AUTOMATION

Connect ideas. Shape solutions.

ESA AUTOMATION

“The revolution is not an apple that falls when it is ripe. You have to make it fall.”

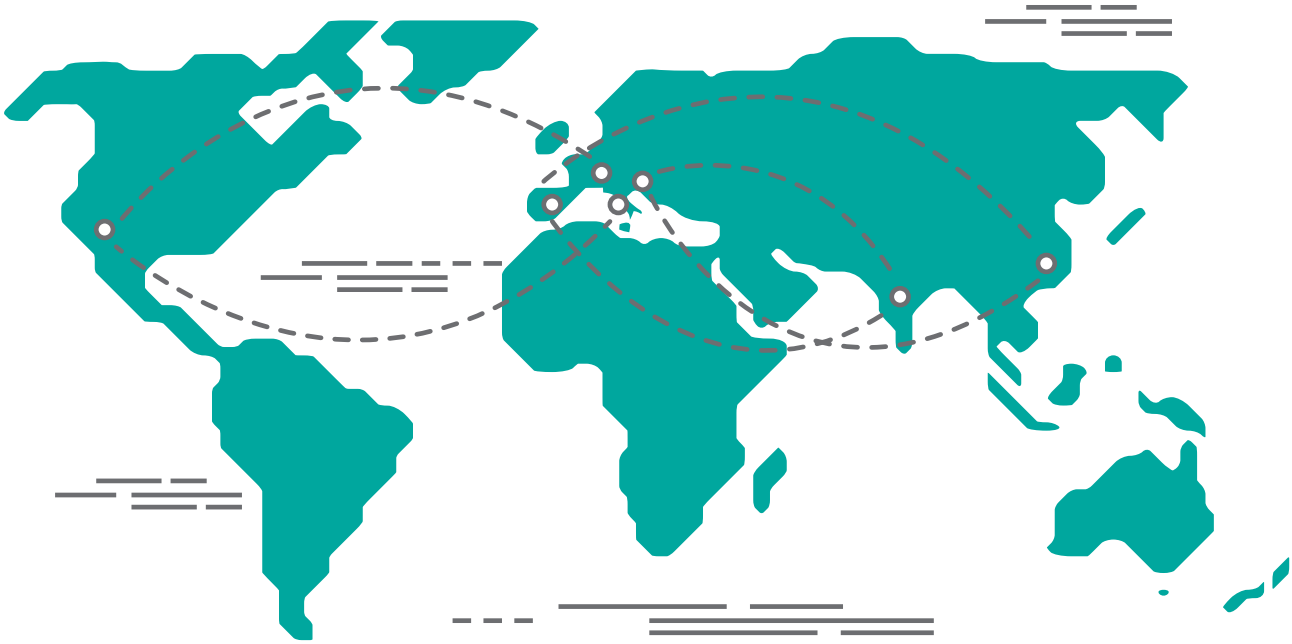
- Isaac Newton
- Steve Jobs
- Che Guevara

CATALOG 2018

The Heart of Automation and The Art of Innovation

The face of industrial automation is transforming and by making your job easier and ensuring a better future for our industry, ESA Automation remains one of the primary driving forces in this positive change.
For ESA Automation, sustainability and technology can not only coexist, but they can merge, contribute to each other and evolve into something better. We create solutions, not just products, Innovation that will optimize every process, according to our values of dynamism, flexibility and openness.

At ESA Automation, we believe in a boundaryless organization, where technology helps you achieve any goal, with this aim in mind, we develop autonomous, open solutions that require minimum input and that reflect the pioneering principles of the Industry 4.0.
We've been working hard to simplify your job with well-designed, smart products, in line with the Internet of Things (IoT) and the Internet of Services (IoS) principles. Products that offer state-of-the-art technology for the best value for money with professional customer care service and on time worldwide delivery.



Borderless innovation
Join our international community

Since starting our activities in 1975, ESA Automation has maintained its goal: to provide innovative solutions for industrial automation. Today, we have grown to become a multinational and multicultural ethical company with branches in seven countries, and our mission belief is stronger than ever.
We have created an international community, with clients, suppliers, researchers, engineers and stakeholders that share the same passion for innovation and an outstanding ability to create value. We have satisfied industries ever demanding needs for better solutions by expanding and developing into new fields. Together we can work to create a new and better approach to production and industrial automation, and create sustainability through efficiency.

Overview

Smart Tech. Ease of Use.

CREW

Our platform. Your touch.

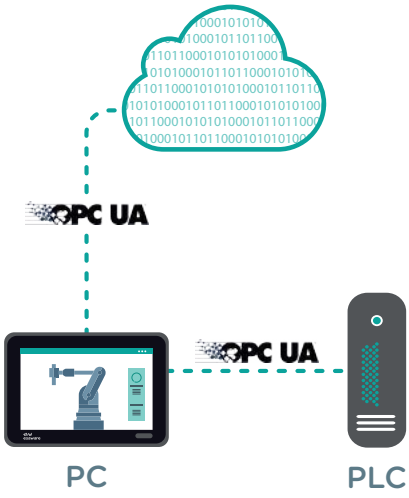
SCADA Crew offers a wide range of vectorial library objects freely customizable, with the possibility of having transparences and gradients. Crew's versatility enables you to gain remarkable time-saving. Thanks to Crew, programming your application has never been easier, smart and looking amazing.
SCADA Crew is based on language WPF and .net. The supported Operating Systems are:

Windows XP Pro Service Pak 3
Windows 7 all versions (32/64 bit)
Windows 8.1 all versions (32/64 bit)
Windows 10 all versions (32/64 bit)

Complete redesign of both graphic layout and usability
Thanks to several customers' feedback, we made Crew interface catchy, aligning it with the latest graphic standards. From Crew 2.0 on, you will find several improvements and a special attention to every single detail. We introduced a new layout for objects property configuration, now split in a clearer and more intuitive way. Graphic objects library has been integrated in the editor toolbar. There is also the possibility to search objects and to customize the ones you would like to visualize in the toolbar libraries.

New link to our YouTube channel to watch our tutorial videos

When you need to clarify a functionality of Crew, you can directly access to our YouTube channel with several tutorial videos extremely explanatory.



OPC UA: New communication driver

We introduced the possibility to communicate through OPC UA standard, allowing an unlimited connectivity to both field devices and Cloud infrastructures. We are always careful to data security and communications, our OPC UA protocol automatically uses the highest security level of encryption available for the device to which it is connected.

New view for alarms statistics

In Runtime you can directly create alarms statistics extremely useful in case of both casual faults and faults occurred in a defined period of time. You can also track how long an alarm has been active.

Creation of project documentation.

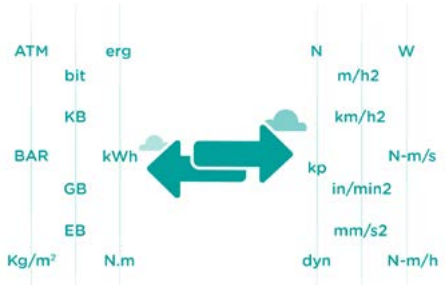
Once finished the project, there is the possibility to export the documentation in both pdf and word format, attaching it directly to the machine papers, saving a lot of time usually dedicated to edit the documents.
In the project documentation you can add any kind of information related to the project, such as pages or list of used tags.

Connectivity to relational databases.

From Crew 2.0 on it is possible to access to any kind of database to store any data coming from field, read and trigged from HMI interface. Receipts cans be stored and shared so that they can be directly created in a higher system interconnected with business MRP and ERP systems.
In the same way, alarms can be stored and shared to create customized statistics for each production line.

Unit of measure converter

The unit of measure conversion let you develop one single project regardless of the measurement system in use. It is also possible to dynamically convert the displayed Runtime values according to the default or custom available tables.

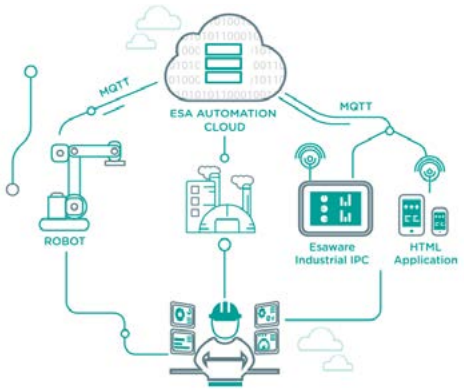


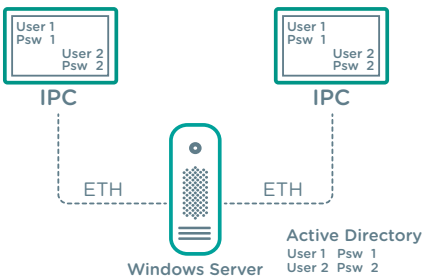
Scheduler

Thanks to the new Scheduler feature, you can schedule events and associate them to specific actions. The events can be selected from a list where you can find single events or multiple recurrent events.

Data export to ESA Automation Cloud with MQTT protocol

Any device programmed using our Crew SCADA can export data to the ESA Automation Cloud platform with standard MQTT protocol.



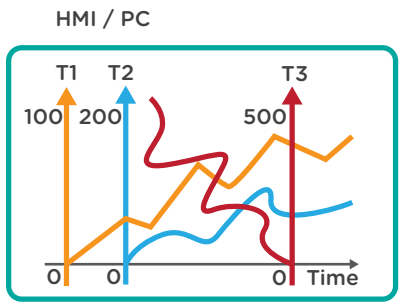


Synchronization between project users and Domain users

With Crew it is possible to use Windows Domain users as project users. Our Pc Runtime directly communicates with the Domain Server and keeps users synchronized, so that any change occurred on Windows Domain gets registered on our Runtime as well.

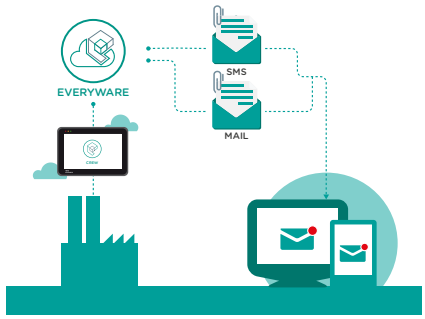
Trend functionality

Trend object in Runtime allows you:
To export trends and import them again to make comparison between different historical traces captured in different intervals.
To decide to use the multiscale functionality and the scale position of each pen inside the trend viewing.



SMS and Email

In a simply and intuitive way, you can send SMS and Email for any event occurred in Runtime. With this function, you can be advised in real time whatever happens in the plant.
Now you can send attachments, such as historical or active alarms and any kind of files.
The user can configure sending SMS and Email in a very easy way, as it is enough only adding email addresses and mobile numbers.

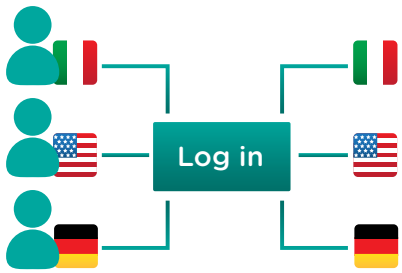


FDA Compliance

The Runtime respects FDA directives, especially the CFR21-part 11 about Food and Drugs. Users can in fact trace, record and authorize any Runtime activity for example through electronic signature.
FDA, mandatory password change upon first login: more FDA standards traceability offers the optional possibility to change the password during the first login on Runtime.

User language

With Crew you have the possibility to relate the visualization language to the logged user. With this functionality it is very easy to manage different users with different languages.



SCADA Crew is also App

Now you can connect easily to your applications from any mobile device, such as smartphones or tablets with Android or Windows Phone operating systems.
Crew Apps have been designed to control your plants from your mobile device with one-handfree logic. The read only or editing mode makes the usage of any smartphone or tablet much easier

crew App

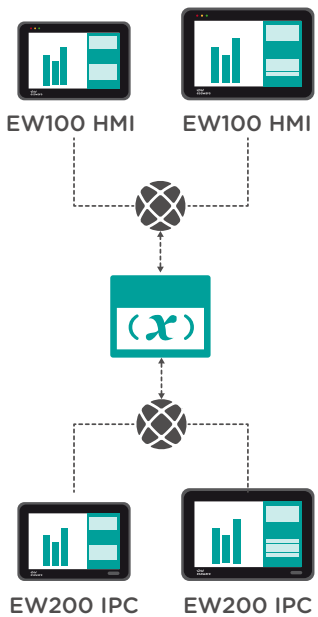
Google play Windows Store

Dynamic filters in Runtime

Through a long press on the column heading of any view, you can add a dynamic content search filter in an easy and intuitive way..

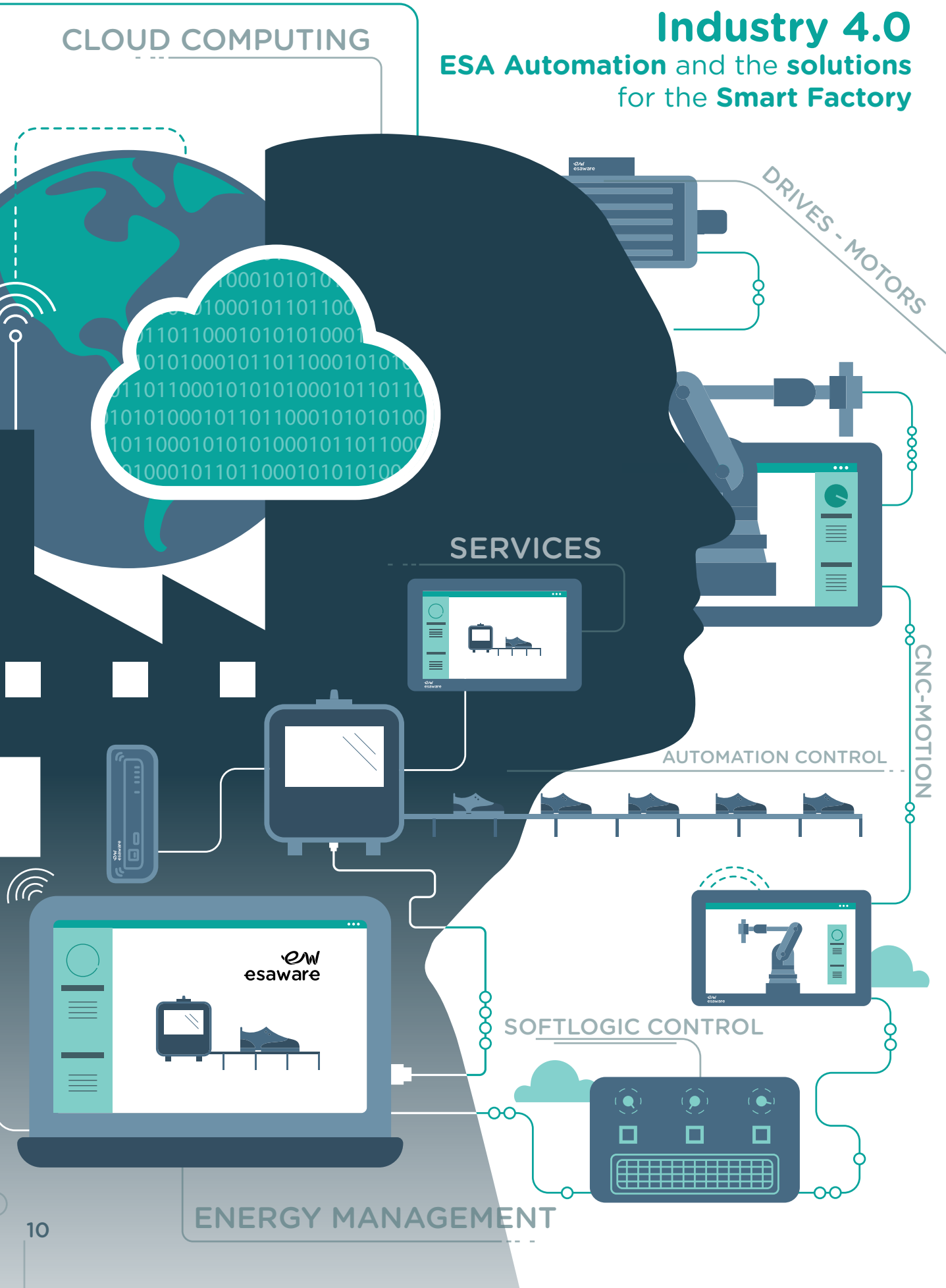
HMI and IPC network project

Create your own network of HMIs and IPCs with a Master/Slave architecture, in order to share all variables and data through Network among connected devices.



Industry 4.0

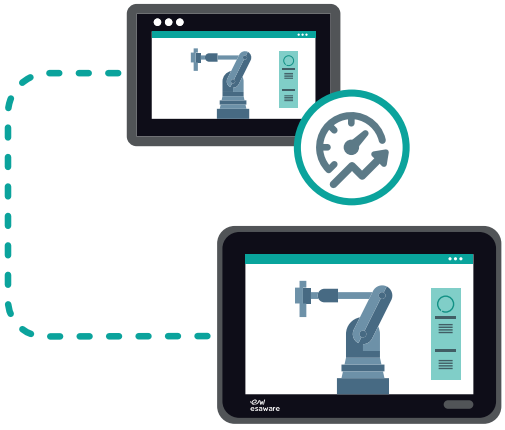
ESA Automation and the **solutions** for the **Smart Factory**



EVERYWARE
Control beyond distance

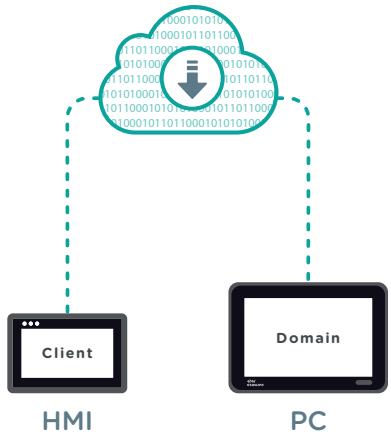
Everyware is the innovative remote maintenance package that eliminates all distances and boarders between users and their production plants. Without any additional hardware or configuration you can access, control and modify the system by just using a common internet connection. Everyware starts an encrypted connection between two clients ensuring the system inviolability and giving access to all devices on that system.
Everyware is also mobile, thanks to its native App available for all the most common mobile devices. Hence, you can view and interact with the human-machine interface remotely, wherever the production plant is.

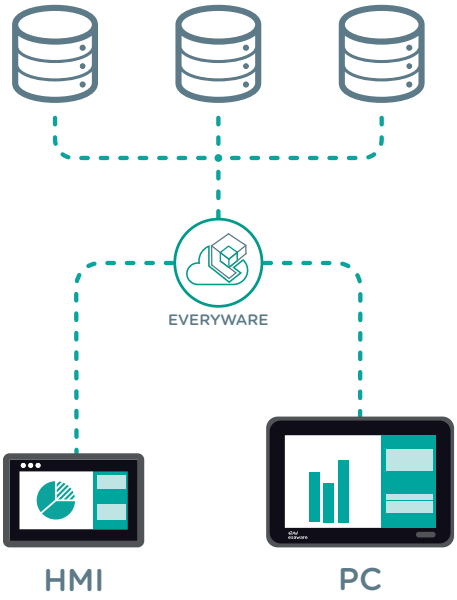
Remote Desktop functionality: performance improvements
We optimized Remote desktop functionality, to get a global significant performance increase: in case of both an unstable connectivity between server and client and in case of good level connectivity



Online Update functionality for domains' management application. Online Update functionality for clients' management application.

From Everyware 1.8 on, it is possible to update in an automatic and scheduled way the client of domains' management that is installed on your PCs. There is also the possibility to update the runtime client during the standard usage. There is no need to manually install the new release.





Connectivity management towards external databases

We always pay great attention to the connections' security. The connectivity to database is managed through our secure communication protocol, Everyware. In this way the user is protected by any kid of attack that could intercept or modify the exchanging data.

User privileges

From Everyware 1.8 on, thanks to a check box, you can decide which functionalities to enable for any single user. Therefore, there will be users enabled just for the Remote Desktop functionality or others enabled only for the Chat service. In a simple and intuitive way, there is the possibility to create hierarchical usage of functionalities which are at the disposal of the users.

HTML5 Client

Now using Everyware is simpler than ever: you are free to use any hardware or operating system you prefer. You don't have to install anything: use any browser and enter your domain by a HTTPS connection.

Usage statistics

With the new statistics functionality you can keep under control your domain activity.
You can visualize your historical data by each functionality or by time period.

Router and Data Manager Support

In your domain you can configure:
EW500 Industrial Router to use Everyware services also with third part devices.
EW900 Data Manager to collect energy monitoring data and visualizing them remotely thanks to Energyaware application.
You can also activate the wake-up on SMS service and optimize your data traffic consumption.

SMS and E-Mail

SMS and Email sending, configured inside the CREW project, is managed by Eveyware infrastructure. This means extreme ease in configuration and maximum flexibility. Thanks to Everyware infrastructure , your SMSs will be sent all over the world with a single cost.

Number of SMS management organized for single Domain folder
It is now possible to set the maximum number of SMS that can be sent overall from all devices added to a Domain folder.

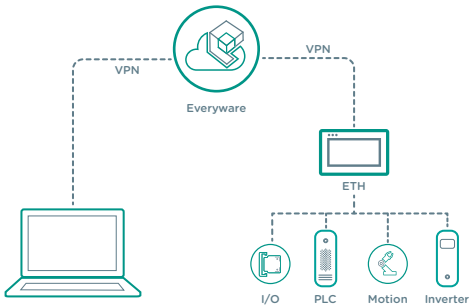
Number of SMS management organized for single Domain device
It is now possible to set the maximum number of SMS that can be sent from each device in a domain.

