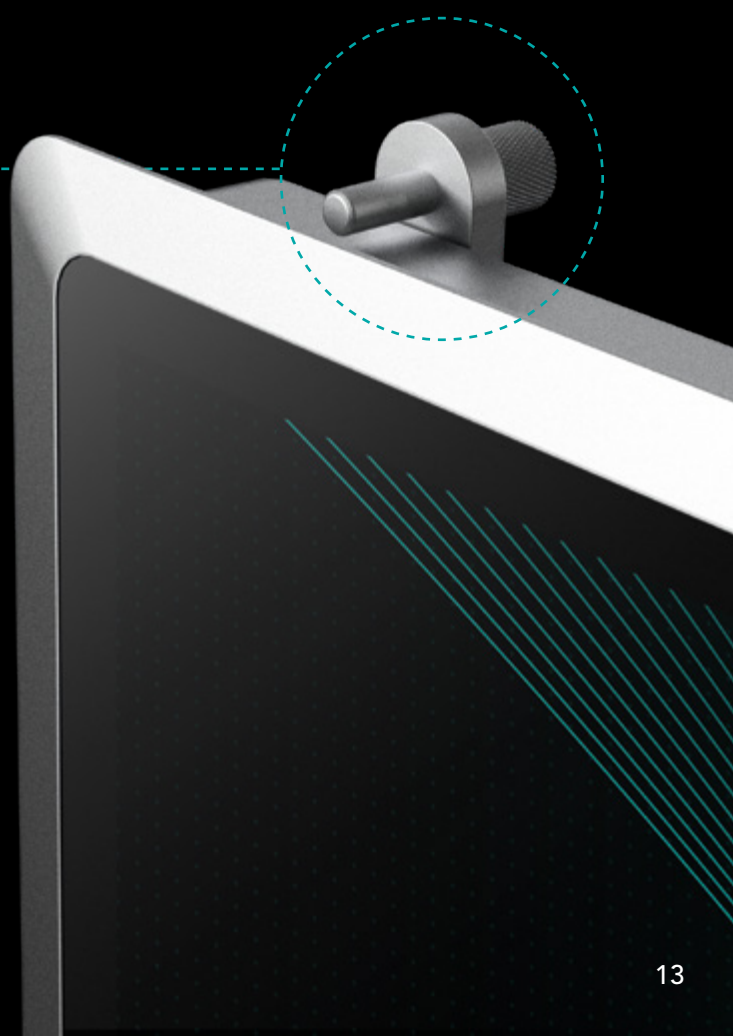




+ Fixing - Smart Block

The SmartBlock to fixing system is designed to help the operator install the product in a simple way.

Thanks to the knurled pins it will be possible to prefix the product using your fingers and then tighten the product to the panel with a tool.





VESA



- + Multi touch technology
- + True flat glass capacitive touch screen
- + Hygienic design full IP66 Front / Back



Hygienic design full IP66 Front/Back for
all sizes: 10,1", 15,6", 21,5" and 27".



Front View



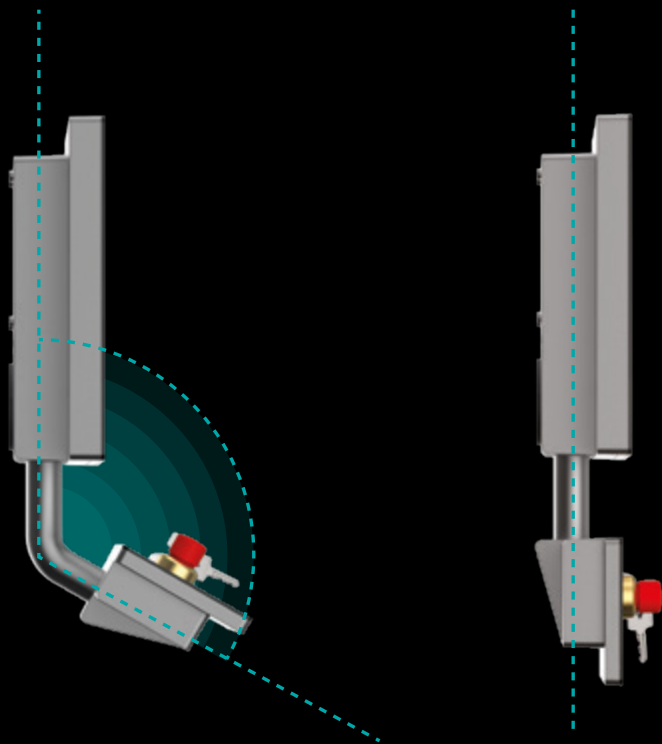


Rear View



Rear View





+ Vesa Keyboard - 120° ergonomic solution

+ Vesa Keyboard - 180°

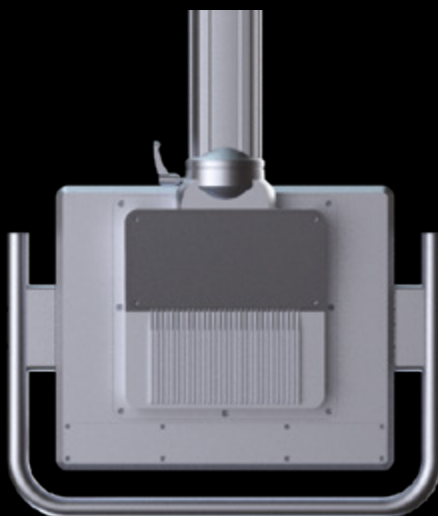


ARM



- + Integrated mounting with aluminium arm and IP66 protection all around.
- + Large portfolio of arm components; the user can define the connection layout that fits the application.
- + Simple and smart cabling thanks to the large backside access.
- + Up to 11 front slots for standard 22 mm electromechanical pushbuttons and indicators.
- + Optional hand held and keyboard support.





15.6"

EdgeHMI
Panel IPC
Monitor
WebHMI



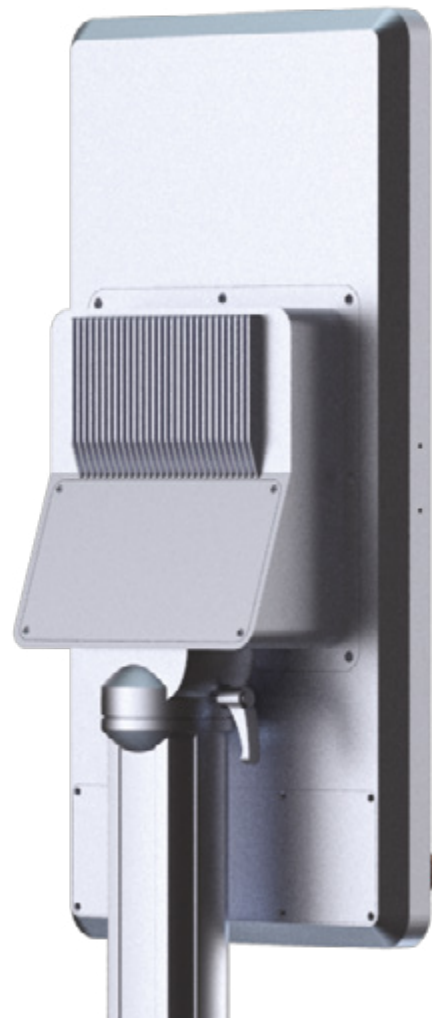
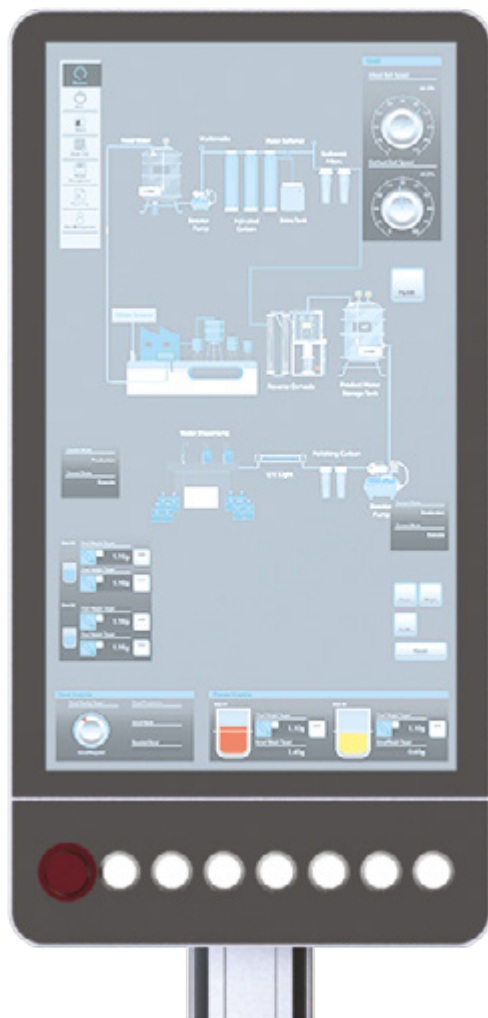
21"