Use the chat to send real-time messages.

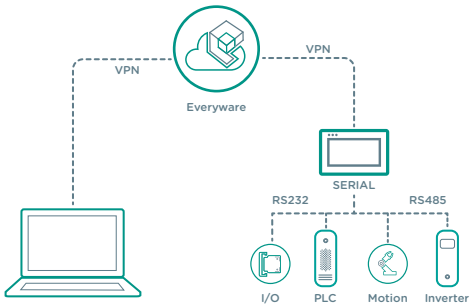
The telephone is not anymore necessary to communicate with the operator: you can cut the costs.

Work in complete safety.

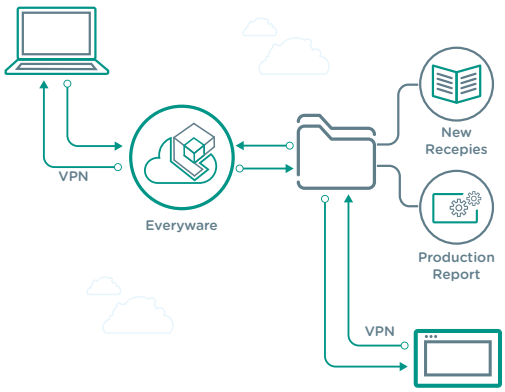
Thanks to an encripted VPN connection base on TLS1.2 algorithm, your work is protected from any system intrusion attempt.



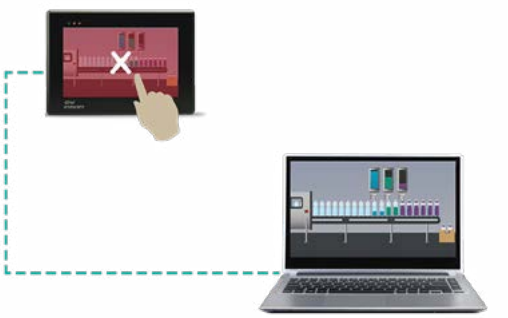
Access any subnet in the plant.
Using an encripted VPN connection between the tele-assistance PC and the devices.



Make downloads and debugs on the connected devices.
Thanks to the virtualization of the serial port inside the Ethernet connection.



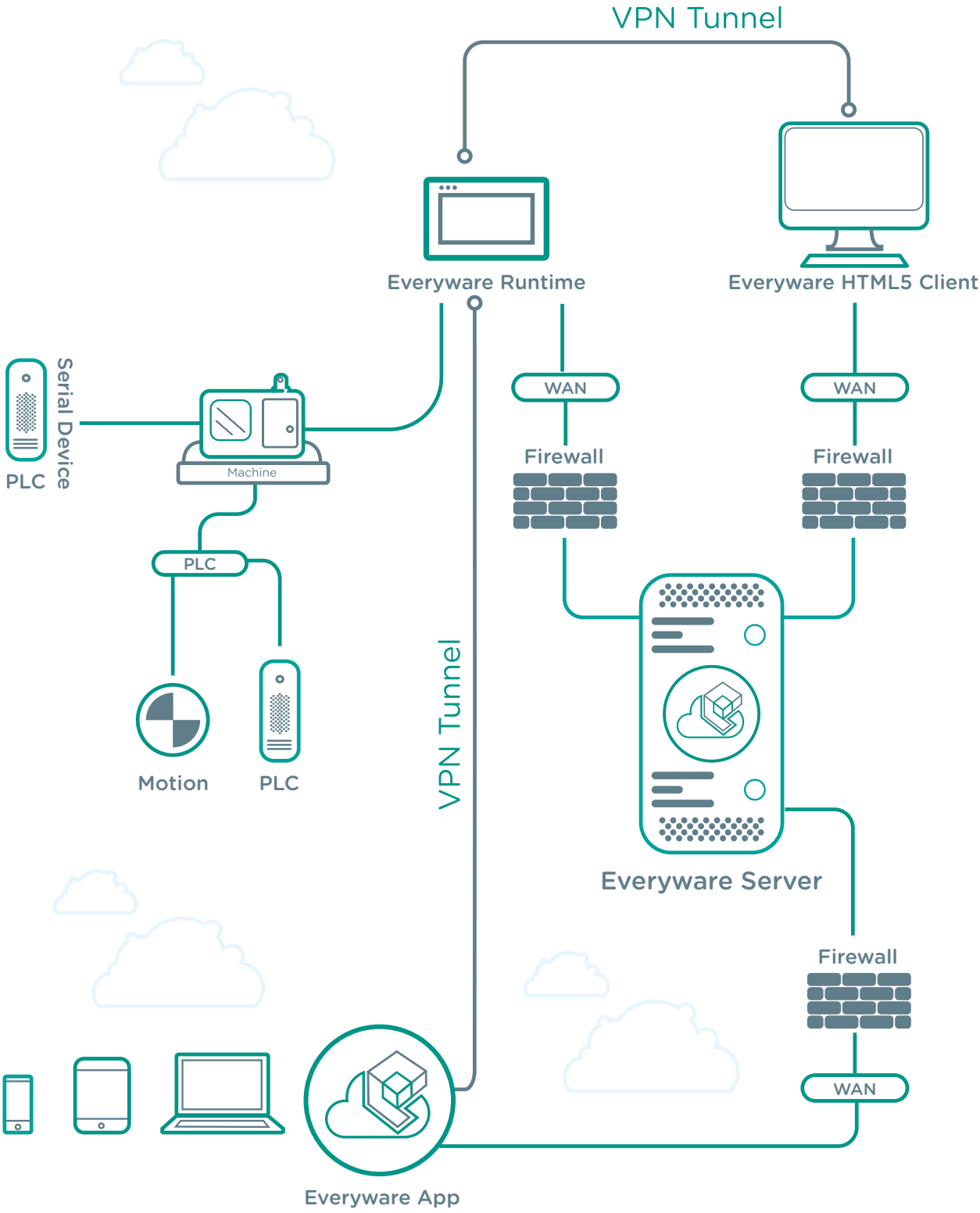
Share files and folders directly with a remote device
Through a standard FTP communication.



Disable touchscreen during Remote Desktop session.
Everyware introduces the possibility to disable interaction with the touchscreen on the device during Remote Desktop session.

Everyware

embedded in HMI and IPC
Esaware



Esaware Industrial Router

Stay connected

EW500 Esaware is the new series of industrial router that allows to connect any device to Everyware Remote Platform. Thanks to EW500 industrial router you can connect through an encrypted VPN connection all your plants.
EW500 is available with up to 4 LAN ports on board to communicate with devices reducing installation costs.
Other options are available: such as communication through a mobile connection. This option allows to install Esaware router where it is not possible to have a wired connection.
EW500 is also equipped with Firewall functionality. The connection is more secure thanks to available filters such as port level filter and package level filter.
Thanks to embedded Input/Output you can decide when starting a remote assistance session and knowing in real time if the assistance session is active.

These are EW500 main features:

- Preloaded Everyware Runtime
- HTML5 configuration
- Din Rail mounting
- Integrated Firewall
- Wi-Fi comunication
- 2G/3G comunication
- Serial Port RS232/485

Features	EW500A0000	EW500A0002	EW500A0100	EW500A0102
Runtime Everyware	Preinstalled			
Operating System	Linux			
Firewall	Integrated			
Processor	Arm Cortex A8			
RAM	256 MB DDR3			
Flash	2GB			
Wan Port	1 x 10/100 Mb			
LAN Ports	2 x 10/100 Mb		4 x 10/100 Mb	
Serial Ports	RS232/485			
USB Ports	1 x USB Host			
Slot	1 x SDHC/MMC			
Input	3 x PNP/NPN			
Output	3 x PNP 300 mA for each output			
Wireless Option	N.A.	2G/3G/3G+ EDGE/HSPA	N.A.	2G/3G/3G+ EDGE/HSPA
Antenna	N.A.	Yes	N.A.	Yes
Status LED	Six on Front			
Power Supply (Vdc)	12 - 32			
Consumption (W)	5			
Operating Temperature (°C)	-10 ... +50 (non condensing)			
Storage Temperature (°C)	-20 ... +65			
Humidity	<90% (non condensing)			
External dimensions (W/H/D) (mm)	55,4 x 160 x 133,2			
Weight (kg)	0,5			
Protection degree	IP 20			
Certifications	CE			

CNC & MOTION SOLUTIONS

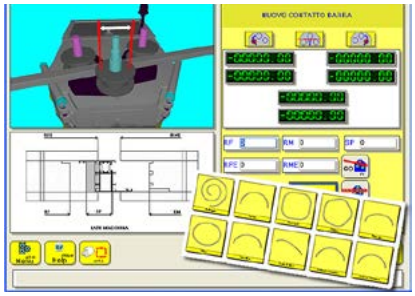
e-motion technology

ESA Automation presents the most comprehensive range of “ALL IN ONE” PAC controllers and includes bright high definition touch screens from 4.3” up to the impressive 15”.
Discover the potential in our renowned PLC, HMI, CNC, Motion Control and IT server, in one powerful device with the number of I/O and Axis easily increased using our CAN Open expansion boards. Realise the huge advantages of writing a SINGLE APPLICATION that incorporates PLC, CNC and HMI functions. We produce standard ISO (G code) CNC solutions for machining wood, glass, stone, ceramics, plastic, and other materials.
ESA has the right solution to improve your machine.

The ESA Automation Application Engineering Service and “Turnkey” customer oriented solutions.

We offer a complete customer oriented automation “Turnkey” solution, including HMI, CNC, PLC and SCADA application development, debug, simulation, and full training of you engineers. Moreover, we provide onsite final testing on the customer’s plant or on the end user plant.
Possibility to have customized applications.

For many years we have developed complete machine applications for numerous industrial fields, including:



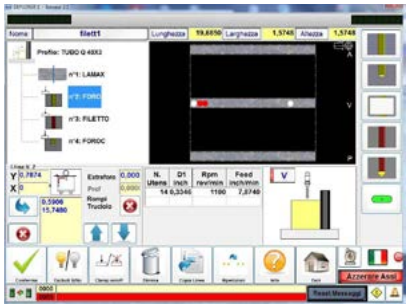
MACHINE TOOLS FOR METAL WORKING

Tube bending machines

For this particular machine we have developed one of the most complete control solution, based on macro user-friendly programming cycles, for single or multiple working machines.

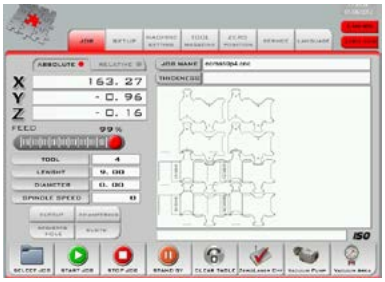
Band saws cutting machines

We have different applications for these machines, from a basic solution with keyboard and display, to the big touch screen based four axis machine motion and PLC control.



Screwing machine

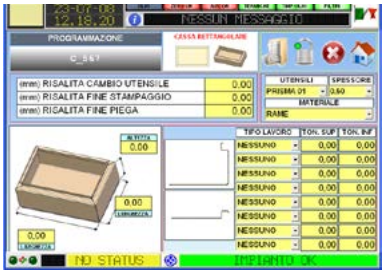
We have developed a machine center for working on iron bars, that can provide all kinds of drilling, screwing and milling thanks to a wizard macro programming tool.



MACHINE TOOLS FOR WORKING SHEETS

Laser, water jet and plasma cutting

The complete solution, up to four axis, with integrated standard or gantry axis management, for all Cartesian robots for metal sheet (but also stone, plastic, rubber, paper) cutting and engraving. ISO (G code) interface that can be easily adapted to all the CAD CAM you may need by our post processor making service. Moreover, a lot of scalable tools like DXF to Macro and DXF to ISO generators can be added to the application.



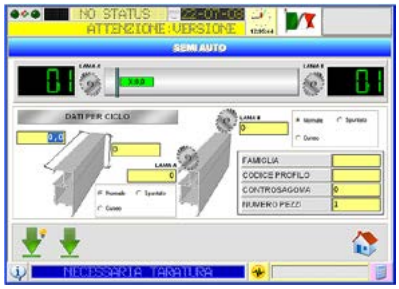
Press brakes

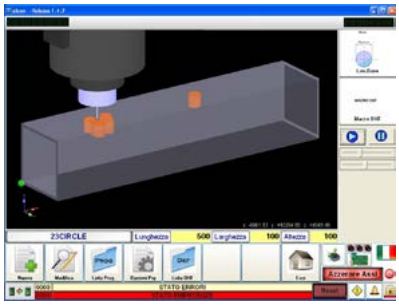
Like all the other applications, our Press brake application is easy to use and guides you through the making of all your pieces. A flexible graphic editor will guide you through the entire metal sheet manipulating process.

Cutting, pressing, profiling and straightener metal sheet lines

A completely configurable metal sheet working all-in-one application that includes PLC and Motion control.

MACHINE TOOLS FOR ALU & PVC WINDOWS PROFILES AND SECTIONS





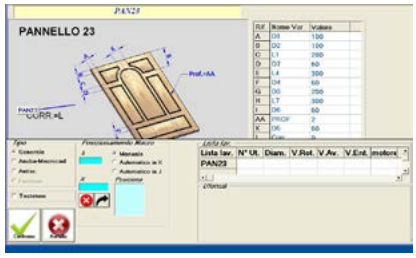
Cutting single or double head machines application

The ESA Automation PVC and ALU profiles cutting single or double head machines application synthesizes twenty years of experience. It is our most complete application, including profiles typology management, profiles cutting formulas, importing and exporting tools for the most important windows cad drawing tools.

Alu profiles machine centers

The 3D simulation tool opens different scenarios of machining programming, as you can decide to work starting from a Macro, from a DXF drawing, from a Macro generated by a DXF drawing, or simply connecting it to an external CAD CAM. Inputs and outputs of the SoftPLC can be configured on a page protected by a password. Moreover, a good oscilloscope function allows you to trigger and to follow the behavior of all axis variables.

WOOD WORKING MACHINES

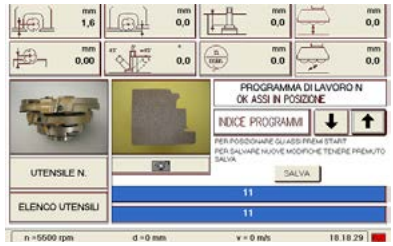


Wood windows profile machine centers

The wood profile machine center applications by ESA Automation include several machines, from the simplest 3 axis standard wood engraving doors and windows profiles machine centers to the most complete producing line, up to 50 Axes or more.

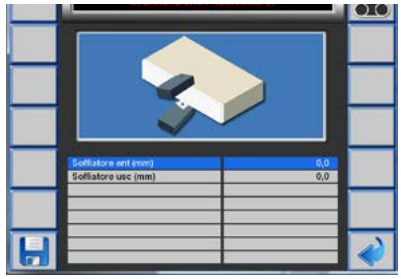
Panel machining centers

You can count on several CAD CAM solutions, in order to draw directly on the CNC application the shape you want to engrave, generating directly ISO (G code), together with the availability of Macro programming or using our DXF to ISO and DXF to Macro scalable tools.



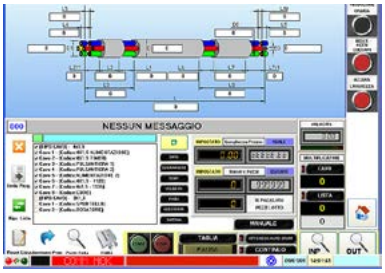
Spindle molder and circular saw solutions

We work for the most important machines producers in the world and we offer a complete range of scalable hardware and software solutions with the best value for money. Our solutions are ready to manage radio controlled registers and tools changing systems.



Edgebander machines

For these machines, we offer a dedicated hardware and software solution. All the applications are fully configurable, with the possibility to scale the machine layout, activating or deactivating all the edge working groups. We can manage both motorized and pneumatic groups, and the application fully controls the temperature of the gluing groups.

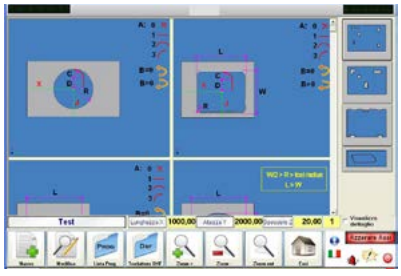


CABLES AND WIRES WORKING MACHINES

The ESA Automation application for working cables machines is a very powerful control software that can completely manage a 4 axis controlled machine, with a motorized blades group or a pneumatic controlled one. The application can also manage the raw cables and wires database, in order to assign a wiring working order with different kinds of wires and cables. The application supports all the most diffused inkjet fast printers. The working order can be sent by net and web, and can be imported from XLS files. A user-friendly interface allows you to program and configure the order list very quickly.

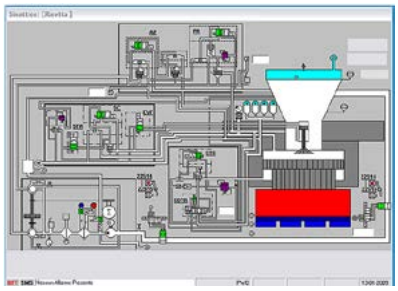
GLASS VERTICAL AND HORIZONTAL MACHINE CENTERS

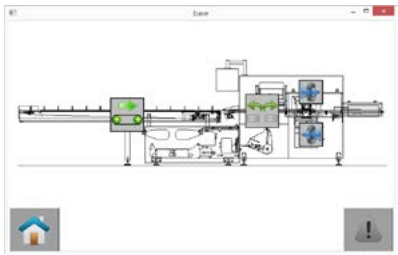
The application includes a rich endowment of macros that automatically includes all the “pre-process” necessary to prepare the glass sheet for the final working, without the risk of breaking it. The application can be connected to different CAD CAMs and can be easily configured for different sizes of machine. Finally, it can also support different layouts of axis configuration.



CERAMIC PLATES PROCESSING PLANTS

Our solution for the tiles production line and press control has been chosen by the main players of this market. It includes the management of the entire production cycle, from the dust dosing on the dies, to the continuous parallelism control and the precise expulsion of the tiles.



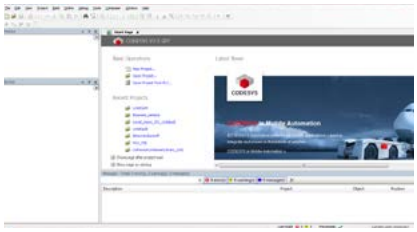


PACKAGING MACHINES

The ESA Automation flow pack 3 - 5 axis electronic cams based application can manage different machine sizes and layouts. From the standard flow pack with rotating sealing group to the translating one, the app can manage several sealing processing options, as “no product, no bag” or “no phase, no seal”. The sealing group temperatures are controlled by the application, and the motor can be driven by digital field buses or by analog or step + dir outputs. Different brands of “on line” inkjet printers are available on the configuration pages, as well as various options in the machine phasing of the electronic cams.

CODESYS

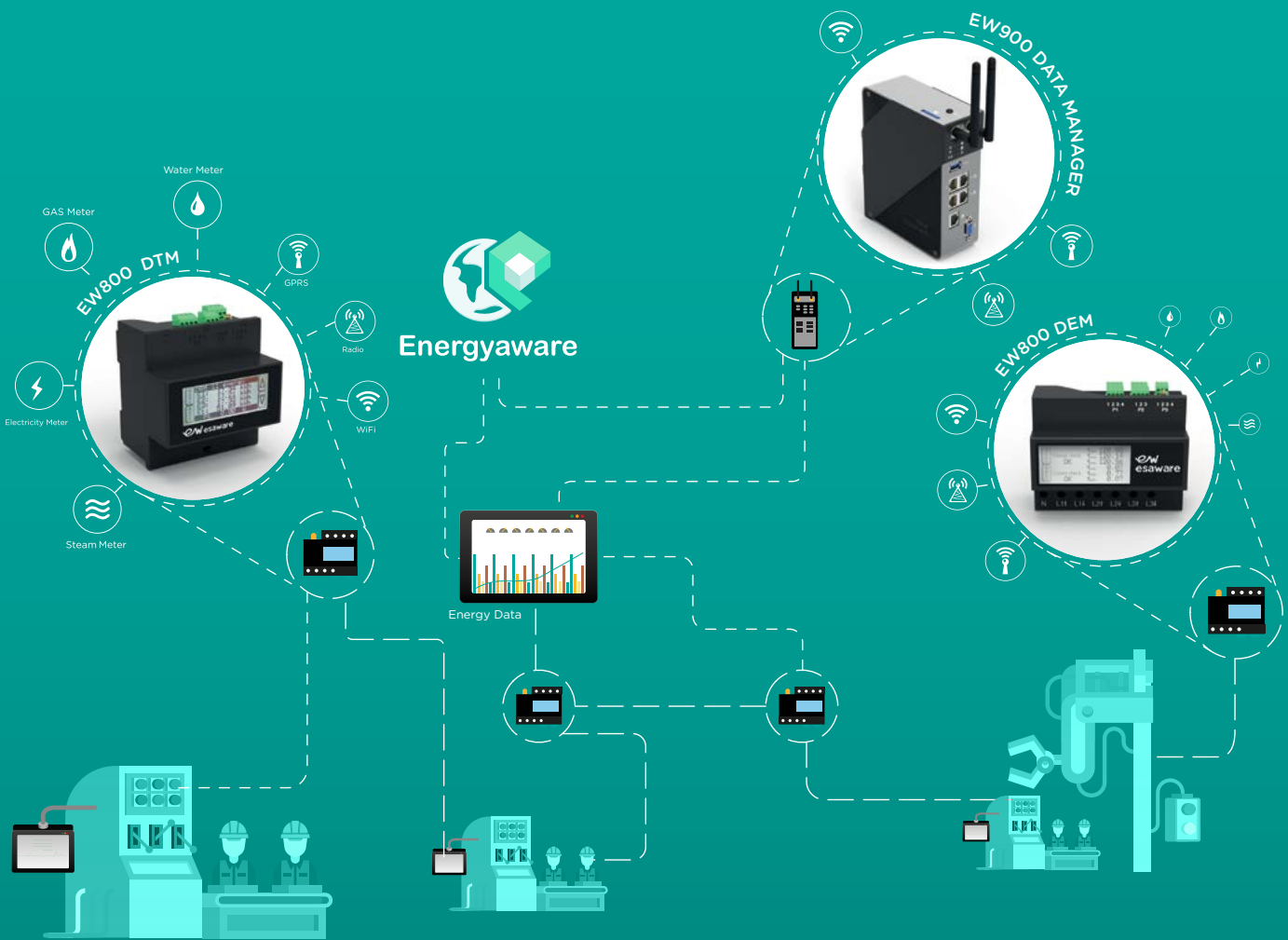
The most recognized and comprehensive IEC 61131-3 development environment for programming Industrial Controllers.
ESA’s seamless integration between CODESYS and Crew enables “one click” sharing of all project information, this time-saving function includes the ability to use CODSYS tags directly in Crew.
The combination of CODESYS runtime and EtherCAT Master provides the optimized solution for any local or distributed PLC application.