EdgeHMI
Panel IPC
Monitor
WebHMI



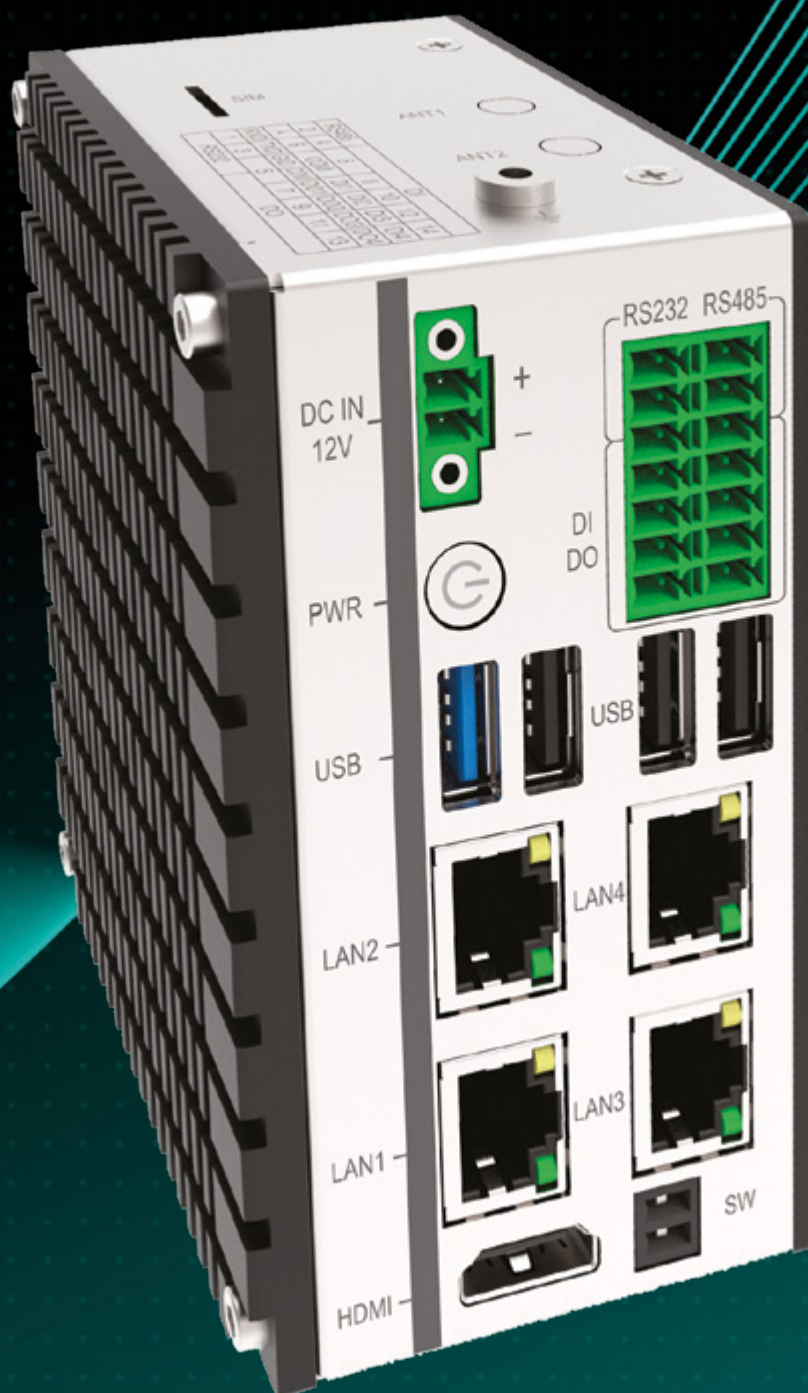
27"

EdgeHMI
Panel IPC
Monitor
WebHMI



+ Configurable push button keyboard





MINI BOOK

MINI BOOK



High performance, compact, fanless IPC box based on Intel Celeron J6412 or more powerful 11th generation i3 and i7.

The integrated Mini PCIe slots allow the user to expand the connection possibilities (Wi-Fi, Bluetooth, 4G, GPS) for easy integration into any Industry 4.0 application.

Up to 6 LAN ports (2 in the basic module and 4 in the additional one) with different Ip addresses for a very smart and powerful internetworking topology.

Kreo Edge runtime for the development of web based visualization and control.

Kreo Connect runtime for remote visualization and technical support.

FEATURES

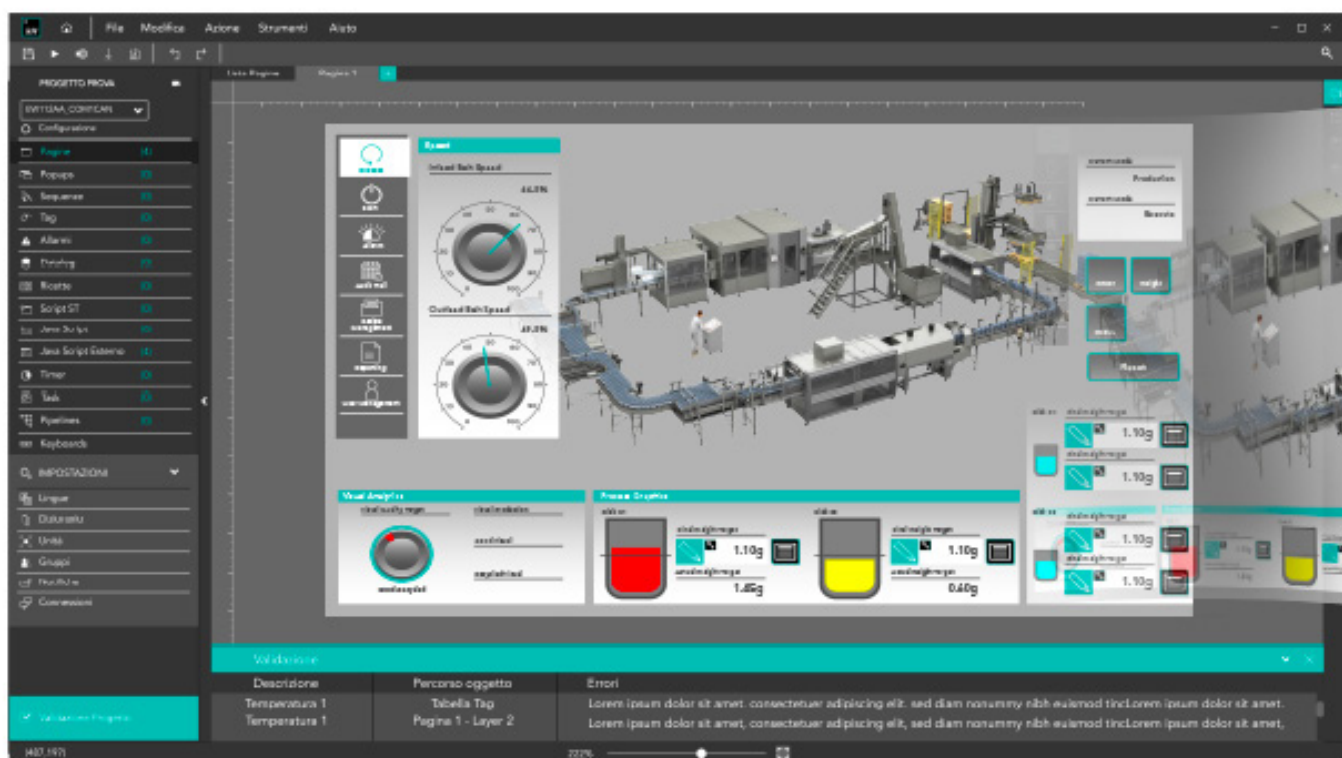
- + Operating system Windows 10 IoT – W11 – Linux
- + 2 embedded LAN ports
- + 4 additional LAN ports integrated in the optional module
- + 8 integrated DI/DO
- + RAM up to 64GB
- + SSD up to 2TB