The following functions and languages are supported :
Ladder diagram
Structured text
Sequential function chart
Continuous function chart
Function block diagram
Integrated visualisation
Trace functions
Offline simulation
All programming languages can be used in combination with one another
Simultaneous conversions possible
All standard data types:
BYTE, WORD, DWORD, SINT, USINT, INT, UINT, DINT
Symbolic operands with no length restriction
Context-sensitive help functions
Global search and replace
Disc space check prior to download
Unlimited number of function parameters

Your efficiency under control.

Check your energy consumption at every stage of the production process with ESA Automation energy efficiency solutions.



INDUSTRY 4.0

ESA Automation and the **solutions** for the **Smart Factory**

Energy Management

Focus your energy.

ESA Automation SMART METER technological platform continuously monitors and records energy consumption (Electricity, Gas, Water, etc.) providing the data which give any organization the insight to make energy improvement decisions based on knowledge and not speculation.
Just connect the CTs and go.
The pre-installed Software on the Data Manager performs all the functions of an advanced Energy Management System from acquisition of consumption data and the secure access to the historical data to the remote control via VPN of smart meter networks.
This new approach, exploiting the IOT (Internet of Things) paradigm, moves the intelligence to the distributed sensors (EW800 Smart Meter). Each individual sensor makes its information to be available to the data manager (EW900 Data Manager) which publishes the accumulated data using free HTML5 web pages which can be displayed on anything from a smartphone or tablet up to a PC.
The use of wireless infrastructures (RF868, 3G, 4G, Wi-Fi) and a distributed modular system gives ESAs EMS both low entry costs and low total cost of ownership.

SMART METERS EW800

ESA Automations EW800 Smart Meters are the building blocks of a modular energy monitoring system, providing accurate energy consumption figures in order to deliver distributed analysis of energy usage profiles. In addition to the measurement of standard energy values, the EW800 provides the appropriate quality parameters of the supply network. Up to 250 EW800 smart meters can be controlled by one EW900 Data Manager also via the RF868 radio interface.

Data Manager EW900

Esa Automation's EW900 compact Data Manager is capable of acquiring and managing consumption data (Electric, Gas, Water, etc.) from up to 250 measurement devices (DEM, DTM, DRM, etc.). EW900 hardware options include up to 3 LANs, Wi-Fi, 3G mobile, RF868 radio, USB port and 3 digital in-3 digital out. All EW900 products come with the pre-installed Energyaware software, for easy management via standard browser, including real time visualization of all collected data, with advanced graphics.

Accessories EW8ET

Current Transformers - Rogowski Coil Sensors - Voltage Transformers for usage with EW800B (DTM) and EW800C (DRM).

Kit ESCo EW8BX

ESA Automation's ESCo Kit provides any user with an extremely quick and easy method of implementing an EMS (Energy Management System). The pre-wired, certified kit includes all the hardware and software you need to start monitoring and logging usage data, conveniently mounted in a GRP cabinet, just supply power and connect the CT/RC for the circuits to be monitored. The pre-installed software begins to record consumption immediately. Expanding the basic system is simply done by the addition of extra meters.

Energyaware

Software pre-installed on the Data Manager for measurement, monitoring, local and remote control of smart meter networks. The software performs all the funtionality of an advanced Energy Management System. Starting from the acquisition of consumption data, up to the remote control via VPN, including the secure access to the historical data loaded into databases and advanced graphics.

Features		EW800A DEM	EW800B DTM	EW800C DRM
Connections		Single-phase Three-phase 4 wires with Y load Three-phase 4 wires with D load	Single-phase Two-phase Three-phase with neutral Three-phase without neutral	
Measuring inputs	**Current Channels**	Direct up to 64A (45kW) three-phase connection, up to 21A (15kW) single-phase connection	with external Current Transformers	with external Rogowski coils
	Voltage Channels	Direct (max rated voltage phase-neutral 230Vac)	Direct (max rated voltage phase-neutral 230Vac) or with external Voltage Transformer (rated secondary voltage 100-115Vac, for LV or MV application)	
Power supply		self-powered	100÷230Vac	
Communication		RS485 ModBus (in all EW800... models) Radio RF868 MHz (only in EW800...200 models) Ethernet (only in EW800...300 models)		
Digital Isolated Input/Output		2 I/O module option (configurable by Data Manager)		
Measures		Voltage (phase-neutral and phase-phase) Current (phase values and neutral value) Imported Active Energy (phase values and total value) Exported Active Energy (phase values and total value) Imported Active Power (phase values and total value) Exported Active Power (phase values and total value) Reactive Power with sign (phase values and total value) Apparent Power (phase values and total value) Power Factor (phase values and total value) Frequency		
Harmonic analysis		THD (in voltage / current signal) Harmonics 1st ...51st (in voltage / current signal)		
Accuracy	**Active Energy** (according to IED 62053-21)	Class 1		
	Reactive Energy (according to IED 62053-23)	Class 2		
	Current and Voltage	≤ 0,5%		
Display		LCD (256 x 96 pixel) and resistive touch screen		
Case	**Mounting**	DIN rail	DIN rail	
	No. DIN modules	7	5	
	External dimensions (mm)	126 x 100 x 70	90 x 96 x 70	

Features		EW900A	EW900B
Processor	CPU type/clock	Cortex A8 / 800 MHz	
	RAM	256 MB	
Memory	Internal Flash	Up 2 GB (for application software and log file)	
	SD Card espansion	Up to 64 GB (for Data Logging)	
Energy Management Software	Pre-Installed	EnergyBasic	
	Option	EnergySend, EnergyAll, EnergyAlarm and EnergyFFT	
		EnergyConA0... (only in EW900 with GPRS/HPSA module)	
Power Supply		24 Vdc	
Communication	Fieldbuses	1 RS485 ModBus RTU, 1 ModBus TCP/IP	1 RS485 ModBus RTU, 3 ModBus TCP/IP Radio RF868 MHz
	Remote	Ethernet HTTP: JASON, FTP, OpenVPN	
		GPRS/HSPA (only in EW900...B... model)	
		WiFi (only in EW900...C... model)	
Digital Isolated Input/Output		3 I/O module (totally configurable)	
Smart sensors	Type	Electricity meter, Water meter, Gas meter, Steam meter, etc.	
	Network Dimension	Up to 250 devices	
Case	Mounting	DIN rail	
	Dimensions (mm)	56 x 171 x 140	

Features

EW8ETA

Type		Compact Current Transformers	Accuracy
1# size	Rated Current	150A	0,5%
2# size	Rated Current	250A	
		500A	
		1.000A	
3# size	Rated Current	500A	
		1.000A	
4# size	Rated Current	2.000A	

Features

EW8ETB

Type		Split-Core Current Transformers	Accuracy
1# size	Rated Current	100A	0,5%
		250A	
2# size	Rated Current	500A	
		1.000A	
3# size	Rated Current	800A	
		1.000A	
4# size	Rated Current	1000A	
		1.250A	
5# size	Rated Current	1000A	
		2.000A	

Features

EW8ETC

Type	Rogowski Coil
Primary current range	1 ÷ 5.000A
Accuracy	1%
Coil Lenght	250mm or 400mm
Coil internal diameter	68mm or 115mm
Auxiliary cable lenght	2.000mm , 6.000mm or 10.000mm

Features

EW8ETD

Type		Voltage Transformers	Accuracy
1# size	Rated Voltage	400 V	0,5%
		690 V	
2# size	Rated Voltage	1000 V	

Energy Management

Focus your energy.

www.esa-automation.com

Esaware Web Panel

Browser-based efficient control

Esaware Web Panel is based on Android operating system. Chrome browser, pre-installed on Esaware Web Panel, allows you to visualize any kind of web pages from a local or remote WEB Server.
Thanks to Chrome you can also visualize web pages from our Web Server that is available on all Esaware HMI. Esaware EW107BD is also available with MicroBrowser software, the ideal tool to visualize contents from Saia PLC or developed with CODESYS TargetVisu ver. 2.X.
Esaware Web Panel is also available with a RS232/485 serial port, that allows the communication through standard protocol with devices equipped with this kind of interface.
Esaware EW107BD is fully compatible with HTML5 and Web Socket technologies.
Esaware Web Panel is also equipped with a dedicated app store, ESA AppStore, created on purpose to allow the update of existing apps.
EW107BD has been created to satisfy users' needs. Not only you have the possibility to install any kind of application, but you can also customize the installed launcher and the store server, that is used to update the apps.

These are EW107BD Android main features:

- Customized Launcher
- Chrome Bowser
- Preinstalled MicroBrowser (EW1xxxD300)
- SNTP Server and Client
- Aluminium front Side PTFE coating
- Capacitive Touch Screen
- High Bright 16 Millions Colors Display
- Arm Cortex A9 Quad Core CPU
- 4 GB DDR3L Ram
- 8 GB Flash
- SDHC v2.0 (up to 25 Mbyte/s)
- 2 USB v2.0 Ports
- 1 Ethernet 1 Gb Port + 1 Ethernet 10/100 Mb
- 1 RS232-485 Port (optional)
- Wi-Fi and 3G (optional)

These are EW107BD Linux main features:

- Desktop Interface
- Chromium Browser
- SNTP Client
- NTP Client
- Aluminium front Side PTFE coating
- Capacitive Touch Screen
- High Bright 16 Millions Colors Display
- Arm Cortex A9 Quad Core CPU
- 4 GB DDR3L Ram
- 8 GB Flash
- SDHC v2.0
- 2 USB v2.0 Ports
- 1 Ethernet 1 Gb Port + 1 Ethernet 10/100 Mb
- 1 RS232-485 Port (optional)
- Wi-Fi and 3G (optional)

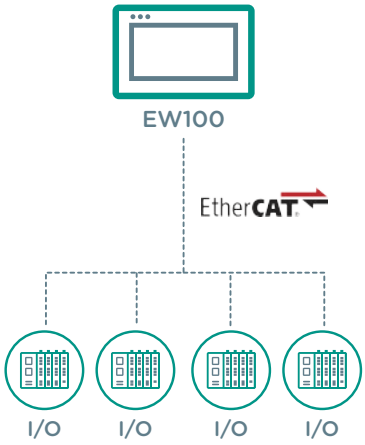
Capacitive Web Panel for Thin Client Application

Features	EW107BD200 Android	EW107BD2SP Android	EW107BD300 Android	EW107BD400 Linux	EW107BD4SP Linux
Display Size	7”				
Display Technology	TFT				
Display Colors	16 M				
Display Backlight	LED				
Display Brightness (cd/m²)	500				
Display Resolution (pixel)	1024x600				
Backlight Life (hours)	50 K				
Touch Technology	Capacitive				
Processor	ARM Cortex A9 Quad-Core				
RAM	2 GB DDR3L				
Flash	8GB				
Browser	Chrome		Chrome/Microbrowser	Chromium/Firefox	
Ethernet Port	1 x 1 GB + 1 x 10 / 100 Mb				
USB Port	2 x vers. 2.0				
Serial Port	-	1 X RS232/485	-		1 X RS232/485
Expansion Slot	1 x MINI PCI express				
Cardbus slot	1 x SDHC				
Power Supply (Vdc)	12 - 32				
Consumption (W)	7				
Operating Temperature (°C)	-10 ... + 50 (non condensing)				
Storage Temperature (°C)	-20 ... + 65				
Humidity	<90% (non condensing)				
External dimensions (W/H) (mm)	192 x 132 x 32				
Cut-out dimensions (W/H) (mm)	185,0 x 125,0				
Weight (kg)	0,5				
Protection degree (front)	IP 66				
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30				

Esaware HMI + SoftPLC

Control made easy

Our HMI + SoftPLC CoDeSys + Ethercat master for visualization/ control through remote I/O and Remote Maintenance Platform.
A solution for the control and command of any kind of industrial application. Thanks to the Ethercat Master interface it is possible to connect different devices to the external enviroment.



The EW100AB is complemented with Ethercat "real time" Ethernet system enabling high-performance control and communication of compatible I/O and motion control devices.

These are EW100AB main features:

- Preloaded CoDeSys v.3.5 Runtime
- Embedded NVRam
- Watchdog Sw
- Wathcdog Hw
- Ethercat Master interface on board
- Operating System Windows Embedded Compact 7 Pro
- Preloaded Everyware runtime
- SNTP Server and Client
- Aluminum Front Side PTFE coating
- True Flat Touch Screen
- Status leds on front
- CPU Arm Cortex A8 1 GHz
- Ram DDR3
- Internal Memory 3 Gbyte
- SDHC v2.0 (up to 25 Mbyte/s)
- High Bright 16 Millions Colors Display

CR9 Task motion

Features	EW104AB	EW107AB	EW112AB	EW115AB
Display Size	4,3”	7”	12,1”	15,6”
Display Technology	TFT			
Display Colors	262 K	16 M		
Display Backlight	LED			
Display Brightness (cd/m²)	400	600	400	300
Display Resolution (pixel)	480 x 272	800 x 480	1280 x 800	1366 x 768
Backlight life (hours)	50 K			
Processor	ARM Cortex A8			
RAM	256 MB DDR3		512 MB DDR3	
Flash	3GB			
NVRAM	32Kb (SoftPLC)			
Scan Time (µSec)	Typical 30			
Serial Ports	SP1 RS232/485-MPI-COM0; SP2 RS232/485-MPI-COM0; CAN; Profibus			
Ethernet (Ethercat Master)	1 x 10/100Mb	2 x 10/100Mb		
USB Ports	1 x USB Host + 1 x USB Device		2 x USB Host + 1 x USB Device	
Cardbus Slot	1 x SDHC/MMC			
Power Supply (Vdc)	18 - 32			
Consumption (W)	4	7	15	19
Operating Temperature (°C)	-10 ... + 50 (non condensing)			
Storage Temperature (°C)	-20 ... + 65			
Humidity	<90% (non condensing)			
External dimensions (W/H/D) (mm)	166 x 112 x 45,9 (61 with double port)	202 x 142 x 45,9	340,5 x 238,5 x 48,6	436,5 x 285,5 x 54,4
Cut-out dimensions (W/H) (mm)	158,5 x 104,5	195 x 135	326 x 227	422,5 x 271,5
Weight (kg)	0,5	0,8	2,5	4,5
Protection degree (front)	IP 66			
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / cULus (Certificate no. E189179) / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22			

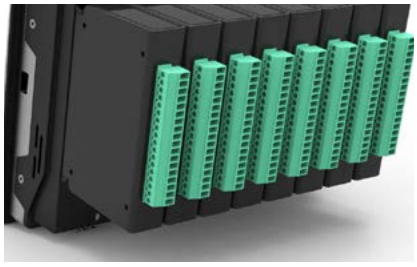
Esaware HMI + SoftPLC + I/O

Control made easy

Our HMI + SoftPLC CoDeSys + Ethercat master + I/O for visualization/control through onboard I/O and Remote Maintenace Platform. The embedded complete solution for the control and command of any kind of industrial application. Thanks the EW600 I/Os it is possible to create extremely flexible configurations.

These are EW100AC main features:

- Backplane for EW600 I/O
- Preloaded CoDeSys v.3.5 Runtime
- Embedded NVRam
- Watchdog Sw
- Wathcdog Hw
- Ethercat master interface on board
- Operating System Windows Embedded Compact 7 Pro
- Preloaded Everyware runtime
- SNTP Server and Client
- Aluminum Front Side PTFE coating
- True Flat Touch Screen
- Status leds on front
- CPU Arm Cortex A8 1 GHz
- Ram DDR3
- Internal Memory 3 Gbyte
- SDHC v2.0 (up to 25 Mbyte/s)
- High Bright 16 Millions Colors Display



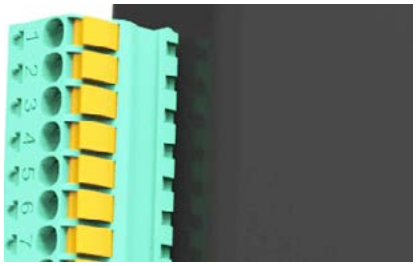
With the addition of an integrated I/O backplane and Esaware EW600 local I/O, the EW100AC is the complete automation control system. The EW100AC “all in one“ solution can be expanded with Ethercat “real time” distributed I/O, delivering ultimate flexibility and efficiency.

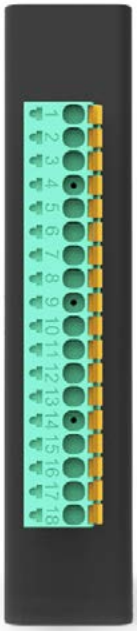
Features	EW104AC	EW107AC	EW112AC	EW115AC
Display Size	4,3”	7”	12,1”	15,6”
Display Technology	TFT			
Display Colors	262 K	16 M		
Display Backlight	LED			
Display Brightness (cd/m²)	400	600	400	300
Display Resolution (pixel)	480 x 272	800 x 480	1280 x 800	1366 x 768
Backlight life (hours)	50 K			
Processor	ARM Cortex A8			
RAM	256 MB DDR3		512 MB DDR3	
Flash	3GB			
I/O Slot	4	8	12	16
NVRAM	32Kb (SoftPLC)			
Scan Time (µSec)	Typical 30			
Serial Ports	SP1 RS232/485-MPI-COM0 ; SP2 RS232/485-MPI-COM0 ; CAN ; Profibus			
Ethernet (Ethercat Master)	1 x 10/100Mb	2 x 10/100Mb		
USB Ports	1 x USB Host + 1 x USB Device		2 x USB Host + 1 x USB Device	
Cardbus Slot	1 x SDHC/MMC			
Power Supply (Vdc)	18 - 32			
Consumption (W)	4	7	15	19
Operating Temperature (°C)	-10 ... + 50 (non condensing)			
Storage Temperature (°C)	-20 ... + 65			
Humidity	<90% (non condensing)			
External dimensions (W/H/D) (mm)	166 x 112 x 45,9 (61 with double port)	202 x 142 x 45,9	340,5 x 238,5 x 48,6	436,5 x 285,5 x 54,4
Cut-out dimensions (W/H) (mm)	158,5 x 104,5	195,0 x 135,0	326,0 x 227,0	422,5 x 271,5
Weight (kg)	0,5	0,8	2,5	4,5
Protection degree (front)	IP 66			
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / cULus (Certificate no. E189179) / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22			

Embedded I/O
Clack & Play

Esaware I/O modules complete our HMI EW100AC series, giving you the ability to fully command and control all of your applications.

All EW600 I/Os are modular, which means that it is possible to create different configurations depending on your needs. They have been designed to guarantee excellent ergonomics and to be extremely easy to install. In fact, they offer a fast cabling system with cage clamps and can be cabled just by extracting the connectors. In addition, Esaware I/O modules are configurable via software without any dip switch or any other kind of hardware configuration.





Digital I/O – EW600B

Mixed opto-isolated input and output modules to prevent signal from suffering due to high voltages, by isolating the circuits using a LED and a receiver. That is why opto-isolators are the best solution to secure control over your plant at any time.

EW600B08B04 8 Digital Input + 4 Digital Output

Supply Voltage (Vdc)	24
Isolation	Optoisolated
Input Numbers	8
Input Type	PNP, NPN
Output Numbers	4
Output Type	PNP (300 mA/output)
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	96 x 72 x 20
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

Analog I/O – EW600A

Mixed input and output modules to manage analog signals produced by the field and to regulate all actuators. Thanks to a powerful signal-processing unit, they guarantee high precision control.

EW600A03A02 3 Analog Input + 2 Analog Output

Supply Voltage (Vdc)	24
Input Numbers	3
Input Type	0 / 5 V, 0 / 10 V, +10 / -10 V, 0 / 20 mA, 4 / 20 mA
Output Numbers	2
Output Type	0 / 5 V, 0 / 10 V, +10 / -10 V, 0 / 20 mA, 4 / 20 mA
Resolution	16 Bit
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	96 x 72 x 20
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

High Speed Input – EW600C

Opto-isolated input modules for fast signal input or fast counter up to 100 KHz.

EW600C02N00 2 High Speed Input

Supply Voltage (Vdc)	24
Input Numbers	2
Input Type	Incremental Pulse / Differential Phase (4x) / Up/Down / Pulse + Direction (5-30 Vdc)
Isolation	Optoisolated
Frequency (KHz)	100
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	96 x 72 x 20
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

Thermocouples Input – EW600D

Input modules for thermocouples sensors with internal or external cold junctions. Thanks to the powerful signal-processing unit, they guarantee very high resolution.

EW600D06N00 6 Thermocouple Input

Input Numbers	6
Input Type	K / J / E / T / N / B / R / S
Resolution (°C)	+ 0,1 / - 0,1
Cold Junction	Internal and External
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	96 x 72 x 20
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

Thermoresistances Input – EW600E

Input modules for thermoresistance sensors. Thanks to the powerful signal-processing unit, they guarantee very high resolution.

EW600E04N00 4 Resistance Thermometer Input

Input Numbers	4
Input Type	Pt100 / Pt200 / Pt500 / Pt1000 / Ni100 / Ni1000
Resolution (°C)	+ 0,1 / - 0,1
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	-10 ... + 50 non condensing
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

High Speed Output – EW600N

High speed output modules to command signals up to 300 KHz.

EW600N00C04 4 High Speed Output

Supply Voltage (Vdc)	24
Output Numbers	4
Isolation	Optoisolated
Output Type	CW/CCW - Pulse+Direction 12 – 32VDc push-pull
Output Current (mA)	5 - 10
Resolution (Hz – KHz)	200Hz – 300KHz
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	96 x 72 x 20
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

PWM (Pulse with modulation) Output – EW600N

PWM output modules to command signals up to 300 KHz.

EW600N00E04 4 PWM Output

Supply Voltage (Vdc)	24
Output Numbers	4
Isolation	Optoisolated
Output Type	PWM – 12 – 32 Vdc push-pull
Output Current (mA)	5 - 10
Resolution (Hz – KHz)	200Hz – 300KHz
Operating Temperature (°C)	-10 ... + 50 (non condensing)
Storage Temperature (°C)	-20 ... + 65
Humidity	<90% (non condensing)
External dimensions (W/H/D) (mm)	96 x 72 x 20
Protection Degree	IP 20
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / EAC ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 (mounted on EW100AC)

Remote I/O

High density in a small size

9X remote I/O are designed to be housed directly on the machine. Their main features of the sturdiness and I/O density in small spaces. They are housed in sturdy metal containers with wall fixing or DIN rails. They are easy to install as they are supplied with connectors with screw-on terminals. Each unit represents a single node which can be set via Dip-Switches. There are interesting mixes of digital input/outputs and analogue input/ outputs, relay outputs, inputs for thermocouples etc.

These are 9X main features:

- CANOpen DS401, Modbus RTU protocol
- Communications status LED on bus
- Communication set via dip –switches
- The digital inputs have a hardware filter

Codes	Specifications
9XD168V	16 digital inputs / 8 digital outputs
9XD1616V	16 digital inputs / 16 digital outputs
9XD16168IOV	16 digital inputs / 8 digital outputs / 8 programmable inputs and outputs
9XD1688RV	16 digital inputs / 8 digital outputs / 8 relay outputs 5 A 250 VAC
9XMF1D44V	4 digital inputs / 4 digital outputs / 4 analog inputs +/-10 volt resolution 1024 points 4 analog outputs +/-10V resolution 1024 points, differential encoder input A,A/ B,B/Index Index/
9XMF2D168V	16 digital inputs / 8 digital outputs / 4 analog inputs +/-10 volt resolution 65536 points 2 analog outputs +/-10V resolution 65536 points
9XD4IOPRESS	Module for the direct detection of compressed air pressure with air pipes directly on the module. 4 inputs from 200 to 750 mBAR . resolution 10 mBAR , precision 50 mBAR

Remote I/O
e-motion technology

Distributed I/O modules and remote AXES represents the best technical solution for anyone engaged in automation engineering, significant cost reductions can be achieved by simplifying wiring and commissioning on any machine.
Thanks to their modularity and the numerous models available you can, strategically distribute the elements to simplify and optimize the on-board machine systems.
The connection between the PAC and the modules is made via a CAN bus network on a standard CAN Open protocol, which provides noise immunity, with the consequent security of the data transmitted, and extremely fast installation.

Uncompromising remote control axes
the E1127 Can Bus Axis card is equipped with two encoder inputs with a band of 200 KHz which is fully configurable (line drivers, 5V or 12V open collector). The E1123 version allows the same performance by managing stepper motors or drives directly with Step+Dir output.

Maximum ergonomics
the vertical mounting system exclusive to ESA Automation is the most ergonomic solution on the market.

Total configurability
each E1120 bridge can fit eight ESA Automation Can Bus cards. Up to 127 E1120 bridges can be routed on one CAN channel.

These are main features of Remote I/O

- Can Bus - Standard Can Open DS 301 (Ds 402) profile
- 3 different layouts available (din rail / wall mounted / boxed)
- Local Risk high speed CPU
- Up to 700 mA max current on digital output
- Short circuit protected digital output
- NPN/PNP configurable digital input
- 5V /12 V configurable on board encoder power supply
- Line driver / Open Collector encoder type configurable on board input
- Zero (Z and Z/) input logic state configurability
- Mono/bidirectional encoder input configurability
- Up to 200 Khz encoder input
- Step + Dir configurable PNP /NPN output
- Up to 65 Khz stepper output
- Drive “OK” or “Fault” separate digital input
- 5V or 12V on board configurable Step + Dir output voltage

E1120

Card CAN NODE DIN rail	BRIDGE
Power Supply	+24Vdc power consumption 100mA
I/O	Local BUS for expansion cards E1121, E1122, E1123, E1 124, E1127, E1191, E1192
Dimensions	128 x93 mm

E1121

Card 16 DIGITAL INPUTS PNP/NPN Opto for E1120	INPUT
INP Power Supply	Common with +24Vdc (NPN) or ground (PNP) in groups of 8
Inputs	The input stage is sized for a value of Vin > +15Vdc (typical +24Vdc)

E1122

Card 16 DIGITAL OUTPUTS PNP for E1120	OUTPUT
OUT Power Supply	2 common with +24Vdc, common GND with E1120
Outputs	Typical current 500mA each output, maximum 700mA in groups of 4
Protections	From short-circuit, temperature

E1123

Card 2 STEPPER AXES for E1120	STEPPER
Control Outputs	PNP +5V or +12V (Enable, DIR, Current)
STEPPER Outputs	PNP or NPN
Frequency	min 38Hz, max 65KHz
Fault Input	PNP or NPN +5V, +12V, +24V

E1124

Card 8 ANALOG INPUTS for E1120	ANALOG
POT power supply	Reference voltage + 5Vdc 5mA for external potentiometers
Inputs	Independently selectable as 0/5V - 0/10V - 0/20mA resolution 12bit

E1127

Card 2 ANALOG AXES for E1120	AXIS
ENC Power Supply	+ 12V+5V selectable separately for the 2 axes
ENCODER	Line-Driver/Open Collector (mono/bi-directional)
Analog Output	2 x +- 10V 12 bit
Frequency	Open Collector: 100Khz, Line Driver:200Khz

Layout

DIN rail Layout	DIN rail module for combination of up to 8 cards with E1120 BRIDGE
Boxed Layout	Stainless Steel module for combination of up to 3/6 CARDS with E1120 BRIDGE
Wall Mounted Layout	Wall Mounted module for combinations up to 8 cards on E1120 BRIDGE

Esaware HMI

Control made easy

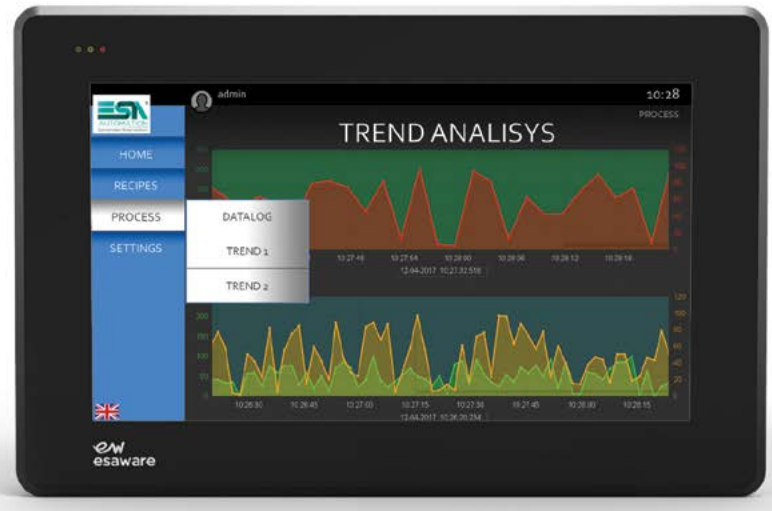
EW100 is the new generation of HMIs based on a modern, powerful architecture that combines visualization, supervision and control of your applications.
Esaware HMI products fully exploit the potential of the Windows Embedded Compact 7 operating system, the only solution that offers transparent interconnection with any company system together with the well-known reliability of the embedded operating systems.

Our Esaware HMI solutions have a widescreen display that can be dimmed up to 100%, and they offer up to 40% more viewing surface compared to a traditional 4:3 display. In addition LED backlit displays excel in durability thanks to a significant energy saving.

In Esaware HMI, esthetics and functionality become one, thanks to the innovative design “Twist”: an inclined surface that prevents the retention of dust and other corrosive substances. Safety and durability are further enhanced by a robust aluminum case with PTFE, non-stick, coating.

Our standard HMI for visualization, control with Remote Maintenace Platform.

- Operating System Windows Embedded Compact 7 Pro
- Preloaded Everyware runtime
- SNTP Server and Client
- Aluminum Front Side PTFE coating
- True Flat Touch Screen
- Status leds on front
- CPU Arm Cortex A8 1 GHz
- Ram DDR3
- Internal Memory 3 Gbyte
- SDHC v2.0 (up to 25 Mbyte/s)
- High Bright 16 Millions Colors Display



Features	EW104AA	EW107AA	EW112AA	EW115AA
Display Size	4,3”	7”	12,1”	15,6”
Display Technology	TFT			
Display Colors	262 K	16 M		
Display Backlight	LED			
Display Brightness (cd/m²)	400	600	400	300
Display Resolution (pixel)	480 x 272	800 x 480	1280 x 800	1366 x 768
Backlight Life (hours)	50 K			
Processor	ARM Cortex A8			
RAM	256 MB DDR3		512 MB DDR3	
Flash	3 GB			
Serial Ports	SP1 RS232/485-MPI-COM0; SP2 RS232/485-MPI-COM0; CAN; Profibus			
Ethernet	1 x 10/100Mb	2 x 10/100Mb		
USB Ports	1 x USB Host + 1 x USB Device		2 x USB Host + 1 x USB Device	
Cardbus Slot	1 x SDHC/MMC			
Power Supply (Vdc)	12 - 32			
Consumption (W)	4	7	15	19
Operating Temperature (°C)	-10 ... +50 (non condensing)			
Storage Temperature (°C)	-20 ... +65			
Humidity	<90% (non condensing)			
External dimensions (W/H/D) (mm)	166 x 112 x 45,9 (61 with double port)	202 x 142 x 45,9	340,5 x 238,5 x 48,6	436,5 x 285,5 x 54,4
Cut-out dimensions (W/H) (mm)	158,5 x 104,5	195 x 135	326 x 227	422,5 x 271,5
Weight (kg)	0,5	0,8	2,5	4,5
Protection degree (front)	IP 66			
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / cULus (Certificate no. E189179) EAC / ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22			

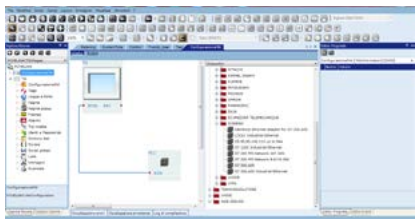
SmartClick HMI
Best cost-to-benefit ratio

SC HMI series is an entry-level HMI solution equipped with ABS plastic chassis that guarantees great sturdiness and durability.
SC HMIs are available in different sizes 7" (SC107 and SC207) and 10,1" (SC110 and SC210). All wide displays with white LED back-lighting and TRUE-FLAT Touch screen.
Advanced technology combined with wide connectivity.

SC series is equipped with

- Ethernet port for programming and communication with the field
- A dual RS232/RS485 serial port with COM0 port functionality, the ESA's OPEN serial port enables communication with any kind of custom solution

SmartClick
Software



SmartClick is the software package for configuring SC HMIs.
The enhanced features allow for the management of data structures, such as Recipes, Trends, Data Logs, active and historical alarms and User management in a quick and intuitive manner.

SmartClick incorporates advanced functionalities including:

- Rich object library
- Level project page management
- Importing/exporting project data
- Transferring stored data
- Project back-up and restore
- VB script with intellisense
- OFF-LINE and ON-LINE simulator
- Dictionary
- Automatic project storage
- Indirect addressing

Features	SC107	SC207	SC110	SC210
Display Size	7” Wide		10.1”	
Display Technology	TFT			
Display Colors	65.536			
Display Backlight	LED			
Display Resolution (pixel)	800 x 480		1024 x 600	
Backlight life (hours)	30 K			
Processor	ARM			
RAM	64 MB	32 MB	64 MB	
Flash	64 MB			
First serial port	Port 1 (RS232/RS485/COM0)	Port 1 (RS232/485/MPI)	Port 1 (RS232/RS485/COM0)	Port 1 (RS232/RS485/MPI)
Second serial port	Port 2 (RS232/RS485/COM0)	-	Port 2 (RS232/RS485/COM0)	
USB Host port	1 x v 1.1			
USB Device port	1 x v 1.1			
Cardbus Slot	1 x Secure Digital/MMC			
Ethernet	1 x 10/100 Mb			
Chassis	ABS Plastic			
Hardware clock	Yes			
Clock battery	Battery (min. durability 5 yrs)	Supercapacitor 72h		
Power Supply (Vdc)	18 - 32			
Consumption (W)	5		8	
Operating Temperature (°C)	-10 ... + 50 (non condensing)			
Storage Temperature (°C)	-20 ... + 65			
Humidity	<85% (non condensing)			
External dimensions (W/H/D) (mm)	198,8 x 137,8 x 40,3	202 x 142 x 40	280 x 190 x 37,5	
Cut-out dimensions (W/H) (mm)	190,2 x 129,2	194 x 134	271 x 181	
Weight (kg)	~ 0,8	~ 1	~ 1,4	
Protection degree (front)	IP 65			
Certification	CE			

HANDHELD HMI

The power in your hands

Esa Automation offers the handheld solution HMI, with different kind of communication interface, serial and CAN. The handheld HMI is connected to the field with the standard cable. In the handheld solution you find 10 programmable Soft Key. The handheld solution is customizable with a different kind of buttons on the front, and on the rear we have the three-way “operator present” button.

These are main features of ESA Automation handheld:

- Over 150 communication protocols for PLCs, inverters, temperature controllers and other devices.
- Fieldbuses connections to MPI and CANopen (only VT505H)
- Up to 150 pages with help, 1500 variables
- Multilanguage, including Oriental and Cyrillic characters
- Recipe handling, Alarms, 10 levels of Passwords
- Moving Graphical objects
- Connection to serial printer
- 10 Function Keys
- Three-way “operator present” button
- Mushroom-shaped start and stop button (lights up with “start”)
- IP65 protection all around
- Powered by Polymath

VT505H HMI
with 5,7” graphic 4 blue levels STN LCD display (320 x 240), 16 rows by 40 characters, Touch-Screen, 640 KB project, software clock, 16 KB recipes, 10 mt cable

VT525H HMI
with 5,7” graphic 16-color STN LCD display (320 x 240), 16 rows by 40 characters, Touch-Screen, 960 KB project, hardware clock, 32 KB recipes, 10 mt cable

Features	VT505H	VT525H
Display Size	5,7"	
Display Technology	STN	
Display Colors	4 tones of blue	16 colors
Display Backlight	CCFL	
Display Resolution (pixel)	320 x 240	
Backlight life (hours)	45 K	50 K
Touch Screen Matrix (cell dimension in pixels h-v)	20 x 16 (16x15)	
Display area size (mm h-v)	115,2 x 86,37	
Columns by Rows/Character dimensions	Depending on used Font	
Contrast adjustment	Software	
Character set	Programmable fonts/TTF Windows® (also Unicode)	
Project memory (text+graphic) (bytes)	640K	960K
Recipes/Alarm buffer (bytes)	16K/- FLASH	32K/8K FLASH
MSP serial port	RS-232/422/485/TTY 20 mA - on VTHCB (excluded CAN version)	
ASP serial port	-	RS-232 - on VTHCB (excluded CAN version)
Integrated (option)	CAN	-
ESA-Net (variables)	Client	
Power supply (Vdc)	18 - 32	
Consumption (W)	10	
Operating temperature (°C)	0 ... + 50 (non condensing)	
Storage temperature (°C)	-20 ... + 60	
Humidity	<85% (non condensing)	
External dimensions (W/H/D) (mm)	250 x 222 x 100	
Weight (kg)	3	
Protection degree	IP 65 on all sides	
Project Languages	4	6
Password levels/Bit passwords	10/8	
Pages/Fields per page	128/34	150/48
Format of variables	DEC, HEX, BIN, BCD, ASCII, Floating point	
Dynamic texts/Lists of images	Value depends on dimensions of project memory	
ISA alarms/Info-messages	-/256	256/256
Help messages (pages/info messages/alarms)	128/256/-	150/256/256
Alarm history buffer	-	220
Recipes (Number/Variables per recipe)	128/256	
Macros (Number/Commands per macro)	1024/16	
Print pages (Total/Number of fields per page)	-	64/128
Automatic Operations/Timers/Equations	32/32/32	
Max bargraphs per page (taken together with fields)	34	48
Project images	BMP, JPEG, TIFF, PSD, WMF, PNG, EPS, etc.	
Buttons per page	Number of buttons corresponding to the number of Touch-Screen cells	
Hardware clock	-	Supercapacitor 72 hours
Function keys	10	
Certifications	CE/cULus	

PAC BOX
e-motion technology

ESA Automation's PAC BOX Solution.

The "blind" PAC is ideal for those applications that need the power of our renowned PLC, CNC, Motion Control and IT server but require external/remote visualisation. Available as either Non OS ARM based or X86 real time Windows based the Human Interface can be provided by an external application (BOX ARM) or the PAC can host HMI pages managed by standard keyboard, mouse, monitor etc. (BOX 1000).

These are main features of Pac Box

- Arm or PC Windows ® Real Time based CPU available
- Several on board digital PLC I/O*
- Up to 1200 mA max current on digital output
- Short circuit protected digital output
- On board configurable 0-10V / 0-20 mA 12 bit analog input*
- On board Axis input for motion Control & CNC applications *
- 5V /12 V configurable on board encoder power supply
- Line driver / Open Collector encoder type configurable on board input
- Mono/bidirectional encoder input configurability
- On board Analog and / or Step + Dir outputs for drives controls
- Up to 6 Can Bus (Can Open Ds 301 -402 profile) ports for digital drives control & expansion
- Linear, Circular, Polar interpolation
- Electronic Cams Controls, Gantry Axis, Tool compensation: complete CNC functions availability

*** expandable by Esa Remote I/O system**

Features	Windows Real Time Based CNC System BOX 1000 BOX CNC
CPU	Intel Atom D525 Dual Core 1,86 GHz
Main Storage memory	1 x flash disk (different sizes available)
Serial Ports	1 x RS232
Universal Serial Port Bus - USB	4 x USB 2.0
Mouse and Keyboard	1 x PS/2 port
Integrated Sound card	1 x Audio port set (jack 3,5 mm for audio line output , mic input)
Field Bus	3 x CAN BUS , prot. Can Open (+3 optional)
Lan Ethernet	1 x Ethernet 10/100/1000

Features	Box Arm
CPU	Cortex M3 / Arm 7
Digital inputs	20 x PNP, with LED status indicator
Digital outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog inputs	6 x resolution 12 bit, configurable by jumpers as 0-10V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5 V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 x analog output +-10V 12 bit - 4 PWM output or 4 x stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial Ports	2 x RS232 + 1 x RS485
Lan Ethernet – Teleservice	1 x Ethernet TCP /IP - FTP compatible - Modbus/TCP server, with remote desktop function
Universal Serial Bus Port - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER, Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)

PAC TOUCH
e-motion technology

ESA Automation offers PAC Touch Solutions ARM based.

The most complete range of " ALL IN ONE " PAC controls. Starting from the little 4,3" to the bigger, 15" touch screen display, discover our famous, powerful PLC, HMI, MOTION CONTROL , CNC and IT server in only one instrument. Discover the adavantages of writing A SINGLE APPLICATION grouping together the PLC CYCLE, CNC and HMI INTERFACE. You'll find the right hardware solution to improve your machine.
All our system can be connected to our complete range of CAN Open Expansions boards , to increase the I/O and Axis integrated equipment.