APPLICATIONS

- + Packaging machine
- + Plastic and rubber machine
- + Steel and wood
- + CNC
- + Food processing
- + Robotics
- + Digital signage
- + Traffic control



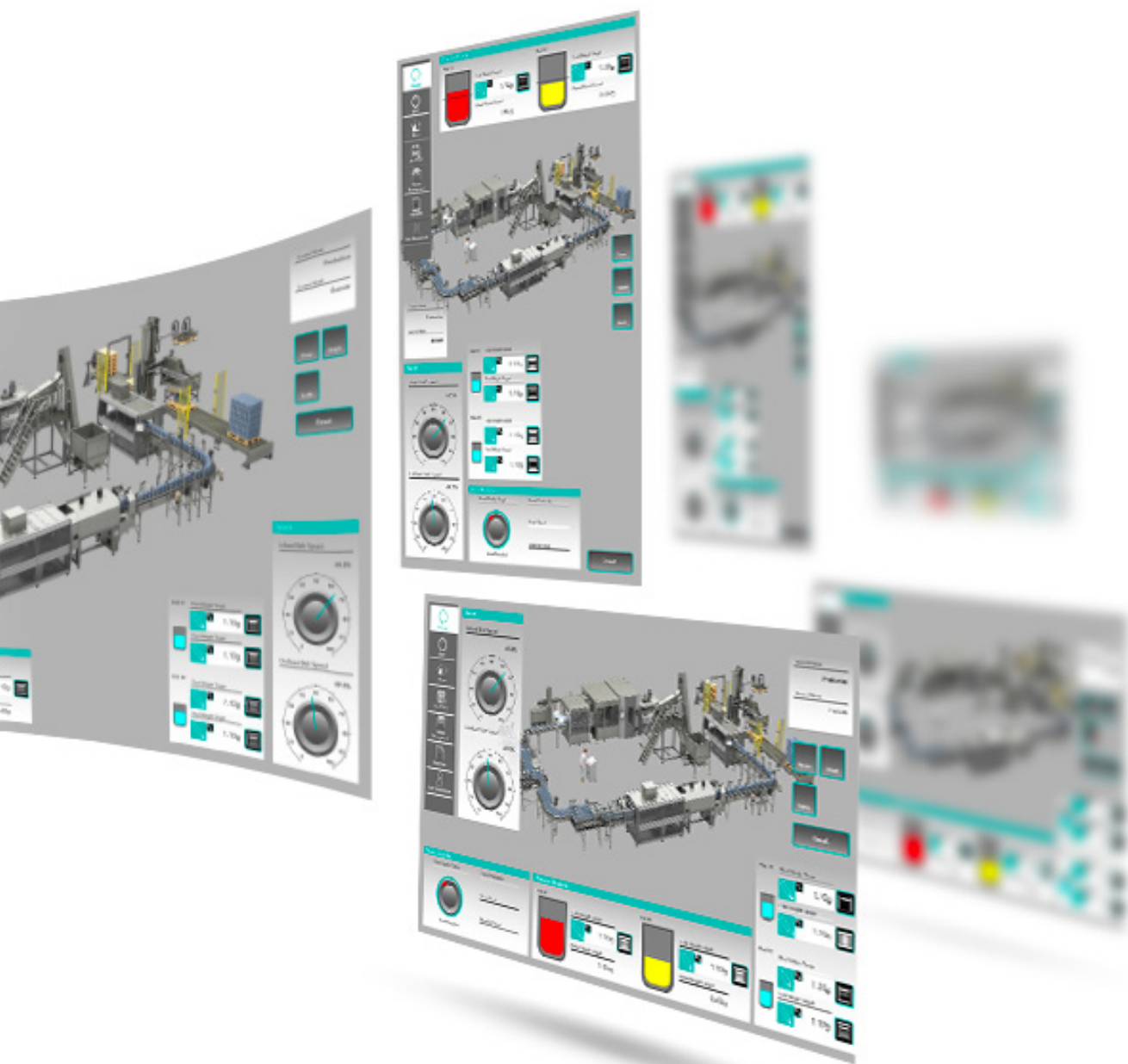
ESAWARE SUITE



Kreo HMI



Kreo Connect



Kreo SVG
Converter

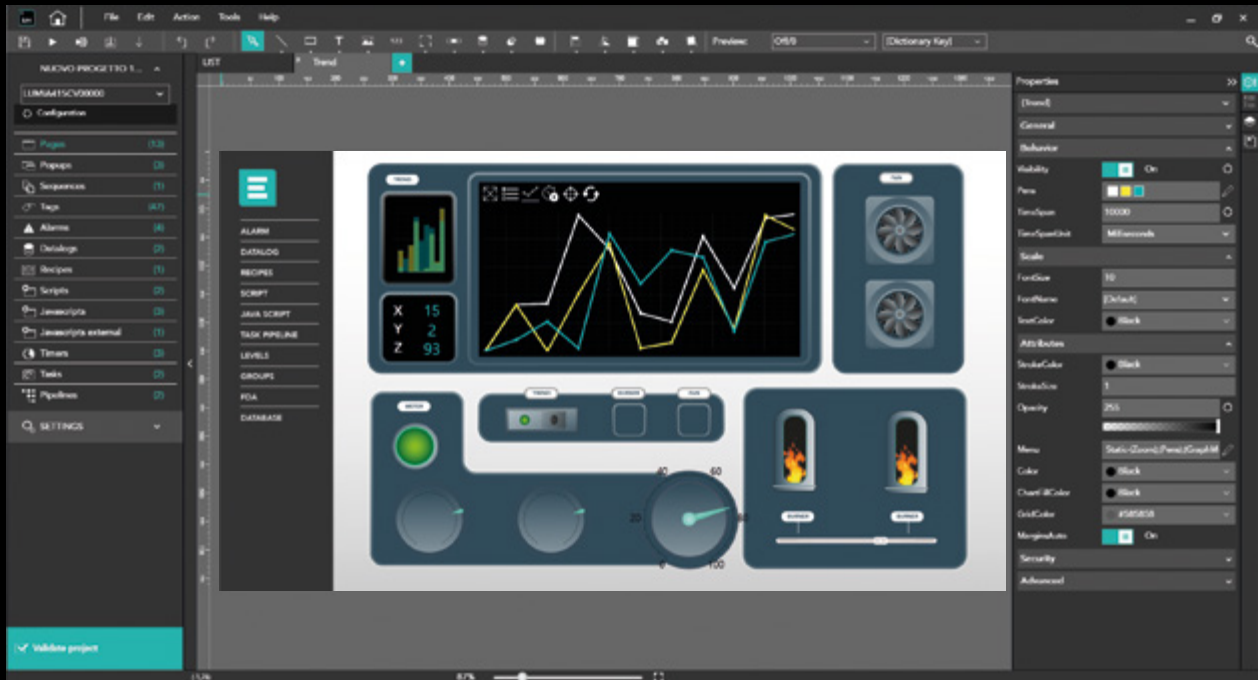
Kreo HMI



Kreo HMI

Software platform that makes the engineering and development of web based visualization and control center solutions extremely easy.

Both Linux and Windows based target devices are supported.



Integrated production report with edit and run time filtering.

IEC 61131 script online debug with breakpoints, step increment and variable watch window.

Advanced debug of the application with integrated monitoring of the edge tasks and edge to web dataexchange.

Smart recipe management with structure and archive online update.