These are main features of Pac Touch

- Arm or PC Windows ® Real Time Fanless based CPU available
- 4,3" - 5,7" - 7" - 8,4" , 10" , 12", 15" on board display available
- Easily customizable front panels
- Several on board digital PLC I/O*
- Up to 1200 mA max current on digital output
- Short circuit protected digital output
- On board configurable 0-10V / 0-20 mA 12 bit analog input*
- On board Axis input for Motion Control & CNC applications *
- 5V /12 V configurable on board encoder power supply
- Mono/bidirectional encoder input configurability
- Line driver / Open Collector encoder type configurable on board input
- On board Analog and / or Step + Dir outputs for drives controls
- Up to 6 Can Bus (Can Open Ds 301 -402 profile) ports for digital drives control & expansion
- Linear, Circular, Polar interpolation
- Electronic Cams Controls, Gantry Axis , Tool compensation: all complete CNC functions availability
- Ready to use applications availability for several industrial branches
- Large flash memory data storage capability for powerful data logging applications

*** expandable by Esa Remote I/O system**

Features	TS804 Visual PLC + CNC
Touch Screen Display	4,3“ Color, resolution 480x272
Main CPU	CPU Arm 7
Digital inputs	16 x 24Vdc, PNP with led
Digital Outputs	16 x solid state, 24Vdc, PNP, 1,2Amp each with led
Configurable I/O	2 x configurable by external jumpers as: 2 x analog output ±10V – resolution 14 16 bit or: 2 x STEPPER+DIR (12V push pull – max 1 Mhz) or: 2 x Analog Inputs 14 bit – 0-3,3V
Encoder inputs	2 x encoder inputs settable as Line driver or open collector, 12 or 5V encoder supply (settable by ext jumpers), 1,5 mhz bandwidth
Analog outputs	2 x ± 10V
Analog inputs	2 x 0-3,3V (0-10V or 0-20 mA can be obtained with external resistors)
Main Flash storage memory	1 x removable SD Flash min 1 GB
Serial ports	2 x RS232
Lan Ethernet – Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function
Universal Serial Bus - USB	1 x USB 2.0 for pen drive
Field Bus	1 x CAN BUS MASTER , Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)

Features	TS804L Visual PLC + CNC	TS804LX Visual PLC + CNC
Touch Screen Display	4,3“ Color, resolution 480x272	
Main Cpu	CPU Arm 7	
Digital inputs	4 x 24Vdc, PNP	8 x 24Vdc, PNP*
Digital outputs	4 x solid state, 24Vdc, PNP, 1,2 A each	8 x solid state, 24Vdc, PNP, 1,2 A each
Configurable I/O	-	4 x configurable as digital inputs 24VDC or outputs
Analog inputs	4 x configurable by jumper as 0-20 mA, 0-10V – 0-3,3 V	4 x configurable by jumper as 0-20 mA, 4-20 mA, 0-10 V: 2 are configurable for direct input thermoresistance Pt 100
Analog outputs	2 x configurable as 0-20 mA / 0- 10 V / PWM Stepper (to be specified before purchasing)	2 x configurable as 0-20 mA / ± 10 V / PWM
Main Flash storage memory	1 x removable SD Flash 1 GB	
Encoder inputs	1 x Input Line driver , Push Pull or Open Collector - 150 Khz bandwidth	2 x inputs PNP Open Collector (on inputs 5-8 digital) - bandwidth 200 Khz
Serial ports	2 x RS 232 + 1 x RS 485	1 x RS 232 + 1 x RS 485
Lan Ethernet – Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function	
Universal Serial Bus - USB	1 x USB 2.0 for pen drive	
Field Bus	1 x CAN BUS MASTER , Can Open protocol	
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)	

Features	TS680 ARM Visual Plc + CNC
CPU	Cortex M3 - Arm 7
Touch Screen Display	5,7“ LED color, resolution 320x240
Digital inputs	20 x PNP, with LED status indicator
Digital outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog inputs	6 x resolution 12 bit, configurable by jumpers as 0-10V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit - 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet – Teleservice	1 x Ethernet TCP /IP - FTP compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER , Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)

Features	TS970 ARM Visual Plc + CNC
CPU	Cortex M3 / Arm 7
Display Touch Screen	7“ LED color, 800x480 resolution
Digital inputs	20 x PNP, with LED status indicator
Digital outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog inputs	6 x resolution 12 bit, configurable by jumpers as 0-10 V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit - 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet – Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER , Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)

Features	TS690 ARM Visual Plc + CNC
CPU	Cortex M3 - Arm 7
Touch Screen Display	10,4“ - color, 800x600 resolution
Digital inputs	20 x PNP, with LED status indicator
Digital outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog inputs	6 x resolution 12 bit, configurable by jumpers as 0-10 V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit - 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet – Teleservice	1 x Ethernet TCP /IP - Ftp compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER , Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)

Features	TS7002 ARM Visual Plc + CNC
CPU	Cortex M3 / Arm 7
Touch Screen Display	12“ LED color, resolution 800x600
Digital inputs	20 x PNP, with LED status indicator
Digital outputs	20 x solid state 24Vdc PNP, max current 1,2 A each, divided in 3 groups (three different output supply common input) (8+8+4) with LED status indicator
Analog inputs	6 x resolution 12 bit, configurable by jumpers as 0-10 V, 4-20 mA
4 Axes	4 x encoder input (zero) Line Driver or Open Collector/Push Pull, voltage 12 or 5V (configurable by jumper) (bandwidth: 1,5 Mhz) - 4 analog output +-10V 12 bit - 4 PWM output or 4 stepper outputs (step + direction)
Main Flash storage memory	1 x removable SD Flash 1 GB
Serial ports	2 x standard RS 232 + 1 x standard RS 485
Lan Ethernet – Teleservice	1 x Ethernet TCP/IP - FTP compatible - Modbus/TCP server, with remote desktop function
Universal Serial Port Bus - USB	1 x USB 2.0 for pen drive
Field Bus	2 x CAN BUS MASTER , Can Open protocol
Real Time Clock (RTC)	1 x Real Time Clock : 24 hours with SCHEDULER (real calendar)

Features	TS7002RT Windows Real Time Based CNC System
CPU	Intel Atom D525 Dual Core 1,86 GHz
Touch Screen Display	12“ 4:3 color, resolution 800x480 (Optional: 1024x768)
Main Storage memory	1 x flash disks (different sizes available)
Serial Ports	1 x RS 232
Universal Serial Port Bus - USB	4 x USB 2.0
Mouse and Keyboard	1 x PS/2 port
Integrated Sound card	1 x Audio port set (jack 3,5 mm for audio line output, mic input)
Field Bus	3 x CAN BUS , Can Open protocol (+3 optional)
Lan Ethernet	1 x Ethernet 10/100/1000

Features	TS7005RT Windows Real Time Based CNC System
CPU	Intel Atom D525 Dual Core 1,86 GHz
Display Touch Screen	12“ 4:3 color, resolution 1024x768
Main Storage memory	1 x flash disks (differect sizes avilable)
Serial Ports	1 x RS 232
Universal Serial Port Bus - USB	4 x USB 2.0
Mouse and Keyboard	1 x PS/2 port
Integrated Sound card	1 x Audio port set (jack 3,5 mm for audio line output , mic input)
Field Bus	3 x CAN BUS , Can Open protocol (+3 optional)
Lan Ethernet	1 x Ethernet 10/100/1000

Solutions for multi-axis systems

Up to 50 AXIS

PCIe 3CAN Master

ESA Automation introduces the new PCIE3CAN, a PCIe standard card that allows you to add to the PC on which it is installed up to 3 independent CAN Master ports, compatible with the DS 301 / 402 standard.
This card has been developed to open the EW200 MITX Esaware PCs to the SoftPLC and SoftMotion functionalities, creating an architecture based on a Real Time operating system, as the most modern and performing control architectures available in industrial automation.
And that's not all. PCIE3CAN is compatible with our PAC and third parties PCs, and it has been designed to guarantee maximum performances in terms of speed and jitter minimization.
PCIE3CAN is set to be used both with the ESA Automation PLC/CNC applications, and with the most common programming tools for SoftPLC and SoftMotion IEC 61131-3 and IEC 61499.

Features

Opto-isolated 3-ports CAN, baud rate 250 / 500 / 1000 Kbit/s
PCI Express bus (1 x) interface
Dimensions: 100 x 55 mm
Driver for real-time operating system Tenasys InTime

Industrial PC Configuration Tool

ESA Automation has equipped its entire sales network with the ingenious PC Configuration Tool. As a result, after consultation with the customer, ESA Automation sales engineer can provide a "tailor-made" quotation that generates a unique IPC code. The whole process from initial customer contact to providing the quotation is quick, efficient and above all provides a detailed product specification for every customer request.

Esaware Panel IPC

Design your own performance

The EW200 Panel IPC line satisfies the latest market and application requirements, thanks to new technological features such as LCD 16:9 widescreen display and resistive and capacitive touchscreen. Esaware Panel IPCs come in different sizes, from 12,1" to 21,5", and have been designed to work flawlessly in any situation.
Our unique Twist design and the PTFE non-stick coating prevent dust and dirt accumulation on the bezel, making it ideal for industrial environments.
Esaware Panel IPC's offer a comprehensive choice of options and configurations while maintaining high performance and lasting reliability.

SLIM version
CPUs 4th generation FANLESS
USB 3.0
2 independent LANs

MITX version.
Variety of Atom and i-core CPUs
FANLESS and FAN
Accessible dual slot bay 2,5"
2 independent LANs
PCI / PCIe Slot

These are EW200 Panel IPC MITX main features:

- SDRAM with DDR3 technology, less consumption but faster than DDR2
- Connection device on SATA 3.0, transfer baud rate up to 6.0 Gb/s.
- PCI /PCIe slot available
- Embedded and long availability Intel processors, based on 3rd and 4th Generation
- LCD wide-screen with LED backlit, 40% extra display surface

These are EW200 Panel IPC SLIM main features:

- Extremely reduced depth for CPU module.
- Intel Baytrail and Intel Haswell platforms, both fanless
- Embedded and long delivery 4th generation CPUs, engineered for high performances and low consumption
- CPUs Celeron J1900 quad core, Intel i3-4010U and Intel i7-4650U dual core, significantly increasing the overall performance
- New SoC technology (System-on-Chip): better performance with less components
- Enhanced embedded graphics with API directX 11.1
- RAM DDR3L, USB 3.0, 2 Intel® LANs

EW200 MITX

Features	EW212	EW215	EW218	EW222
Display Size	12,1"	15,6"	18,5"	21,5"
Display Technology	TFT / 16,7 M			
Display Brightness (cd/m²)	400	300		
Contrast	1000	500	1000	5000
Viewing Angle	88/88/88/88	85/85/85/85	85/85/80/80	89/89/89/89
Display Resolution (pixel)	1280x800	1366x768		1920x1080
Backlight life (hours)	50 K			
Touch Technology	Resistive (5 wires) / Capacitive (PCT 10 touches)			
Bezel /Chassis	Aluminum with PTFE non-sticking coating / Sheet Steel			
CPU Fanless Atom CPU Fanless Celeron	Atom Dual Core N2800 1,86 GHz Celeron Quad Core J1900 2,0 GHz			
CPU Fan Intel® Core™ 3G	Intel Core i3-3120ME 2,4GHz/ i5-3610ME 2,7GHz/ i7-3610QE 2,3 GHz			
CPU Fan Intel® Core™ 6G	Intel Celeron G3900TE 2,6GHz/ Intel Core i3-6100TE 2,7GHz/ i5-6500TE 2,3GHz/ i7-6700TE 2,4 GHz			
Chipset	NM10 Atom / SoC / QM67 / Q170			
GPU embedded	GMA3650 650MHz / HD Graphics - 4000 / HD Graphics 9G 510-530			
RAM (Atom Dual Core) RAM (Celeron Quad Core)	up to 4GB DDR3 SODIMM 1066MHz 204 pin up to 8GB DDR3L SODIMM 1333MHz 204 pin			
RAM (Fan Intel® Core™) 3G RAM (Fan Intel® Core™) 6G	up to 16GB DDR3 SODIMM 1333/1600MHz 204 pin up to 32GB DDR4 SODIMM 1866/2133MHz 260 pin			
RS232 / RS485	2x RS232 + 1x RS232-422-485			
USB Port IP66 front USB Ports 2.0/3.0 rear	1x -no capacitive- 4/0 Atom - 3/1 Celeron - 4/0 iCore™ 3G – 0/4 iCore™ 6G			
Ethernet (Atom Dual Core) Ethernet (Celeron Quad Core)	2x 1Gb RJ45 Intel 82574L 2x 1Gb RJ45 Intel I210			
Ethernet (Fan iCore™) 3G Ethernet (Fan iCore™) 6G	2x 1Gb RJ45 Intel 82579LM / Realtek RTL8111DL 2x 1Gb RJ45 Intel I210AT / I219LM			
VGA/DVI-D (Atom Dual Core) VGA/DVI-D (Celeron Quad Core)	1x / 1x (dimmable LCD backlit) 1x / 1x			
VGA/DVI-D (Fan iCore™) 3G	1x / 1x			
DVI-D/HDMI (Fan iCore™) 6G	1x / 1x			
Audio - PS2 (no iCore 6G)	1/0 (Atom-Celeron) – 1/1 (iCore 3G)			
CFast slot	1 x external accessible slot			
Mechanical Slot (optional)	1x PCIe x1 - 1x miniPCIe - 1x PCIe x16 – 1x PCI			
Drives RAID 0/1	HDD min. 500GB / SSD min. 32GB / CFast min. 4GB - Option			
Power Supply (Vdc)	18...30 VDC (25W-15" basic)			
Consumption (W)	-20 ... + 65			
Operating Temperature (°C)	-10 ... + 50 (non condensing)			
Storage Temperature (°C)	-20 ... + 65			
Humidity	90% (non condensing)			
External dimensions (W/H/D) (mm)	340,5x238,5x87,8 (max)	436,5x285,5x87,8 (max)	503,7x324,7x83,3	571,7x362,7x83,3
Cut-out dimensions (W/H) (mm)	326x227	422,5x271,5	486,5x307,5	554,5x345,5
Weight (kg)	4,5	6	8,5	10,5

Protection degree (front)	IP 66
Certifications	CE / EN61000-6-2 / EN61000-6-4 / EN60068-2-6 / EN60068-2-6/27/30 cULus (Certificate no. E189179) / EAC / ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22
Operating Systems (32/64 bit according to CPU type)	WIN7 - WES7 - WIN8.1 - WIN10 IoT Enterprise LTSB 2016

EW200 SLIM

Features	EW212	EW215	EW218	EW222
Display Size	12,1"	15,6"	18,5"	21,5"
Display Technology	TFT / 16,7 M			
Display Brightness (cd/m²)	400	300		
Contrast	1000	500	1000	5000
Viewing Angle	88/88/88/88	85/85/85/85	85/85/80/80	89/89/89/89
Display Resolution (pixel)	1280x800	1366x768		1920x1080
Backlight life (hours)	50 K			
Touch Technology	Resistive (5 wires) / Capacitive (PCT 10 touches)			
Bezel /Chassis	Aluminum with PTFE non-sticking coating / Sheet Steel			
CPU Fanless Celeron 4G CPU Fanless Intel® Core™ 4G	Celeron Quad Core J1900 2,0 GHz (2,42GHz) – 10W Intel Core i3-4010U 1,7GHz / i7-4650U 1,7GHz (3,3GHz) – 15W			
Chipset	SoC			
GPU embedded Celeron J1900 GPU embedded i-core i3-4010U GPU embedded i-core i7-4650U	HD Graphics HD Graphics 4400 HD Graphics 5000			
RAM (Celeron Quad Core) RAM (Fanless Intel® Core™)	on board 4GB DDR3L 1066/1333MHz - dual channel - up to 8GB DDR3L SODIMM 1333/1600MHz 204 pin -single channel-			
RS232 / RS485	1x RS232 + 1x RS485			
USB Port IP66 front USB Ports 2.0/3.0 rear	1x -no capacitive- 1x 2.0 + 1x 3.0 CPU J1900 / 4x 3.0 CPU Intel® Core™			
Ethernet Celeron J1900 Ethernet iCore™ i3/i7	2x 1Gb RJ45 Intel I210 2x 1Gb RJ45 Intel I210/I218			
VGA/DP (Celeron J1900) DP (iCore™ i3/i7)	1x / 1x (DP passive cable required) 2x (DP active cable required)			
RAID 0/1	2x SSD on CPU iCore / 2x mSATA on CPU J1900			
Expansion Slot	1x miniPCIe CPU J1900 / 2x miniPCIe CPU i-Core			
Drives externally accessible	CFast slot (option)			
Drives (internal)	HDD min. 500GB / SSD min. 32GB / mSATA min.32GB (options)			
Power Supply (Vdc)	15...36 (25W-15" basic)			
Consumption (W)	25-50			
Operating Temperature (°C)	-10 ... + 50 (non condensing)			
Storage Temperature (°C)	-20 ... + 65			
Humidity	90% (non condensing)			
External dimensions (W/H/D) (mm)	340,5x238,5x66,6 (max)	436,5x285,5x66,6 (max)	503,7x324,7x62,1	571,7x362,7x62,1
Cut-out dimensions (W/H) (mm)	326x227	422,5x271,5	486,5x307,5	554,5x345,5
Weight (kg)	4,5	6	8,5	10,5
Protection degree (front)	IP 66			
Certifications	CE - EN61000-6-2 / EN61000-6-4 / EN60068-2-6/27/30 / cULus (Certificate no. E189179) / EAC ATEX 2014/34/UE directive Group II Category 3 GD Zone 2/22			
Operating Systems (32/64 bit according to CPU type)	WIN7 - WES7 - WIN8.1 - WIN10 IoT Enterprise LTSB 2016			

Esaware Box IPC

Rugged design. Expandable technology.

The new Box IPC range that fulfills even the toughest industrial requirements.
Esaware EW400 rugged Box IPCs have been designed for harsh industrial environments.
The EW400 series is particularly suited when thermal shocks and critical temperature conditions are required, -20 / +60 °C .

These are EW400 Rugged main features:

- Fanless design
- Rugged structure
- A technologically advanced heat dissipation system and an operating Temperature between -20 and + 60°C
- Heat-pipe cooling: an efficient active cooling system that allows the device to maintain superior computing performances without CPU throttling even in high temperature environments
- Up to CPU i7 quad core
- Equipped with the state-of-the-art I/F; USB 3.0, CFast, PCIe/PCI expansions

Side A - Detail of CFast slot , serial ports and main power push button switch.
APO or ATX selection.

Side B - Huge I/F capability towards the field, 3 display ports , 4 USB 3.0 , 2 independent LAN ports.

Features	EW400 Atom	EW400 Intel Core
Aluminum Enclosure	Heavy duty steel chassis Selection ATX/APO via Bios LED green on/off On/Off push-button LED red HDD Lockable power connector Aluminum heat-sink with Heat-Pipe thermal system	
CPU Fanless	Atom Dual Core D2550 1,86 GHz	Intel Core i3-3120ME 2,4GHz Intel Core i7-3610QE Quad 2,3GHz
Chipset	NM10 DMI 2,3GT/s	QM77 DMI 5GT/s
GPU embedded	GMA3650 min 640 MHz	HD Graphics 4000 650/1000 MHz
RAM	2GB up to 16GB DDR3	4GB up to 16GB DDR3 SODIMM 204-pin 1333 MHz
I/F	2 x RS232/422/485 Sub-D 9 pin 3 x RS232 Sub-D 9 pin 6 x USB ver.2.0 2 x Ethernet 1 Gbit RJ45 – Intel 82574L 1 x miniPCIe slot 1 x VGA 1 x DVI-D 1 x Line Out / Mic In 1 x CFast slot external access	2 x RS232/422/485 Sub-D 9 pin 3 x RS232 Sub-D 9 pin 4 x USB ver. 3.0 2 x Ethernet 1 Gbit RJ45 - Intel 82579/82574L 1 x miniPCIe slot 1 x VGA 1 x DVI-D 1 x HDMI 1 x Line Out / Mic In 1 x CFast slot external access
Drives	HDD min. 500GB/SSD min. 16GB/CFast min. 4GB	HDD min. 500GB/SSD min. 16GB/CFast min. 4GB [RAID 0-1 optional]
Mechanical slot (opt.)	-	2 x slot (1xPCIe x1 + 1PCI)
Operating Temperature (°C)	-20...+ 60 (non condensing)	
Storage Temperature (°C)	-40 ... +80	
Humidity	<90% (non condensing)	
Weight (kg)	3	4,5/6 (0/2 slot ver.)
Power supply (Vdc)	9...26 - 22W (2GB + HDD)	9...26 - 45W (i3 - 4GB+HDD)
Dimensions (W/H/D) (mm)	299x216x59	337x239x77 / 337x239x122 (0/2 slot ver.)
Operating system (32/64 bit according to CPU type)	WIN7 - WES7	
Protection degree	IP 20	
Certifications	CE / EN61000-6-2 / EN61000-6-4 / EAC	

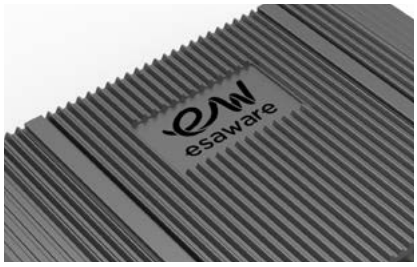
Esaware Box IPC

Compact design. Multi-connectivity.

Esaware EW410 Box IPC series offers a multi-functions compact version designed for industrial applications.
EW410 thanks to its compactness and the variety of I/F can be used in any industrial or professional application.
By means of lateral fixing plates or DIN-RAIL mount accessory, EW410 can be easily installed directly into the machine or positioned inside the electrical cabinet.

These are EW410 Compact main features:

- Fanless design
- High performances in a compact size
- Multi I/F to communicate with the field
- Serial, USB, ETH, and mini PCIe slot to support mSATA, 3G and Wi-Fi cards.
- An elegant and functional design with aluminum heat-sink for highly efficient passive heat dissipation
- Dual monitor control function.
- SSD or HDD support (CPU J1900 only)



Full covered with aluminum heat-sink for optimal conventional heat dissipation.

Detail of I/F ports
2 or 4 independent LANs
4 USB 2.0 - 3.0
2 multi serial ports
Main push button switch

Features

Aluminum Enclosure	Heavy alu extrusion chassis Aluminum Heat-Sink LED green on/off Selection ATX/APO via Bios On/Off push-button LED blue HDD Lockable power connector Wall/VESA/DIN rail - mounting options	
CPU Fanless	Celeron Quad Core J1900 2,00 GHz	Atom Dual Core D2550 1,86 GHz
Chipset	SoC	NM10 DMI 2,5GT/s
GPU embedded	HD Graphics Resolution 1920 x 1080 DVI Resolution 2560 x 1600 VGA	GMA3650 Resolution 1920 x 1080 DVI /VGA
RAM	4GB DDR3L 1066 MHz on board	2GB DDR3 1066 MHz on board
I/F	2 x RS232/422/485 Sub-D 9 pin 1 x RS232/422/485 8-bit DIO 9 pin 4 x USB ver. 2.0 1 x USB ver. 3.0 1 x DVI-I 4 x Ethernet 1 Gbit RJ45 - Intel I210 2 x MiniPCIe slot (1x mSATA) 1 x SIM slot (RS485 Auto Direct.Control)	2 x RS232/422/485 Sub-D 9 pin 4 x USB ver. 2.0 2 x Ethernet 1 Gbit RJ45 - Intel 82574L 3 x MiniPCIe slot (1x mSATA) 1 x DVI-I 1 x Line Out / Mic In 1 x CFast slot external access 1 x SIM slot (RS485 Auto Direct.Control)
Drives options	mSATA/SSD/HDD	CFast/mSATA
Operating Temperature (°C)	0...+60 (non condensing)	
StorageTemperature (°C)	-20...+80	
Humidity	85% (non condensing)	
Weight (kg)	0,8	0,7
Power supply (Vdc)	9 ... 36 max 20W	9 ... 26 - max 20W
Dimensions (W/H/D) (mm)	180 x 121 x 33	161x108x32
Operating system (32/64 bit according to CPU type)	WIN7 - WES7 – WIN8.1 – WIN10 – UBUNTU 14	WIN7 - WES7 - WES2009 – UBUNTU 12
Protection degree	IP 20	
Certifications	CE - EN61000-6-2 / EN61000-6-4 / EAC	

Esaware Box IPC

Rugged design. Expandable technology.

EW420 Dynamic box IPC is the new Esaware box IPC. A fanless device equipped with 6th generation of CPU, like Intel® Core™ i3, i5 and i7 Celeron G3900TE, and 4 LAN ports.

EW420 box IPC is the ideal solution to satisfy applications who require power and wide connectivity to the field.

It is equipped with 4 independent LAN ports (1 Gbit) and 4 serial ports (settable via BIOS) like RS232/422/485, 2.0 and 3.0 USB.

Wi-Fi and 3G options, mass storages such as mSATA, HDD or 2,5" SSD and PCIe slots make EW420 the ideal solution for industrial and professional IT applications. Furthermore, EW420 supporting 0-50°C operating temperatures is suitable for harsh environments.

These are EW420 Dynamic main features:

- Fanless design
- High performances in a compact size
- Multi I/F to communicate with the field
- Serial, USB, ETH, and mini PCIe slot to support mSATA, 3G and Wi-Fi cards.
- An elegant and functional design with aluminum heat-sink for highly efficient passive heat dissipation
- Dual monitor control function.
- Multi SSD/HDD support with extractable drawer

SSD/HDD extractable drawer - GPIO connector

4 LAN ports

Features

Heavy duty steel chassis	Selection ATX/APO via BIOS LED green on/off On/Off push-button LED red HDD Lockable industrial power connector Aluminium Heat-sink
CPU Fanless	Core i7-6700TE Quad Core 2,4 GHz Fanless Core i5-6500TE Quad Core 2,3GHz Fanless Core i3-6100TE Dual Core 2,7 GHz Fanless Celeron G3900TE Dual Core 2,3 GHz Fanless
Chipset	H170 DMI 8GT/s
GPU embedded	HD Graphics 530 CPU icore HD Graphics 510 CPU Celeron
RAM	RAM up to 32GB DDR4 SODIMM 260-pin 2133 MHz
I/F	2 x RS232/422/485 Sub-D 9 pin 2 x RS232 Sub-D 9 pin 4 x USB ver. 3.0 + 2x ver- 2.0 4 x Ethernet 1Gbit RJ45 - Intel 82574L 1 x DP port + 1 x DVI-I + 1 x HDMI 1 x Line In-Out / Mic In 3 x MiniPCIe slot FS (one mSATA) 1 x connector GPIO 8bit 4DI/4DO
Drives options	1/2x HDD (min. 500GB) /SSD (min 32GB) on extractable drawer(s) RAID 0-1 [optional]
Mechanical slot (opt.)	2 x slot (PCIe x1)
Operating Temperature (°C)	0... +50 (non condensing)
StorageTemperature (°C)	-40 ... +85
Humidity	< 90% (non condensing)
Weight (kg)	4,5/5,5 (0/2 slot ver.)
Power supply (Vdc)	9...36
Power consumption (24 Vdc – basic config – NO PCI CARDS) (W)	55 (i7-4GB+HDD) max 56,3 without PCI 60,4 with PCI
Dimensions (W/H/D) (mm)	280x230x87 / 280x230x135 (0-2 slot ver.)
Operating system (32/64 bit according to CPU type)	WIN7 – WES7 – WIN 8.1 – WIN 10 IoT Enterprise LTSB 2016
Protection degree	IP 20
Certifications	CE - EN61000-6-2 / EN61000-6-4 / EAC

Box IPC
Endurance and reliability

XB300 industrial BOX PC family offers a complete range of products able to fully satisfy any automation requirement.
XB300 industrial BOX PC range gives the maximum power to your applications thanks to the possibility to choose between several CPUs of series Intel® Core™ and Core 2 Duo, Celeron B810, Celeron Core Duo T3100, Intel Core2Duo P8400, Intel Atom N270 , with or without slots, 2 or 3 PCI/PCIe on board.
XB300 BOX PC range has a modular architecture in order to best exploit the potential of Intel CPUs, ensuring both low energy consumption and high performance.
XB300's aluminum finned cover also permits a quick heat dissipation generated from the internal motherboard components.

These are XB300 main features:

- Wide choice of configurations with/ without PCI slot, 2 or 3 PCI/PCIe
- High configuration flexibility with modular HDD,SSD,PCI slot, CPU and RAM
- Removable HDD/SSD
- RAID function
- Industrial design that can meet any automation requirement
- Low energy consumption thanks to the aluminum finned cover that permits a quick heat dissipation
- Easy installation and maintenance on cabinets or on a side of the machine

Features	XB300 3 Slots iCore	XB300 2PCI Celeron/ C2D	XB300 2PCIe Celeron
CPU Fanless	Intel® iCore i3-3120ME 2.4 GHz, i5-3610ME 2.7 GHz Cel. B810 1,6 GHz	Intel ® Core2Duo P8400 2,26 GHz Intel ® Celeron Dual Core T3100 1.9 GHz	Celeron Quad Core N2930 1,83 GHz Fanless
Chipset	QM77	GM45+ICH9M	SoC
FSB	DMI 5GT/s	800/1066 MHz	800/1066 MHz
RAM	up to 16 GB DDR3	up tp 8 GB DDR3	up to 8GB DDR3L
Hard disk / SSD (opt.)	Min. 500GB 2,5" SATA / SSD 32 GB		
Compact flash slot External access	1 x		-
RS232 serial port	1 x		2 x
RS485 serial port	2 x	-	2x
USB ports (2.0/3.0)	2x / 6x	4 x	4 x / 4x
Power ON green LED frontal	1 x		
HDD red led	1 x		
ATX/APO selector	Via BIOS	1 x	Via BIOS
PS/2 keyboard / mouse	USB	1 x	USB
1 Slot	1x PCI	-	-
2 Slot	1x PCIe x8	2 x PCI	2 x PCIe 1x
3 Slot	1x PCIe x8	-	-
Wi-Fi card (opt.)	Internal PCI/PCIe		
Video port	1 x DVI-I (single-link) + 1 x HDMI	1 x VGA + 1 x DVI-I (single-link digital signal only)	1 x VGA + 1 x HDMI
Audio port	MIC IN + Line OUT	MIC IN + Line IN + Line OUT	1 x Line Out / Mic In
Ethernet ports RJ45	2 x Ethernet 10/100/1000 Mbit RTL 82574	2 x Ethernet 10/100/1000 Mbit RTL 8111C	2 x Ethernet 1Gbit RJ45 - Intel 82574L
External (W x H x D) (mm)	203,2 x 268 x 125	203,2 x 268 x 125	230 x 240 x 126
Connector GPIO	-	-	1 x 8 bit 4DI/4DO
Power supply (Vdc)	11..32 - max 95 W		9...36 – max 22W
Power consumption (24 Vdc - basic config - NO PCI CARDS) (W)	42/54	54/42	22
Protection degree	IP 20		
Weight (kg)	5,5	5	4,3
Operating temperature (°C)	0 .. +50		
Storage temperature (°C)	-20...+60		-30 ... +70
Humidity	85%		90%
Certifications	CE / Immunity EN 61000-6-2 / Emissions 61000-6-4		
Optional kits			
RAID 2xHDD function	1 x		1 x
Removable HDD/SSD (opt.)	1x (opt.)		Extractable drawer for HDD/SSD installed
Operating system (32/64 bit according to CPU type)	WIN7 – WES2009 – WIN ® XP Pro SP3 MUI – WIN 8.1 – WIN 10 IoT Enterprise LTSB 2016		

VESA IPC
Overcoming space

15” Industrial Touch PC for VESA mount.

The VESA industrial PC is the ideal solution to overcome constraints caused by limited space for the installation of a Panel PC on a machine. The VESA XV715 PC can be easily orientated to fit the different operational requirements in an area giving the operator maximum freedom of movement in the workspace.

Simply and quickly mounted via its VESA 75/100 attachment the XV715, from ESA Automation, is powered by an Intel® ATOM N2800 Fanless third generation Intel® Atom Dual Core microprocessor. It comes with a white LED backlit 15” LCD touchscreen and is highly configurable with HDD, SSD, CF and RAM options. Built for industry the XV7 has an IP66 front panel and an IP54 robust steel rear casing, the PC’s modern design allows for ease of maintenance and access to removable HDD, SSD and CF.

VESA XV715 can be ordered with the following operating systems: WIN7, WES7, WES 2009, XP pro for Embedded.

These are XV7 Vesa IPC main features:

- 15” LCD display with Touch Screen and white LED back-lighting.
- CPU Intel® ATOM N2800 Fanless , the third generation of Intel® Atom Dual Core microprocessor
- Extreme mounting simplicity thanks to the VESA 75/100 attachment holes
- High configuration flexibility with HDD, SSD, CF and RAM options
- IP66 on front and IP54 on rear

XV7 VESA IPC Fanless

Features	XV715
Display Size	15”
Display Technology	TFT
Display Colors	262 K
Display Backlight	LED
Life (min. at 25 °C)	50k
Display Resolution (pixel)	1024 x 768
Touch screen Type	Analog resistive (5 wires)
CPU Fanless	Intel® ATOM Dual Core N2800 1.86 GHz
Chipset	Intel® NM10
Graphics embedded	Intel® GMA 3650
DMI	2,5 GT/s
RAM	up to 4 GB DDR3 DIMM 204 pin
Removable HDD / SSD / mSATA (opt.)	min. 500 GB SATA 2,5” / SSD 16 GB / mSATA 32GB
Compact Flash Slot Internal (opt.)	1 x
Compact Flash Slot External (opt.)	1 x
RS232 serial port	1 x
RS485 serial port	1 x
USB on front (2.0) IP66	1 x
USB on rear (2.0)	2 x
Green LED on front	1 x
Mini PCIe	1 x
Wi-Fi card (opt.)	miniPCIe 1 x
Video port	1 x VGA
Ethernet port RJ45	2 x Ethernet 10/100/1000 Mbit Intel 82574
External (WxHxD) (mm)	425 x 300 x 77 (mm)
Back-up with battery	1 x
Power supply (Vdc)	18...30 max 85 W
Power consumption (W) (24 Vdc - basic config)	43
Protection level	IP 66 on front / IP54 on rear
Operating temperature (°C)	0...+50 (non condensing)
Storage temperature (°C)	-20...+65
Humidity	90% (non condensing)
Weight (kg)	7,5
Certifications	CE / Environment EN 60068-2-6/27/30 / Immunity EN 61000-6-2 / Emissions 61000-6-4
Operating system (32 bit)	WIN7 - WES7 - WES 2009 - XP Pro for Embedded

Esaware UPS
Uninterruptible Power Supply

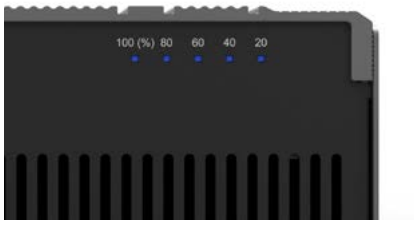
Smart UPS designed for power backup of electronic devices and in particular Industrial PCs.
It consists in a stand-alone static device which includes DC/DC power supplier and ion lithium battery pack as a power storage. Wide DC input range and stable DC output, it is the ideal solution in all those applications where unstable power supply is a real danger and where a sudden current interruption may occur during the working time.
Easy to install, thanks to its different mounting plates, it can be easily installed into the electrical cabinet or directly into the machine.
Lithium batteries deliver higher-quality performance in a safer, longer-lasting package. Possibility to install it afterwards on existing systems or machines. Proper shutdown of the Operating Systems and applications running on the IPC.

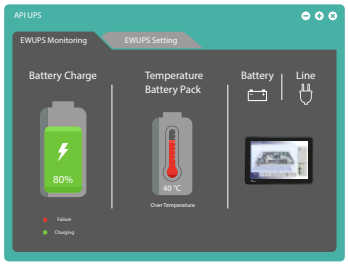
These are EW UPS main features:

- Compact and All-in-One device
- Space saving
- Power DC/DC
- Battery charger
- Battery pack
- Blue LEDs for status information
- Rapid battery charging
- Ion lithium technology for energy storage

The SMART functions of EWUPS are:

- Serial communication RS232
- SW app included
- Battery monitoring
- Charging monitoring
- Parameterization of threshold values
- Set-point configurations
- Auto & Safe shutdown of IPC running Win7-Win8-Win10





Features	EWUPS
Cell Specs	2000 mAh 6S1P - UR18650RX CELL
Battery type	Li-ion (Lityum-ion) 3,6V
Input voltage (Vdc)	18-32
Output voltage (Vdc)	by battery Buffer 22 / by main line 25
Output LOAD (W)	60
Cycle Life	Tested for 300 times charge/discharge at 100% capacity
Reverse polarity protection	YES
Short circuit protection	YES
Over temperature protection	YES
Overcharge protection	YES
Recharge time (hours)	4
Discharging time to 50% at 20 °C	24' 30W / 12' 60W
RS232	1x PC connection
USB 2.0	2x USB ports for device charging
APP SW	Battery status monitoring / Automatic OS shut down
Status LED blue	Power / Battery level - charging
DC - in	Lockable power connector
DC - out	4-pin ATX 12 connector
Operating Temperature of battery (°C)	Charge 0~40 - Discharge -20 ~ +50
Operating Temperature of power supply (°C)	0-50
Storage Temperature (°C)	-20~+60
Operating Humidity	0-90%
Humidity	90% (non condensing)
Weight (kg)	0,7
Mounting	Wall / DIN RAIL options
External Dimension (WxHxD) mm	163x108x49,6
Certifications	CE - RoHs

Esaware Industrial Monitor

Innovative design. Elegant technology.

With the EW300 series, Esaware offers a wide range of industrial monitors that combine innovative and elegant design with the highest industrial engineering standards. EW300 Industrial Monitors have been designed to ensure high performance and durable reliability in harshest industrial environments.

All EW300 monitors share the same well designed bezel as the EW200 Panel IPCs.

The main features of EW300 Industrial Monitors are:

- LCD wide screen
- Resistive or capacitive touchscreen
- Multi Video inputs
- Multi touchscreen output
- Reduced depth

Detail of true-flat touch screen along with twisted aluminum bezel and ATEX IP66 frontal USB port.

Our unique Twist design and the PTFE non-stick coating prevent dust and dirt accumulation on the bezel.

Features	EW315	EW322
Display Size	15,6"	21,5"
Display Technology	TFT	
Display Colors	16,7M	
Display Brightness (cd/m²)	300	
Contrast	500 : 1	
Viewing Angle (H - V)	85/85/80/80	89/89/89/89
Display Resolution (pixel)	1366x768	1920x1080
Backlight life (hours)	50k	
Touch Technology	Resistive (5 wires) / Capacitive (PCT 10 touches)	
Bezel /Chassis	Aluminium - PTFE no-sticking coating / Sheet Steel	
Front USB	1x USB 2.0 type A – rear 1x USB type B	
Rear touch outputs	1x USB 2.0 type B + 1x RS232 sub-din 9 pins	
Video input	DVI-D + VGA	
Power Supply (Vdc)	18...30	
Operating Temperature (°C)	0 ... + 50 (non condensing)	
Storage Temperature (°C)	-20 ... + 65	
Humidity	<85% (non condensing)	
External dimensions (W/H/D) (mm)	437x286x58	572x363x61
Cut-out dimensions (W/H) (mm)	422,5x271,5	554,5x345,5
Weight (kg)	5	9,5
Protection degree (front)	IP 66	
Certifications	CE / EN61000-6-2 / EN61000-6-4 / EN60068-2-6 / EN60068-2-6/27/30 / cULus (Certificate no. E189179) / EAC / ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22	
External dimensions (W/H/D) (mm)	437x286x58	572x363x61
Cut-out dimensions (W/H) (mm)	326x227	554,5x345,5
Weight (kg)	4,5	10,5
Protection degree (front)	IP 66	
Certifications	CE / EN61000-6-2 / EN61000-6-4 / EN60068-2-6 / EN60068-2-6/27/30 / cULus (Certificate no. E189179) EAC / ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22	

EWD U

The easiest and compactness servo drive

EWDU is the new compactness, cheaper and simple servo drive from ESA Automation.

Ready to control different type of motors like rotary brushless servo motor, linear servo motor and also DC servo motor with current up to 10A, is available in 2 different configuration levels: standard like a fieldbus drive and advanced with integrated simple motion functions.

The drive is powered at low voltage in a range from 24 to 60 Vdc power supply and the dynamics features allow to read feedback device like incremental encoder.

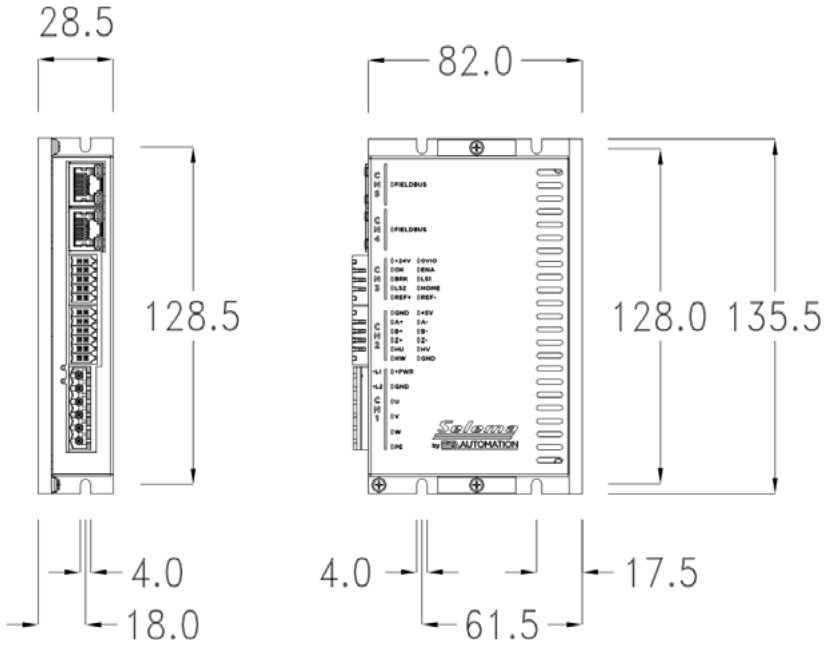
Inside has a double CPU for high speed response with a firmware set-up functions like:

- Brake motor control capability
- Torque and positioning control
- Speed control with adjustable ramps with or without jerk
- Stand Alone Positioner (Advanced)

Key point of the new EWD U servo drive is the easy to set-up; thanks to the ***drivewatcher*** software you are able to set-up the motor parameter with one digit only. The best performances of the drive and motor combinations are guarantee by our skilled technical people that have already set-up into the firmware drive all ESA motor database and tested all configurations.