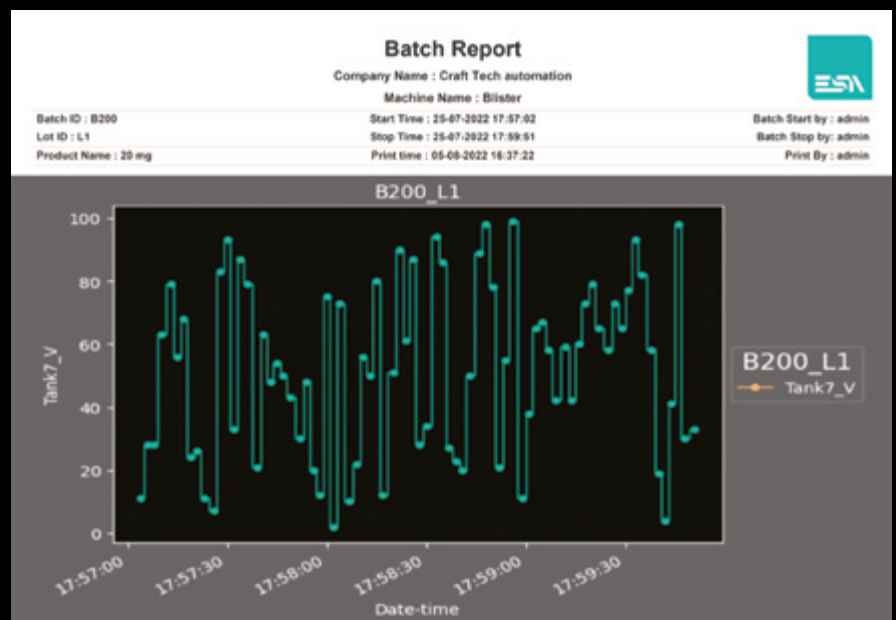
Libraries

+ Library management

- Static graphic objects
- Animated objects
- System widget
- Project widget
- ST and Java script
- Responsive container

+ SVG based library objects

+ Sharing and reusing



Kreo HMI Runtime

EdgeHMI

- + Communication drivers
- + Field data collection
- + Data aggregation
- + Elaboration



- + External Javascript



- + Multi touch and gestures



- + WebPage technology - Full HTML 5



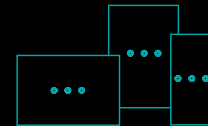
- + Integrated PDF reader and Video player

WebHMI

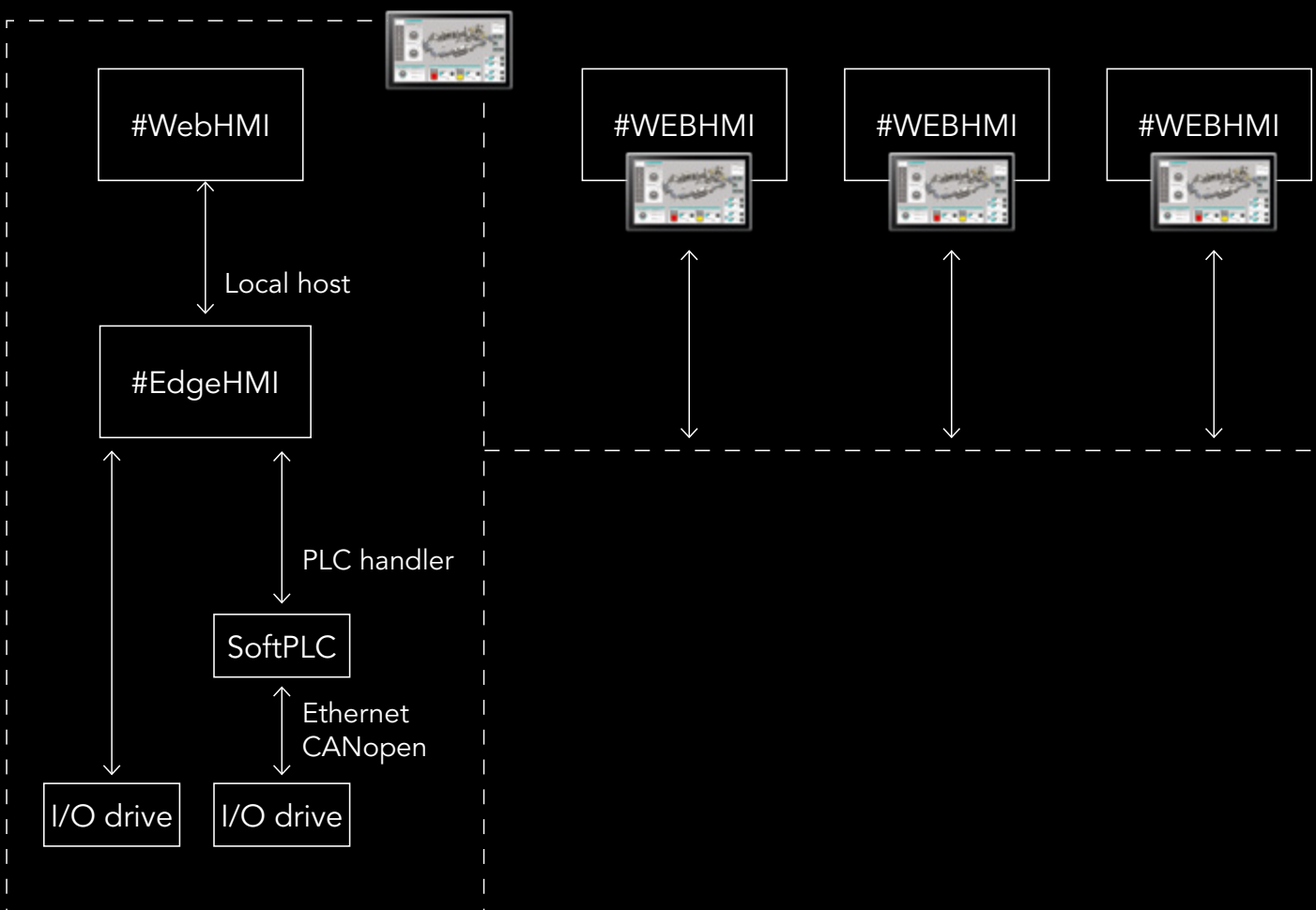
- + Visualization
- + Simple and smart User Interface