- Feedback: Incremental Encoder or Halls Sensor
- Fieldbus: CAN DS402
- 4 digital Inputs / 2 digital output
- 1 analog input +/- 10V differential (12 bit)
- Protection Level: IP20
- Standards: CE

Dimension



Technical Data

Power Supply (Vdc)	24-60
Control Supply (Vdc)	18-32
Continuous Current (A DC)	10
Peak Current (A DC)	20
PWM Frequency (KHz)	8
Analog Input	1
Digital Input	4
Digital Output	2
Interface	RS422 debug on RJ45
Protocol	CANopen
Protection	I²T, thermal
Brake Control	YES
Connection Type	Connectors for power and auxiliary
Operating Temperature (°C)	0 ... +40 (max 55°C with de-rating)
Storage Temperature (°C)	-25 ... +85
Shipping Temperature (°C)	-25 ... +85
Product Enclosed Rating	IP 20
Brake control	Inside
Drive parametrization	With software drivewatcher

Codification

EWD x x x x x x x x x x x

Products
U = compact Drive

Supply Voltage
A = 24 Vdc to 60 Vdc

Drive Type
S = Single axis Drive

Current axis 1
A = 10 A

Current axis 2 (for double)
0 = no second AXIS

FieldBUS
C = CANOPEN

Feedback
0E - Incremental Encoder

Option Board / version
00 = No Option Board / standard

Custom Version
00 = No Special

EWD B

Motor Integrated Servo-Drive

EWD B Motor Integrated Servo-Drive is a synchronous servo motor with an integrated drive control, combines compact dimensions with space-saving machine design by eliminating a drive in a cabinet.

The drive, powered at low voltage with 24 to 60 Vdc power supply simplifies the connections structure of the axis with simple connectors. The dynamic performance and the flexibility of the implemented mechatronic functions extend its use in various applications on the machine.

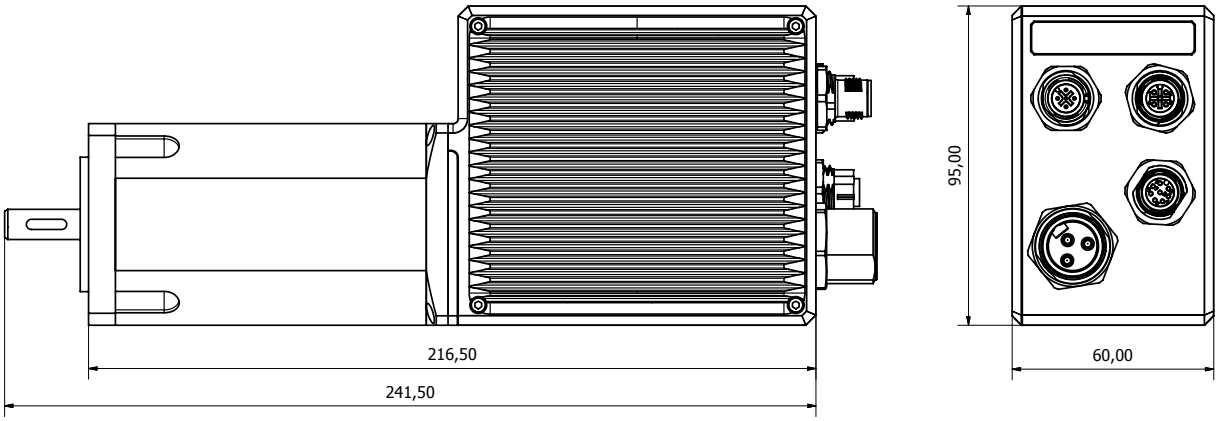
The EWD B is based on motors with 60 mm flange, torque from 0.7 to 1.3 Nm with and without integrated gearbox. Despite the thrust integration and on-board housing of the motor, which is typically a source of heat, the drive does not need to be downgraded in terms of both performance and power delivered to the motor, and this is due to a sophisticated engineering solution. Thanks to the integrated feedback, the product has good speed accuracy and position control.

EWD B has 4 industrial water-resistant connectors at the rear, 2 at the top for fieldbus communication such as CANOpen or Profinet, and two at the bottom for I/O connectionS and power supply.

Commissioning is the easiest as possible thanks to the complete characterization of the motor.

- Feedback: SinCos Encoder or Halls Sensor
- Fieldbus: CAN DS402 or Profinet IP
- 4 digital Inputs
- Protection Level: IP65
- Easy set-up

Dimension



Technical Data

Drive Section	Power Supply (Vdc)	24-60
	Control Supply (Vdc)	24 ±20%
	Continuous Current (A DC)	8
	Peak Current (A DC)	16
	PWM Frequency (KHz)	8
	Analog Input	NO
	Digital Input	4
	Digital Output	NO
	Interface	RS485 debug
	FieldBus Protocol	CANopen or Profinet (in option)
	Protection	I²T, thermal
	Brake Control	YES
Motor Section	Stall Torque (Nm)	1,3 or 0,7
	Nominal Torque (Nm)	1,3
	Peak Torque (Nm)	2,8
	Inertia	0,23 Kg cm²
	Connection Type	Connectors for power and auxiliary
	Operating Temperature (°C)	0 ... +40
	Storage Temperature (°C)	-25 ... +85
	Shipping Temperature (°C)	-25 ... +85
	Product Enclosed Rating	IP 65
	Protections / Safety	Not available
	Drive configuration	With software drivewatcher

Codification

x	x	x	x	x	x	x	x	x	x	x	x	x

EWD

Products
B = Drive on Motor

Supply Voltage
1 = 24 Vdc to 60 Vdc

Motor Size - Flange
2 = Flange 60

Motor Size - Torque
1 = 0,7 Nm 3500rpm
2 = 1,4 Nm - 2300 rpm

Brake
0 = No Brake
1 = Brake fitted

Fvieldbus
A = Can Open DS 402

Feedback
A = Absolute SinCos Encoder

Mechanical Interface
00 = Flange 40/63, shaft 11x23
48 = Flange 50/70, shaft 14x30

Gearboxes
A = Without Gearbox
B = With Gearbox

Special
00 - No Special
xx - Special Code

MINIECO

Best Performance to Cost Ratio

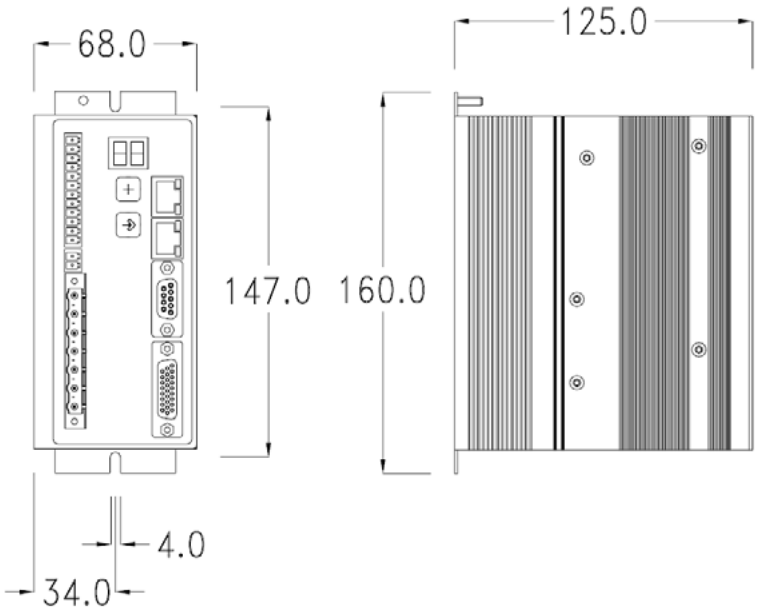
miniECOplus drive is designed as an excellent performance/price compromise to control small/medium size brushless servomotors powered at 230 Vac and rated up to 1 kW.
Available in the size of 4 A nominal current, this drive allows a decentralized motion control approach, executed by CANOpen DS402 or ModBUS fieldbus.
Inside has a double CPU for high speed response with a firmware set-up functions like:

- Pulse positioner
- Analogue control
- Fieldbus ethernet based control
- Emulated Encoder

Different feedback input from the brushless servomotors like incremental encoder or absolute BiSS, for an high resolution positioning.
Key point of the new miniECO servo drive is the easy to set-up; thanks to the drive watcher software you are able to set-up the motor parameter with one digit only. The best performances of the drive and motor combinations are guaranteed by our skilled technical people that have already set-up into the firmware drive all ESA motor database and tested all configurations.
STO Safety Functions on board reduce time and cost, no need additional cabling.

- Feedback: Incremental Encoder or BiSS absolute
- Fieldbus: CAN DS402 or ModBUS RTU
- 2 digital Inputs / 4 digital output
- 2 analog input +/- 10V differential
- Protection Level: IP20
- Standards: CE and UL
- STO Safety Torque Off integrated

Dimension



Technical Data

Power Supply (Vac)	1phase and 3phase 230
Control Supply (Vdc)	24 ± 10%
Nominal Current (A)	4
Peak Current (A)	8
PWM Frequency (KHz)	8
Analog Input	2
Digital Input	2
Digital Output	4
Interface	RS422 debug on RJ45
Protocol	CANopen DS402 – ModBUS RTU
Protection	I²T, thermal
Brake Control	YES
Connection Type	Connectors for power and auxiliary
Operating Temperature (°C)	0 ... +40 (up to 55°C with derating)
Humidity	5 .. 95 % not condensing
Product Enclosed Rating	IP 20
Brake control	Inside
Drive configuration	With software drivewatcher or keypad

Codification

9 X | E C O | X | X | X X X X | X | X X

Products

9X Drive Family

Family

ECO

Power Supply

2 230 Vac

Version

S Plus

Nominal Current

0408 = 4 A cont / 8 A peak

Conformal

U = UL Certified

Options

12 = option DIVENC

18 = option BiSS

ECO TECH

Smart control. Simple design.

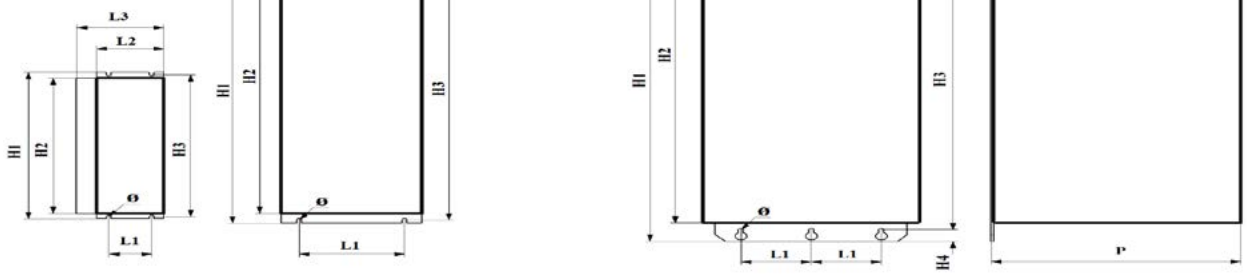
ECO Tech drive is capable of controlling a wide range of Brushless motors starting from 0.7 up to 1000 Nm and also is ready to pilot the asynchronous motors, thanks the special algorithm design.
Available in a size range from 4 A to 60 A nominal current, with a voltage supply from 230 Vac to 400 Vac this drive allows a decentralized motion control approach, executed by several fieldbuses available like EtherCAT, CANOpen DS402, ModBUS RTU.

The capability to accept different feedback devices like incremental encoder, resolver, absolute encoder and also Hiperface DSL® provides a high-resolution response in the positioning mode.
The mechatronic functions implemented allow non-interpolated, single axis or multiple axis applications to perform movements directly on the drive, even with complex laws of motion. This feature makes it possible to use a PLC or operator panel without an actual axis board, thus optimizing the application from a cost-effective view point as well.

Easy set-up and simple commissioning are guaranteed by a special firmware design with one-digit set-up for the motor combination. Finally, a simple Safety Stop circuit inside of the ECO Tech drive reduce the timing to connect and cost.

- Feedback: Incremental Encoder, Resolver, Absolute Encoder, Hiperface DSL®
- Fieldbus: CAN DS402, EtherCAT or ModBUS RTU
- 12 digital Inputs / 4 digital output
- 2 analog input +/- 10V differential
- Protection Level: IP20
- Standards: CE
- Safety Torque Off circuit
- High Overload capability

Dimension



Model

Model	L1	L2	L3	L4	H1	H2	H3	P	Peso/KG	
9XECO2D0410P	37,5	62	68	-- -	186	168	179	150	1,3	
9XECO2D0410G	37,5	62	82	-- -	186	168	179	150	1,5	
9XECO2D0615	37,5	62	82	-- -	186	168	179	150	1,5	
	L1	L2	L3	H1	H2	H3	H4	P	Ø	Peso/KG
9XECO4D0410	42,5	67	73	227	210	220		190	4,5	2,2
9XECO4D0512	42,5	67	87	227	210	220		190	4,5	2,5
9XECO4D1020	70	104	---	270	242	260		224	4,5	4,2
9XECO4D2040	70	130	---	345	315	335		224	4,5	7,5
9XECO4D2550	105	140	---	390	360	380		250	4,5	8,5
9XECO4D3090	105	140	---	390	360	380		250	4,5	9,7
9XECO4D40120	70	216	---	487	423	416	18	250	5,4	
9XECO4D60180	70	216	---	487	423	416	18	250	5,4	

Technical Data

Power Supply (Vac)	1phase or 3phase 230 - 3phase 400
Control Supply (Vdc)	24 ± 10%
Nominal Current (A)	From 4 A to 60 A
Peak Current (A)	From 4 A to 180 A
PWM Frequency (KHz)	8
Analog Input	2
Digital Input	12
Digital Output	4
Interface	RS422 and RJ45
Protocol	CANopen DS402 – ModBUS RTU - EtherCAT
Protection	I²T, thermal, DC-Bus Overvoltage
Brake Control	YES
DC-Bus connection	YES
Connection Type	Connectors for power and auxiliary
Operating Temperature (°C)	0 ... +40 °C max 55°C with de-rating
Humidity	5 .. 95 % not condensing
Product Enclosed Rating	IP 20
Brake control	Inside
Drive configuration	With software drivewatcher or Keypad

Codification

9 X | E C O | X | X | X X | X X | X | X

Products

9X Drive Family

Family

ECO

Power Supply

2 230 Vac
4 400 Vac

Version

T Tech

Nominal Current

0410 4 A cont. / 10 A peak
0512 5 A cont. / 12 A peak
0615 6 A cont. / 15 A peak
1020 10 A cont. / 20 A peak
2040 20 A cont. / 40 A peak
2550 25 A cont. / 50 A peak
3090 30 A cont. / 90 A peak
40120 40 A cont. / 120 A peak
60180 60 A cont. / 180 A peak

Standard Feedback

E Encoder
(empty) Resolver

Options

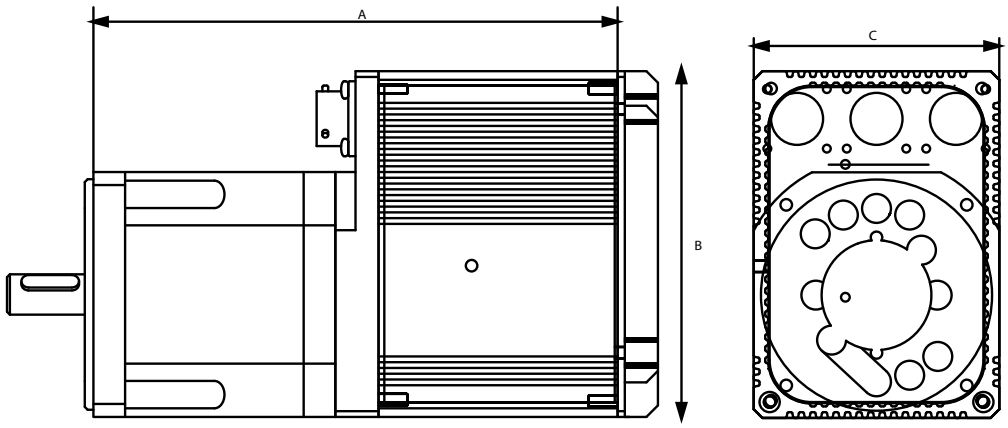
14 = option FULL
15 = option DSL
16 = option FULL and DSL
19 = option FRRTEN and FULL
20 = option FULL and ETHERCAT

MID3
Motor Integrated Servo-Drive

MID3 Motor Integrated Servo-Drive is the technical evolution of motion control with a decentralized philosophy of synchronous servo motor combined with an integrated drive control, extremely compact dimensions and easy commissioning for the OEM's.
A typical application of this solution is every application in rotating tables, packaging machines, filling machines where the number of motors is important.
The drive is powered at DC voltage 190 ... 350 Vdc power supply and it is based on motors with 80 mm flange, torque from 1.3 to 3.4 Nm. Despite the thrust integration and on-board housing of the motor, which is typically a source of heat, the drive does not need to be downgraded in terms of both performance and power delivered to the motor. This is due to a sophisticated engineering solution.
Thanks to the integrated feedback, the product has good speed accuracy and position control. The available fieldbuses are CAN-Open, ModBUS RTU, S-CAN and S-NET.
The implemented mechatronic functions for single-axis multi-axis non-interpolated applications allow to carry out movements directly on the Motor Edge Drive even with complex motion laws. This feature allows the use of PLCs or operator panels without a real axis board, thus optimizing the application also in terms of cost.

- Feedback: Incremental Encoder or Halls Sensor
- Fieldbus: CAN DS402, modBUS RTU, S-CAN, S-NET
- 3 digital Inputs
- Protection Level: IP55
- Standards: CE
- 2 operation mode: Standard Positioner with 3 curves profile and Speed Reference
- Common DC-Bus with multi drive configuration
- Brake management

Dimension



Model

	A	B	C	Kg
9XMID150531xxxx	199	183	16	3,5
9XMID150532xxxx	253	213	40	4,6
9XMID150533xxxx	283	243	40	5,6
9XMID150534xxxx	313	273	40	6,7

Technical Data

Drive Section	Power Supply (Vdc)	310 ±10%			
	Control Supply (Vdc)	24 Vdc ± 15% - 0,5A			
	Continuous Current (A DC)	3,5			
	Peak Current (A DC)	20			
	PWM Frequency (KHz)	8			
	Analog Input	NO			
	Digital Input	3			
	Digital Output	NO			
	Interface	RS485, CAN			
	Protocol	S-CAN, CANopen, S-NET, ModBUS RTU			
	Protection	I²T, thermal			
	Brake Control	YES			
Motor Section	Stall Torque (Nm)	1.5	2.9	4.2	5.3
	Nominal Torque (Nm)	1.3	2.4	3.3	3.4
	Peak Torque (Nm)	5.5	9.1	9.1	9.1
	Inertia	0.92	1.72	2.53	3.33
	Speed (rpm)	3000	3000	3000	3000
	Connection Type	Connectors for power and auxiliary			
	Operating Temperature (°C)	-25 ... +85			
	Storage Temperature (°C)	-25 ... +85			
	Shipping Temperature (°C)	-25 ... +85			
	Product Enclosed Rating	IP 55			
	Protections / Safety	no STO and other safety protection			

Codification

9	X	M	I	D	X	X	X	X	X	X	X	X	X

Products

9X Drive Family

Family

MID

Power Supply

1 Standard

Motor Supply

505 Standard

Motor Size

31 1,3 Nm
32 2,4 Nm
33 3,3 Nm
34 3,4 Nm

Motor Winding

1 230V

Brake Option

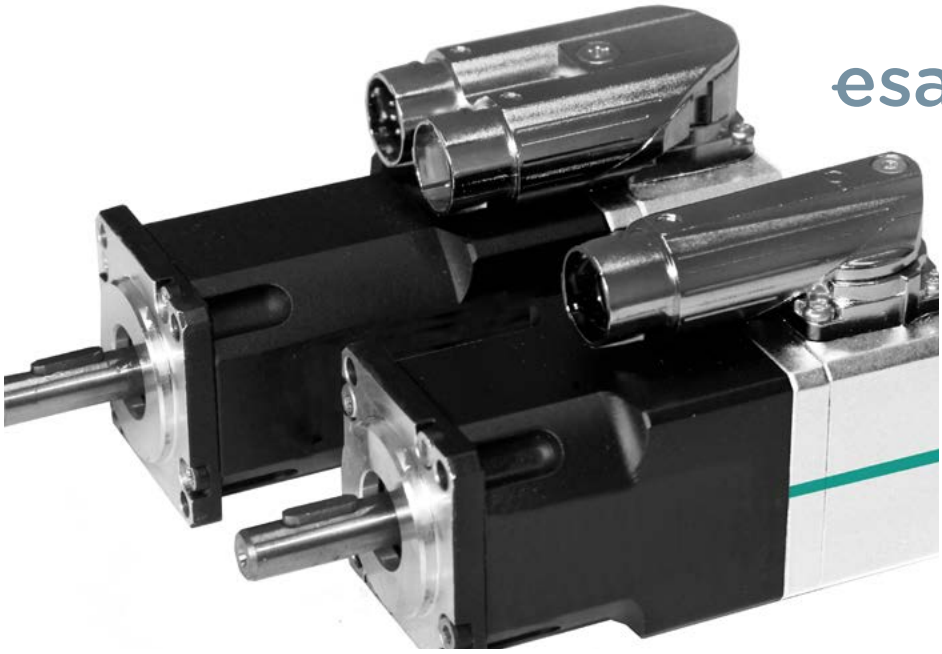
0 no Brake
1 Brake Fitted

Feedback type

9 Resolver

Layout connection

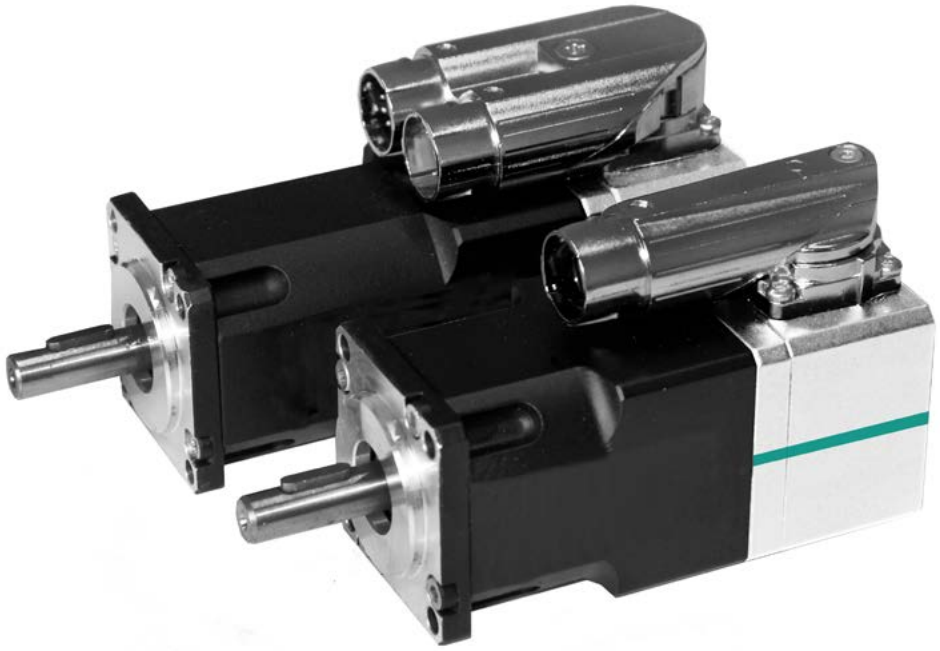
5 Standard for MID



Brushless Motors
Performance and efficiency

9MDSM brushless servo motors are AC synchronous motors with very high performance, low cogging and low torque ripple thanks the latest generation of magnets type and construction techniques provided. Designed to allow high current overloads and to achieve high dynamic performance, they offer a wide range of torques between 0.18 and 200 Nm, distributed over a broad spectrum of standard sizes and flanges. It is possible to have fractional motors of Nm with several types of outputs for motor and signals connections.
Additional key feature is the possibility to have several types of feedback, from a resolver to an incremental or absolute encoder and also Hiperface DSLTM single cable solution. As well as a brake and a standard temperature sensor (PTC) to detect motor overheating, which can also be detected with the PT1000 sensor. Compact motor solutions are also available in terms of length. Motors with 40 and 60 mm flange are available in compact configurations where the gear is integrated in the motor.