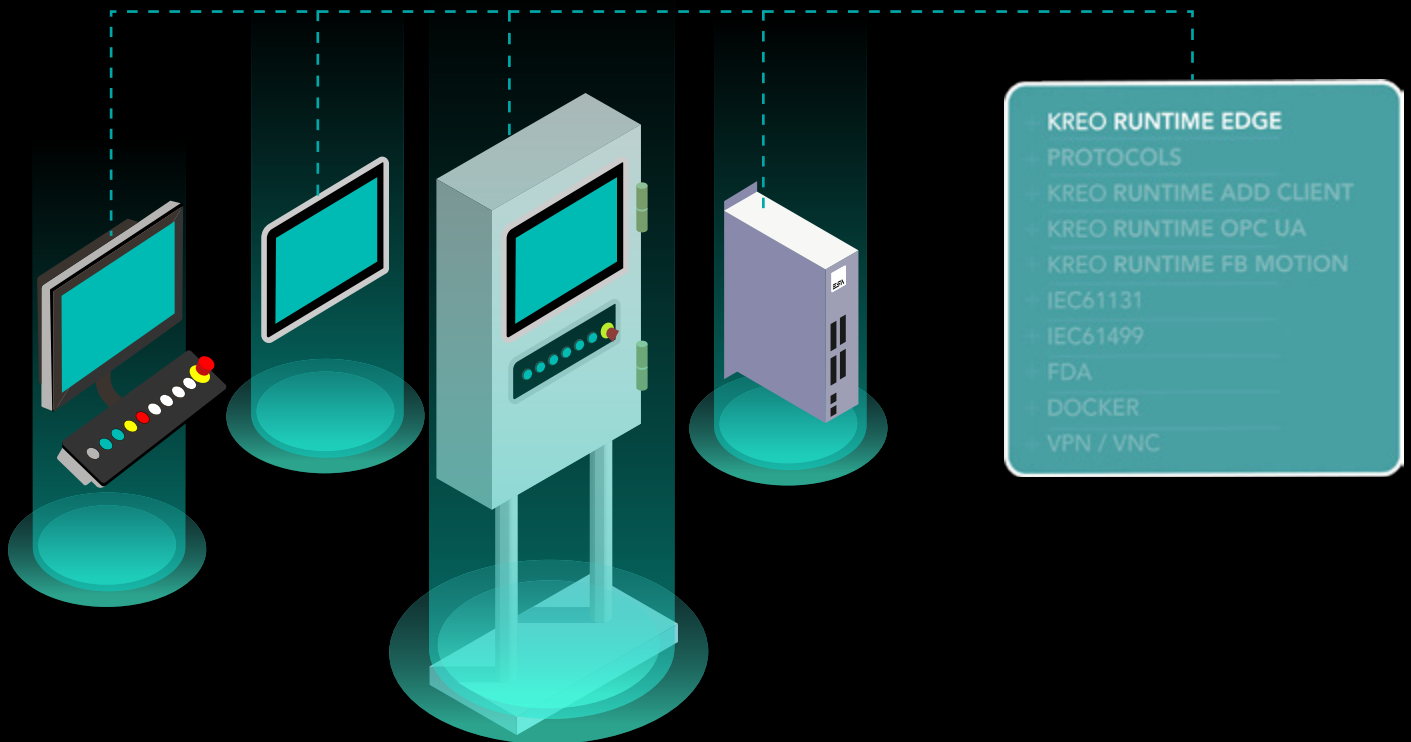
- + ST Script - IEC61131



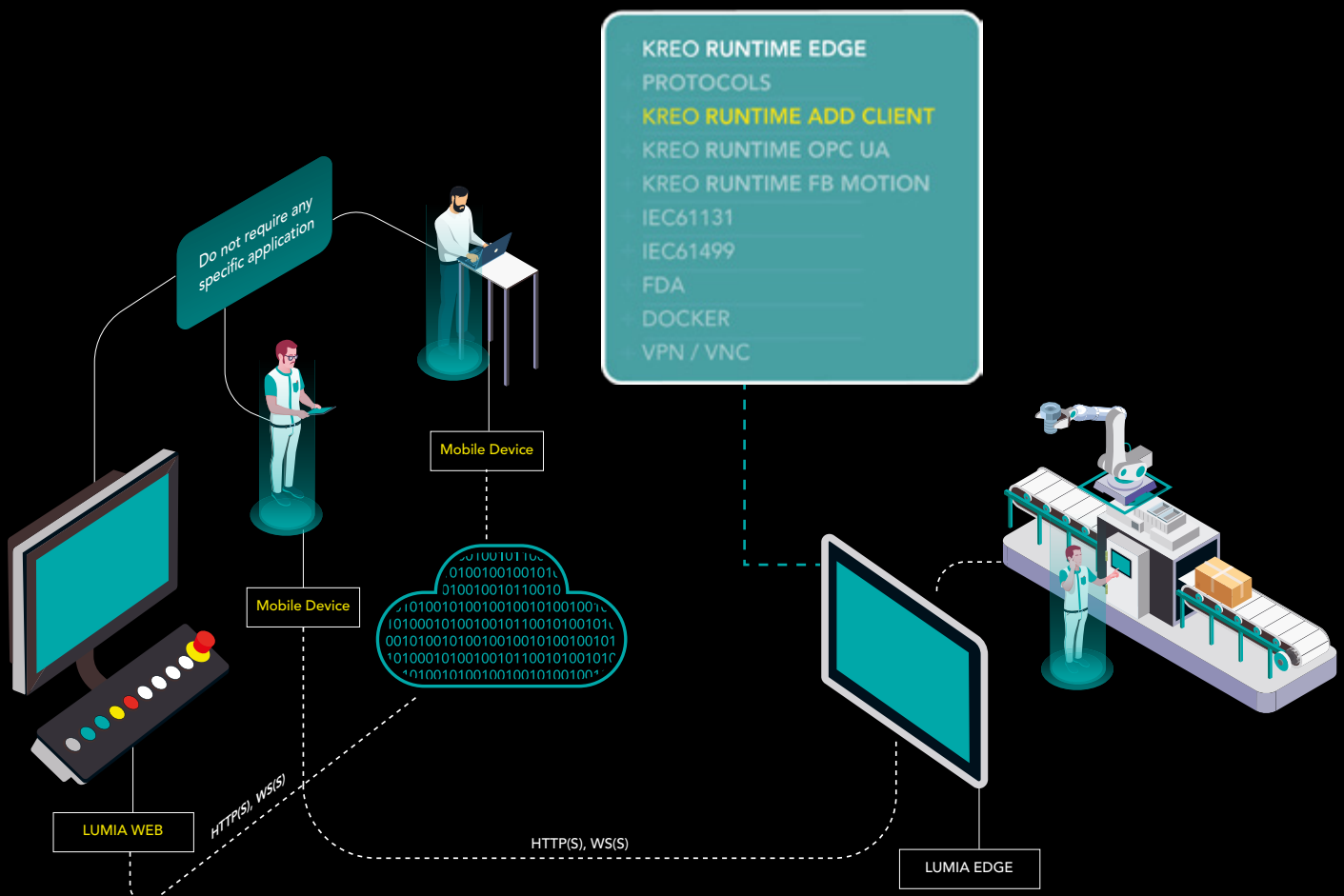
- + Responsive design



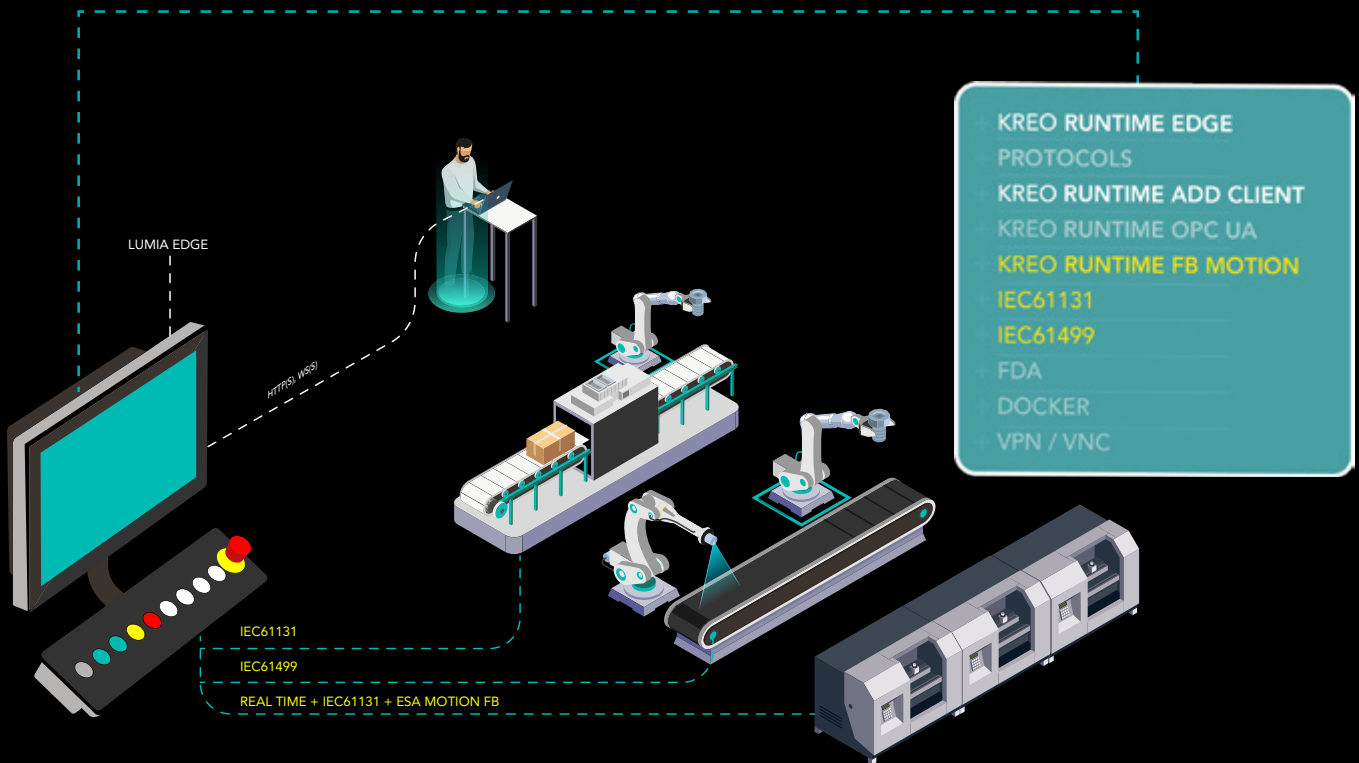
LOCAL CLIENT - LUMIA EDGE



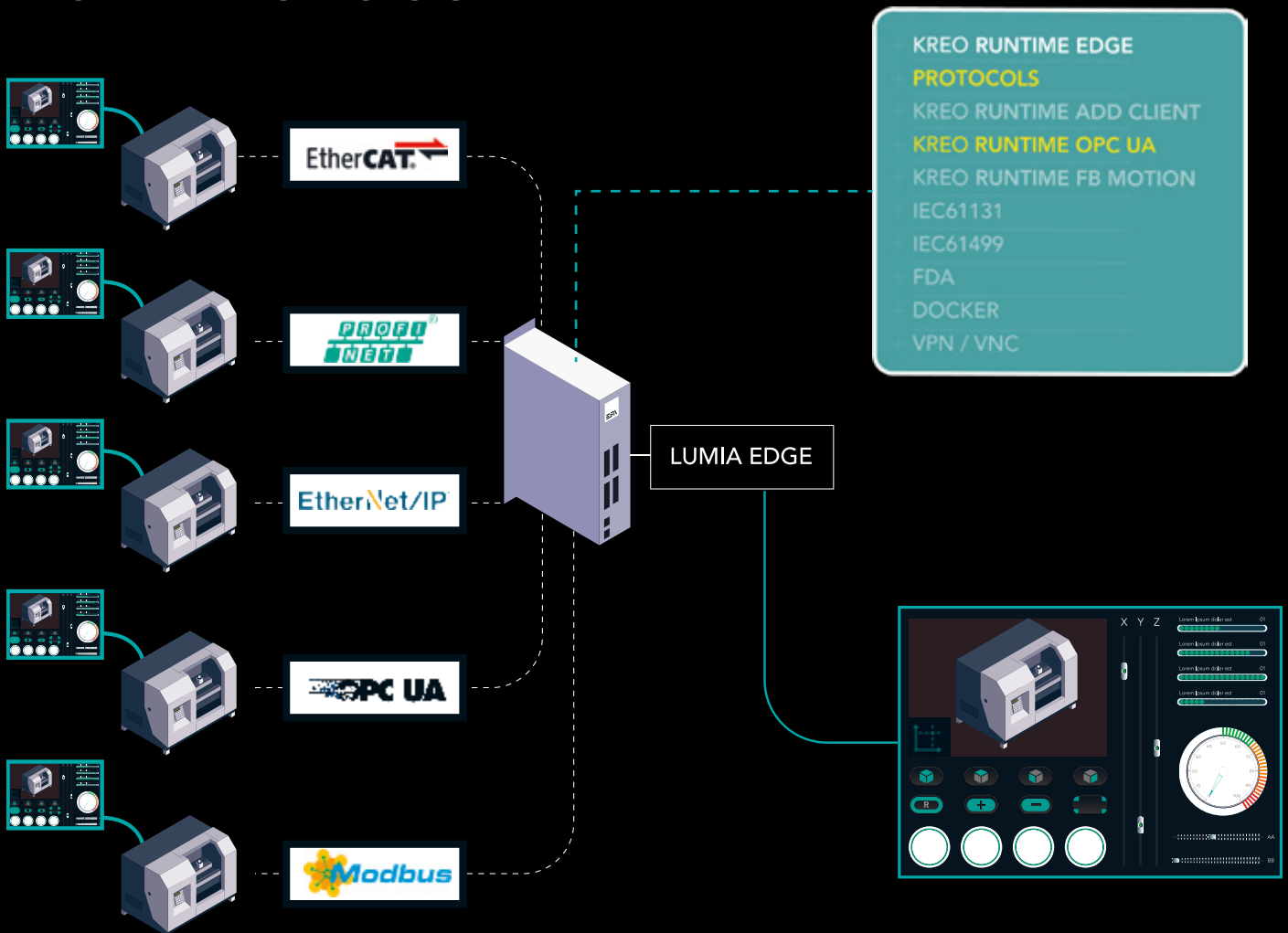
MULTI-CLIENT



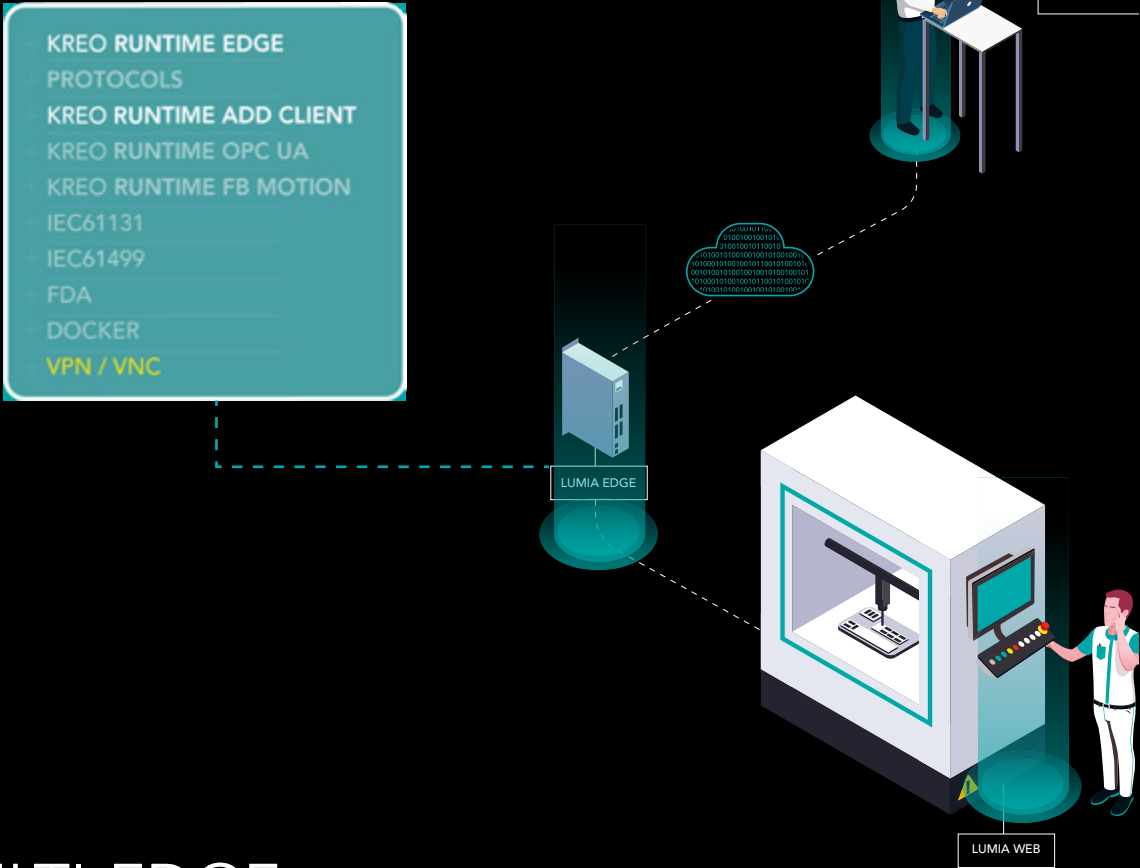
MULTI-RUNTIME



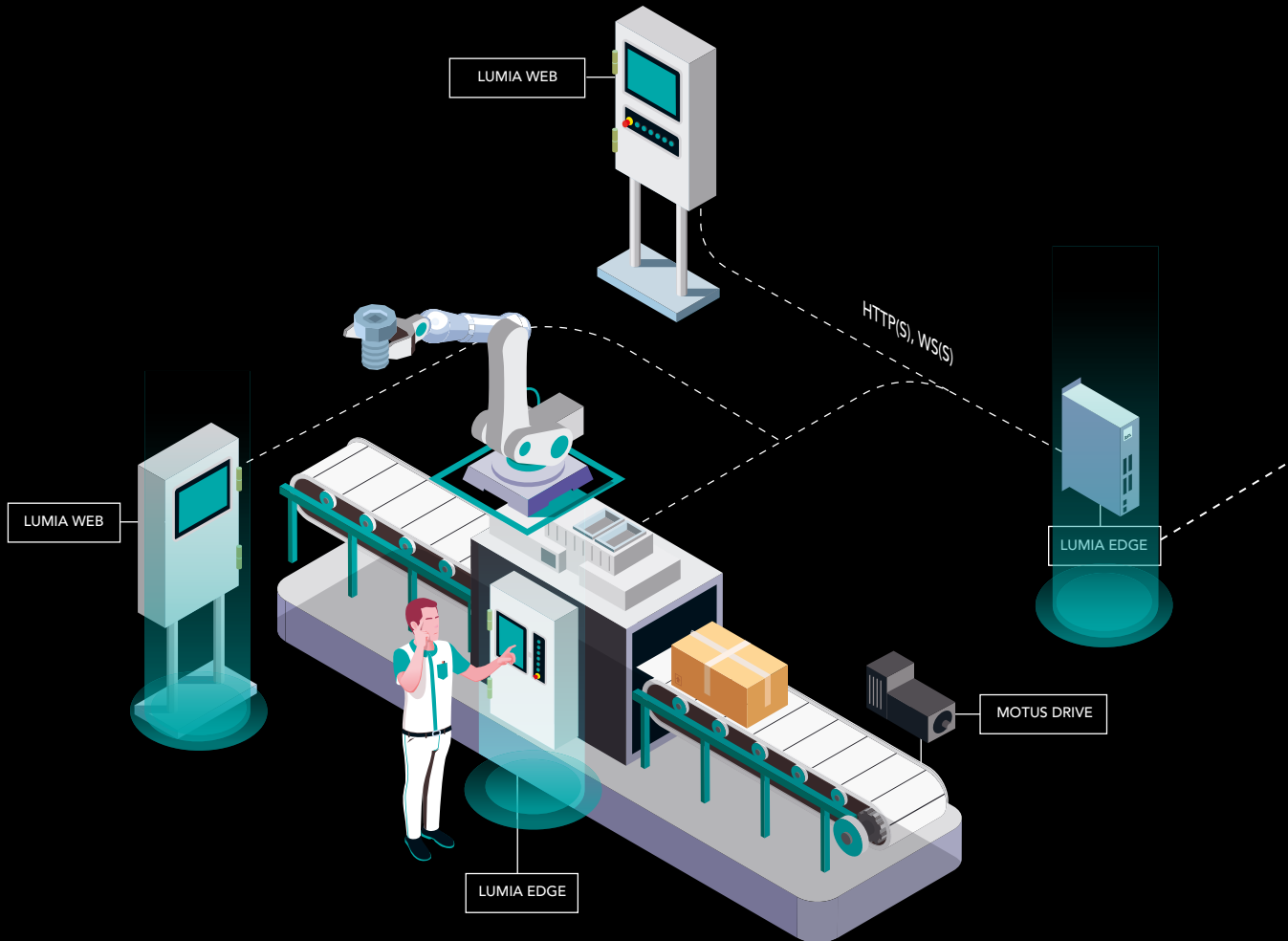
MULTI-PROTOCOL



REMOTE MAINTENANCE



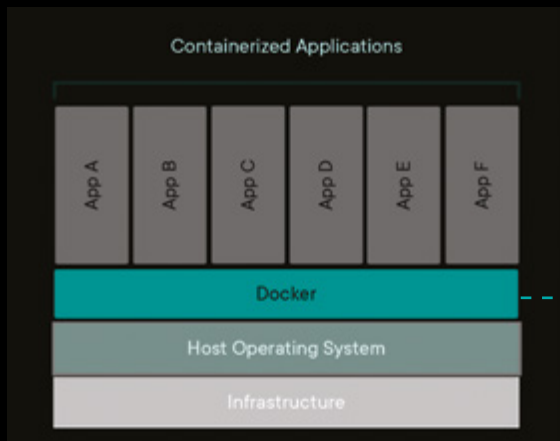
MULTI-EDGE



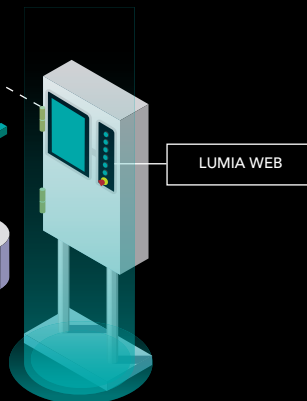
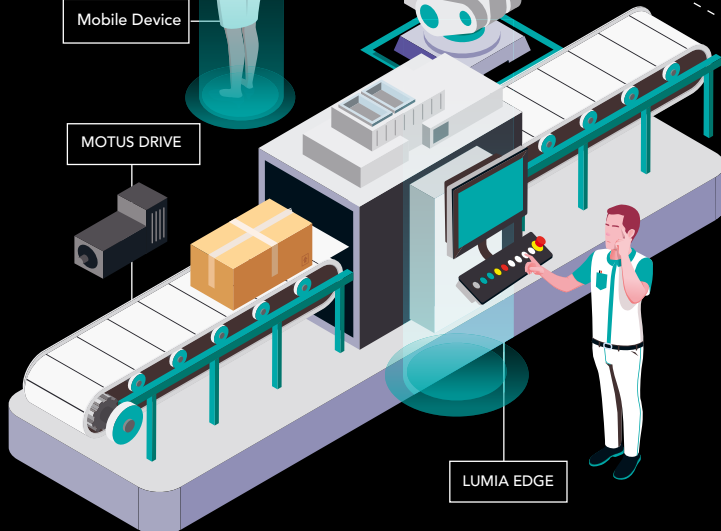
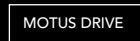
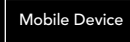
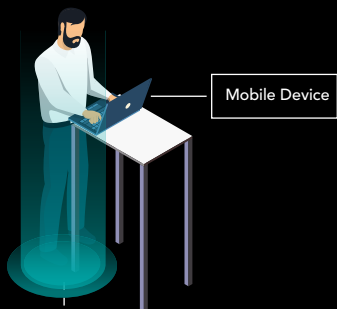
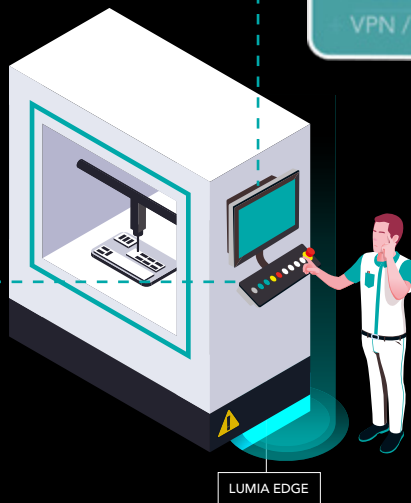


DOCKER CONTAINERS

Linux Docker is the containerization technology that enables the creation and use of Linux containers. With Docker the customer has the possibility of installing and running third party applications together with the predefined application provided with the Lumia platform.