- Rare earth magnets for high temperatures
- 8-pole construction
- Sinusoidal EMF
- Integrated thermal protection
- Output with rotary connectors
- Ultra compact dimensions
- High protection, smooth casing
- Low cogging
- Wide range of feedback
- Standard flange
- 40,60,85,115,142,190,260 and special non-standard flange available



Codes	Flange mm	Torque Nm	Current A	Voltage Vac	Speed rpm	Motor Output
9MDSM504..	40	0,19	8,2 - 0,78	24 / 48 / 230	3000-6000	Flying Leads
9MDSM505..		0,38				Y-TECH Intercontec
9MDSM521..	60	0,7	7 - 8 - 1,7	24 / 48 / 230	3000-5000	M23 Intercontec
9MDSM522..		1,4				
9MDSM531..	85	1,5	1,65	230 / 400	3000-4500	M23 Intercontec
9MDSM532..		2,9	3,2			
9MDSM533..		4,2	4,6			
9MDSM534..		5,3	5,8			
9MDSM541..	115	4	2,5	230 / 400	3000-4500	M23 Intercontec
9MDSM542..		7,6	4,7			
9MDSM543..		11,3	7			
9MDSM551..	142	10	6,5	400	3000-4000	M23 Intercontec or M40 Intercontec
9MDSM552..		19	12,3			
9MDSM553..		27	15,4			
9MDSM554..		35	20			
9MDSM561..	190	15	9	400	3000	M23 Intercontec
9MDSM562..		28	24			
9MDSM563..		50	28			
9MDSM564..		70	39			
9MDSM571..	260	76	37	400	1500	M23 Intercontec or M40 Intercontec
9MDSM572..		45	41			
9MDSM573..		230	65			

ESA Automation's Ethercat Solution

HMI + Drive + Motor

Find out our complete solution

Stainless Steel Panel IPC

Extreme durability. High endurance.

ESA Automation XS7 industrial PC family is also available with bezel in Stainless Steel.

The XS7 INOX V2A stainless steel products conform to FDA 21 / EN1672-2 a meeting Food Processing, Pharma and Chemical industry safety and hygiene requirements.

ESA Automation's XS7 industrial PCs are designed, built and tested to ATEX (Zone 2/22, category 3 G/D) and EN60068-2-6/27/30 enabling these robust units to safely withstand vibration, shock and humidity expected in these severe environments.

Outward inclined INOX surface to prevent bacterial or microbial loads from depositing.
True-flat touch screen offers hygienic prevention and easy cleaning.

These are XS7 stainless steel Panel IPC main features:

- Wide choice of LCD size and touch screens from 7" wide up to 19"
- High configuration flexibility with HDD, SSD, mSATA/CFast, PCI/PCIe slot, CPU and RAM
- Elegant and precise industrial design, available with aluminum or INOX stainless steel finishing for the front bezel
- True-flat touch screen front bezel
- Removable HDD/SSD
- RAID function

XS7 Panel Dynamic iCore Stainless Steel

Features	XS712	XS715	XS719
Display Size	12,1" SVGA - 12,1" XGA	15"	19"
Bezel in Stainless steel	6 mm of smooth and seamless inox frame with True-Flat Touch screen, No LED / USB on the front		
Display Technology	TFT		
Display Colors	16,7 M		
Display Backlight	LED		
Backlight life (hours)	50 K		
Display Resolution (pixel)	800x600 (SVGA) - 1024x768 (XGA)	1024 x 768	1280 x 1024
Touch screen Type	Analog resistive (5 wires)		
CPU Fan Intel® Core™ 2G	Intel® Celeron B810 1.6GHz, Intel® Core i3-2330E 2.2 GHz, i5-2510E 2.5 GHz, i7-2710QE 2.1GHz		
CPU Fan Intel® Core™ 6G	Intel® Celeron G3900TE 2,6GHz/ Intel® Core i3-6100TE 2,7GHz/ i5-6500TE 2,3GHz/ i7-6700TE 2,4 GHz		
Chipset	QM67PCH / Q170		
Graphics embedded	Intel HD Graphics – 3000 / HD Graphics 9G 510-530		
DMI	DMI2 5GT/s - DMI3 8GT/s (iCore 6G)		
RAM (Fan Intel® Core™) 2G	up to 16GB DDR3 SODIMM 204pin Dual Channel 1066/1333 MHz		
RAM (Fan Intel® Core™) 6G	up to 32GB DDR4 SODIMM 1866/2133MHz 260 pin		
Hard disk/SSD (opt.)	min. 500 GB SATA 2,5" / SSD 16 GB		
Internal Compact Flash (opt.)	1 x		
External Compact Flash Slots (opt.)	1 x		
RS232 serial port	2 x		
RS485 serial port	1 x		
USB on rear (2.0/3.0)	4/0 (iCore 2G) - 0/4 (iCore 6G)		
Ethernet (iCore™) 2G	2x 1Gb RJ45 Intel 82579LM / Realtek RTL8111DL		
Ethernet (iCore™) 6G	2x 1Gb RJ45 Intel I210AT / I219LM		
PS/2 keyboard / mouse port	1 x (iCore 2G)		
PCI slot (opt.)	1x PCI / 2x PCI / PCIe x1 / PCIe x16		
mPCIe slot	2x (iCore 6G)		
Wi-Fi card (opt.)	PCIe		
Video port	1x DVI-D / VGA (iCore™ 2G) - 1x DVI-D / HDMI (iCore™ 6G)		
Audio port	MIC IN + Line IN + Line OUT (Fan iCore™ 2G)		
Ethernet ports RJ45	2 x Ethernet 10/100/1000 Mbit Intel 82579 - RTL 8111		
External (W x H x D) (mm)	336 x 256 x 81	425 x 300 x 85,5	508 x 384 x 92,5
Cut-out (W x H) (mm)	320 x 240	393 x 275	477 x 355
Power supply (Vdc)	18...30 max 75 W	18...30 max 85 W	18...30 max 95 W
Power consumption (W) (24 Vcc basic config - NO PCI CARDS)	48/58	55/65	67/77
Protection level	IP 69K on front	IP 66 on front	
Operating temperature (°C)	0...+50		
Storage temperature (°C)	-20...+65		
Humidity	90%		
Weight (kg)	~5	~6,5	~11
Certifications	CE / ATEX 2014/34/UE directive Group II Category 3 GD Zone 2/22 Environment EN 60068-2-6/27/30 / Immunity EN 61000-6-2 / Emissions 61000-6-4		

Optional kits	
RAID 2xHDD function	Yes
Removable HDD/SSD	Yes
DVD-RW Sata	External (opt.)
Operating system (32/64 bit according to CPU type)	WIN7 - WES7 - XP Pro for Embedded - WIN8.1 - WIN10 IoT Enterprise LTSB 2016

XS7 Industrial Panel PC Fanless Stainless Steel

Features	XS712	XS715	XS719
Display Size	12,1" SVGA - 12,1" XGA	15"	19"
Bezel in Stainless steel	6 mm of smooth and seamless inox frame with True-Flat Touch screen, No LED / USB on the front		
Display Technology	TFT		
Display Colors	16,7 M		
Display Backlight	LED		
Backlight life (hours)	50 K		
Display Resolution (pixel)	800x600 (SVGA) 1024x768 (XGA)	1024 x 768	1280 x 1024
Touch screen Type	Analog resistive (5 wires)		
CPU (Atom) CPU (Celeron)	Intel® ATOM Dual Core 1,86 GHz N2800 Intel® Celeron Quad Core 2,00 GHz J1900		
Chipset(Atom) Chipset (Celeron)	NM10 SoC		
Graphic (Atom) Graphic (Celeron)	Intel® GMA 3650 Intel® HD Graphics		
DMI	DMI 2,5 GT/s / -		
RAM (Atom) RAM (Celeron)	Up to 4GB DDR3L 1066 MHz SODIMM 204 pin Up to 8GB DDR3L 1333 MHz SODIMM 204 pin		
Drives (internal) Atom	min. 500 GB SATA 2,5" / SSD 16 GB / CF2GB		
Drives (internal) Celeron	min. 500 GB SATA 2,5" / SSD 16 GB / Msata 32 GB / CFast min. 4GB (options)		
CF / CFast (external)	1x CF (Atom)/ 1x CFast (Celeron) (option)		
RS232 serial port	2 x		
RS485 serial port	1 x		
USB on rear (2.0/3.0)	4/0 (Atom) - 3/1 (Celeron)		
Ethernet ports RJ45	2 x 1Gb Intel 82574 (Atom) - 2 x 1Gb Intel I210 (Celeron)		
PCI / PCIe Slot (opt.)	PCI / 2xPCI / PCIe x1 / PCIe x16		
Mini PCIe slot	1 x		
Wi-Fi card (opt.)	PCI / mPCIe / PCIe1x		
VGA/DVI-D	1/1 dimmable LCD backlit (Atom)		
VGA/DVI-D	1/1		
Audio port	Line-in + Line-OUT + MIC-IN (Atom) - MIC-IN + Line-OUT (Celeron)		
External (WxHxD) (mm)	336 x 256 x 81	425 x 300 x 85,5	508 x 384 x 92,5
Cut-out (WxH) (mm)	320 x 240	393 x 275	477 x 355
Back-up with battery	1 x		
Power supply (Vdc)	18...30 max 75W	18...30 max 85 W	18...30 max 95 W
Power consumption (W) (24 Vdc basic config - NO PCI CARDS)	36	43	55
Protection level	IP 69K on front	IP 66 on front	
Operating temperature (°C)	0...+50		
Storage temperature (°C)	-20...+65		
Humidity	90%		
Weight (kg)	~ 5	~ 6,5	~ 11
Certifications	CE / ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22 Environment EN 60068-2-6/27/30 / Immunity EN 61000-6-2 / Emissions 61000-6-4		

Optional kits		
RAID 2xHDD function	Yes	
Removable HDD/SSD	Yes	
DVD-RW Sata	External (opt.)	Internal (opt.)
Operating system (32/64 bit according to CPU type)	WES2009 - Win® XP Pro SP3 MUI - WIN7 - WES7 - WIN8.1 - WIN10	

Stainless Steel Industrial Monitor

Extreme durability. High endurance.

The ESA Automation XM7 series is available with Stainless steel front bezel.
The rugged 6mm INOX bezel makes XM7 suitable for all harsh environments such as those with high concentrations of dust, intense vibrations or high temperatures.
INOX V2A stainless steel products are particularly suited for environments where compliance with health and hygiene norms are required.
The bezel made of INOX stainless steel includes the true-flat resistive touch screen.

The XM7 INOX series conforms to FDA 21 / EN1672-2 and they are the optimal solution for Food, Pharmaceutical and Chemical industries.

The XM7 INOX series is equipped with a true-flat resistive touch screen meeting Food Processing, Pharma and Chemical industry safety and hygiene requirements.

The XM7 INOX V2A stainless steel are designed, built and tested to comply with the ATEX Directives. (Zone 2/22, category 3 G/D) and EN60068-2-6/27/30 enabling these robust units to safely withstand vibration, shock and humidity expected in these severe environments.

Main features of XM7 INOX V2A stainless steel series:

- Wide choice of LCD and touch screens, from 7” wide up to 19”
- LCD 4:3 with LED backlit
- Multi inputs for video signals
- Multi outputs for touch screen
- Elegant and meticulous industrial design
- Bezel available in INOX stainless steel finish with TRUE FLAT touch screen
- IP69K protection degree on 7” and 12,1”
- IP66 protection degree on 15” and 19”

Features	XM7W7	XM712	XM715	XM719
Display Size	7” Wide	12,1”	15”	19”
Bezel Inox V2A	6mm thickness			
Technology	TFT 262 K colors		TFT 16,2 M colors	TFT 16,7 M colors
Display Backlight	LED			
Brightness cd/m2	500	370	350	400
Contrast	600:1		700:1	1000:1
Viewing angle H-V	70-60	140-120		170-170
Lamp life (min a 25°C)	50k			
Resolution (pixel)	800 x 480	800 x 600	1024 x 768	1280 x 1024
Touch technology	Analog resistive true flat (4 wires)	Analog resistive true flat (5 wires)		
Touch output	RS232 + USB			
USB frontal IP66 / USB rear (2.0)	None			
Green Led Power ON	None			
VGA/DVI-I */S-Video/Video composite	1 x (* digital signal only single-link)			
External (WxHxD)	228 x 155 x 66,7	336 x 256 x 56,7	425 x 300 x 57,2	508 x 384 x 64,2
Cut-out (WxH)	219 x 145	321 x 240	393 x 275	477 x 353
Power supply (Vdc)	18...30 max 50W			
Power consumption (W)	30	35		45
Protection degree	IP 69K front 7” / 12,1” - IP 66 front 15” / 19”			
Operating temperature (°C)	0...50 (non condensing)			
Storage temperature (°C)	-20...+65			
Humidity	90% (non condensing)			
Weight (Kg)	3,0	5,0	7,0	10,5
Certifications	CE / Atex 2014/34/UE directive Group II Category 3 G D Zone 2/22 Environmental EN60068-2-6/27/30 / Immunity EN61000-6-2 Emission EN61000-6-4			

Stainless steel HMI

Extreme durability. High endurance.

The 7” IT107W and 12” IT112 with AISI 304/V2A stainless steel bezel and TRUE-FLAT touch screen make cleaning quick, easy and effective.
Thanks to the front bezel’s very high degree of protection, IP69K according to ISO EN 20653, these HMIs offer excellent chemical resistance to highly corrosive substances (such as cleaning chemicals, alkaline substances, etc...) and safeguards against frequent washing at high pressure, such as is normal in the food, pharmaceutical and chemical industries.
The large outside edge radius of curvature on the bezel (4 times the minimum required by law) prevents deposition and contamination of bacteria or microbes on the front. In addition, the front panel complies with DIN EN1672-2, EHEDG guideline and FDA requirements in the food, pharmaceutical and chemical.

The stainless steel HMIs are equipped with industrial displays and high brightness white LED backlight, touch screen technology with 4 or 5 wires that ensures optimal functionality even with superficial damage on the surface.

Stainless steel HMIs are equipped with:

- SP1 serial port (RS232 / RS485 with integrated MPI)
- USB port (type of device) for programming the terminal
- COM0 port (RS-232), USB port (host type) for connecting peripheral devices (headboards and mouse), for easy import/export data on USB key and printing reports
- Serial port SP2 (RS232 / RS485 with integrated MPI) CAN, Profibus-DP or ProfiNet
- Ethernet Port 10/100 Mbit
- Slot for Secure Digital and MultiMedia Card (MMC)
- Second slot for Compact Flash memory
- Extended power supply range 18..32 Vdc and extremely low power consumption
- Powered by Polymath

IP 69K

Features	IT107WX	IT112TX / IT112TY
Display Size	7”	12,1”
Display Technology	TFT	
Display Colors	65 K	
Display Life (hours)	50 K	
Display Backlight	LED	
Display Resolution (pixel)	800 x 480	800x600
Processor	Intel PXA 270	
RAM	64M	128M
Flash	32M	64M
Serial Ports	SP1 (232/485/MPI), SP2 (232/485/MPI), CAN, Profibus	
USB Port Host	1 x v 1.1	1 x v 1.1
USB Port Device	1 x v 1.1	
Cardbus Slot	1 x Secure Digital	
Compact Flash Slot	-	1 x Compact Flash
Ethernet	1 x 10/100 Mb	2 x 10/100 Mb
Hardware Clock	Supercapacitor 72h	
Consumption (W)	8	15
Power Supply (Vdc)	18 ... 32	
Operating Temperature (°C)	0 ... +50 (non condensing)	
Storage Temperature (°C)	-20 ... +65	
Humidity	<85% (non condensing)	
External Dimensions (W/H/D) (mm)	228 x 155 x 44,4 (63,6 with double port)	336 x 256 x 67,6
Cut-out Dimensions (W/H) (mm)	219 x 145	320 x 240
Weight	~2,2	~ 4,6
Protection degree (front)	IP 69K	
Certifications	CE / EN60068-2-6 / EN60068-2-27 / Humidity EN60068-2-30 / cULus (Certificate no. E189179) EAC / ATEX 2014/34/UE directive Group II Category 3 G D Zone 2/22	

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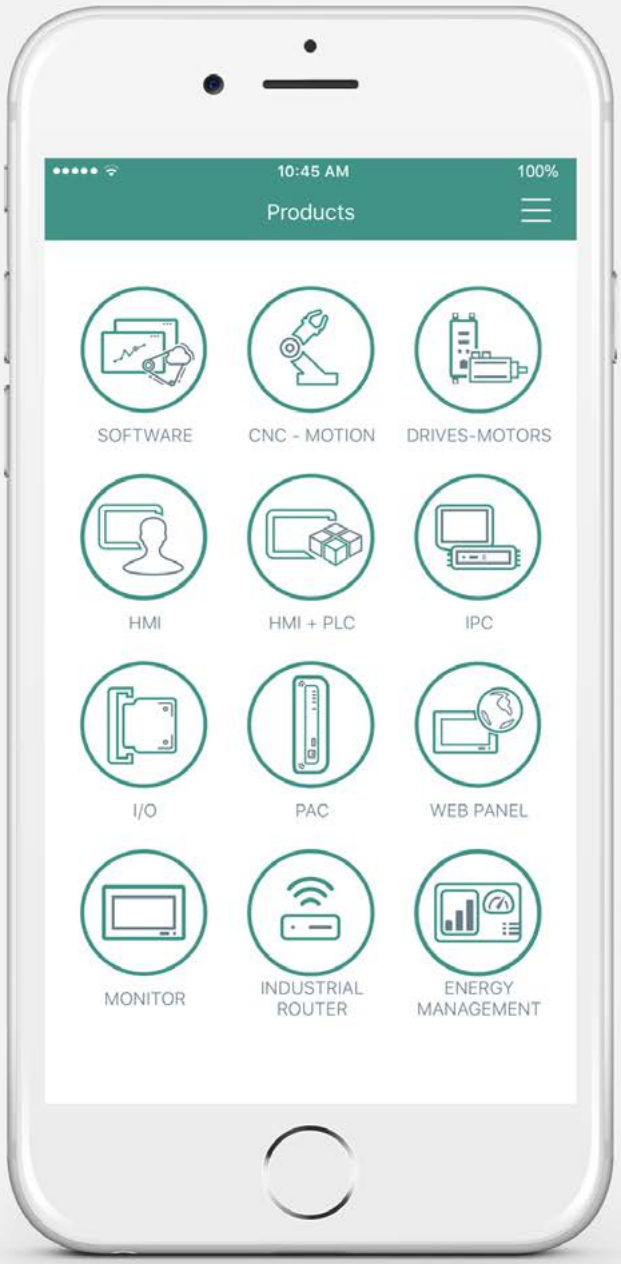

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info@esa-automation.com