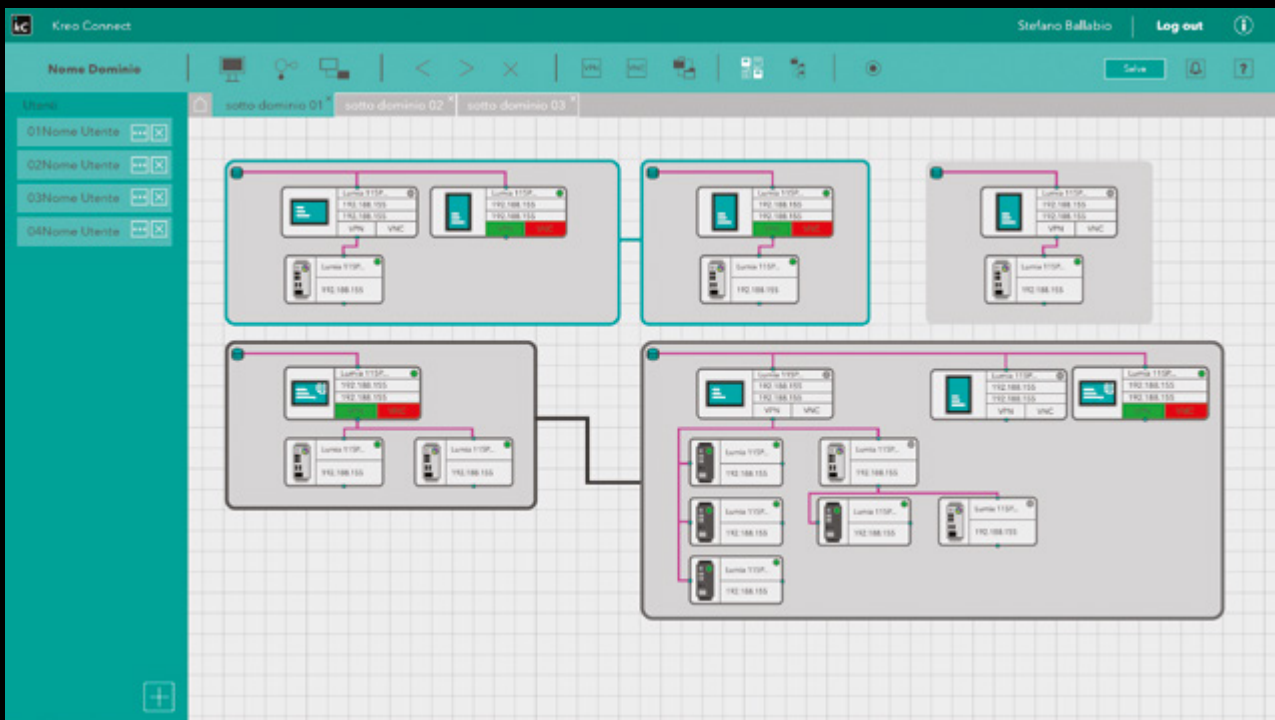
KREO RUNTIME EDGE
PROTOCOLS
KREO RUNTIME ADD CLIENT
KREO RUNTIME OPC UA
KREO RUNTIME FB MOTION
IEC61131
IEC61499
FDA
DOCKER
VPN / VNC



Kreo Connect



Easy, secure and efficient access to the machine anywhere and anytime in order to provide high level support.
The machine builder service team can improve the support activities reducing dramatically both the response delay and the cost.
The support engineer having a standard internet connection can access the control unit, the HMI and all the devices connected to the OT network.
The debug and fix of the application is almost immediate.



Cross platform application available for Windows and Linux OS.

Remote desktop allows to lock the remote input to avoid remote operators working on the HMI while during maintenance operations.

VPN traffic is routed to multiple devices of the OT local network so it is possible to establish the VPN tunnel with the complete machine network.

The domain can manage an unlimited number of endpoints, an unlimited number of Users and Groups and unlimited traffic.

Allows the creation of domain and subdomains. This architecture let the machine builder to provide the required access to the customer assigning required privileges.

- + Preinstalled in all LUMIA lines of products
- + Cloud based solution for maintenance and data collection
- + No need of modifying any firewall policy nor IT configuration
- + Based on standard https protocol
- + Remote desktop, file transfer, chat
- + VPN for the online debugging and application update
- + TLS 1.2 security protocol for the highest security level

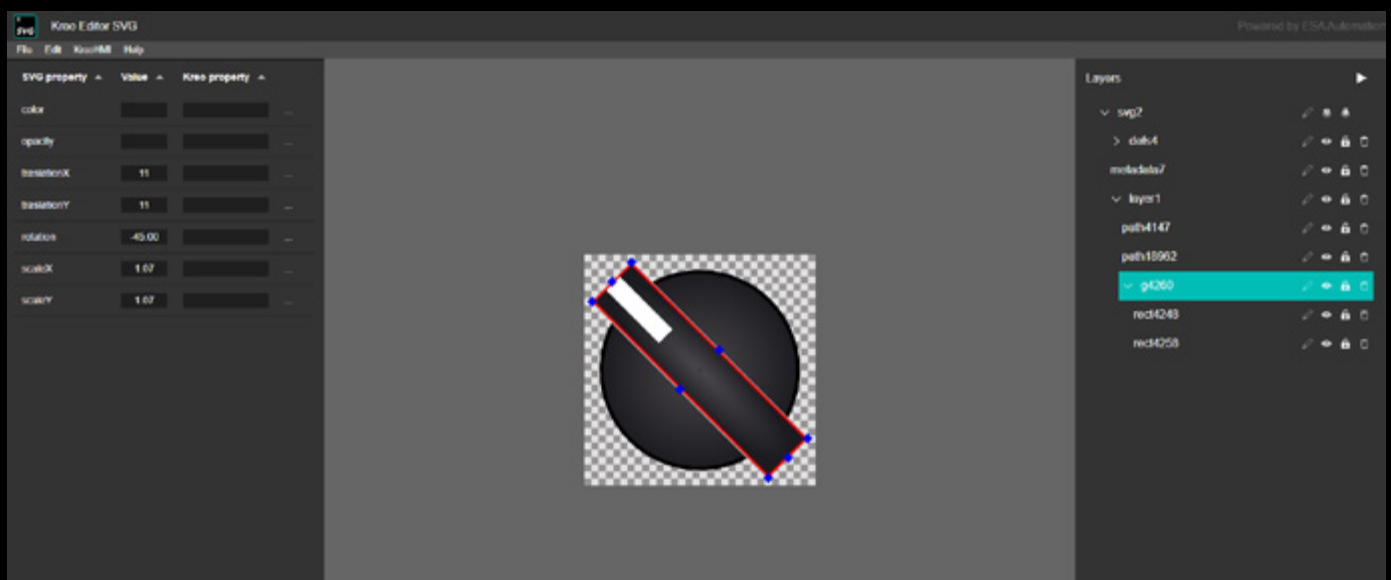
KREO SVG CONVERTER

Create your own SVG graphics library by yourself.



Kreo SVG
Converter

KREO SVG CONVERTER is the utility that allows the user to develop the graphic libraries of Kreo HMI starting from a generic SVG object. The object can be developed by a graphic studio or downloaded directly from internet. There is no limitation; any object can be animated and inserted in a Kreo HMI library. The user interface of KREO SVG CONVERTER is totally graphic and it is not necessary to write any HTML5 source code.



- + Fully web based utility continuously updated
- + Only a simple registration on the ESA website (www.esa-automation.com) is required
- + A powerful SVG editor is included that allows the user to group the graphical layers
- + Definition of Kreo properties with association to the SVG layers
- + Different animation possibilities (translation, rotation)
- + Color management of the different levels

Visit the new website

esa-automation.com

The complete range of ESA products.





**Mind
Over
Innovation.**



ESA S.p.A. | Headquarters
Via Padre Masciadri 4/A
22066 Mariano Comense (CO) Italy
Tel. +39 031757400
info@esa-automation.com

ESA S.p.A. | LBU | Robotics
Via Aldo Moro 27
56010 Vicopisano (PI) - Italy
Tel. +39 050701047

ESA energy S.r.l.
Via Fortunato Zeni 8
38068 Rovereto (TN) - Italy
Tel. +39 0464443272

ESA Europa S.L.U.
Passeig del Ferrocarril, 335
08860 Castelldefels (Barcelona) - España
Tel. +34 936455014

ESA Automation Technology (Shanghai) Co., Ltd.
Office address: Floor 3rd, No. 8 Building, No. 188
ZhongChen Road, Songjiang District, Shanghai.
Postcode: 201613
Tel. +86 2137788206

ESA S.p.A. | LBU
Via Molise, 1 - Z.I. Gello
56025 Pontedera (PI) - Italy
Tel. +39 0587296014

ESA S.p.A. | LBU
Via Monari Sardè 1
40010 Bentivoglio (BO)
Tel. +39 0516640464

ESA Elettronica GmbH
Carl-Zeiss-Strasse, 35
63322 Rödermark - Deutschland
Tel. +49 6074486450

ESA Software & Automation India Pvt. Ltd
HYBRID TOWERS , NO: 5AC-101 , 1st Floor, 2nd
Main, HRBR Layout, 3 rd Block, Kalyan Nagar Post,
Bangalore-560 043 – INDIA
Tel. +91 9845378673



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