



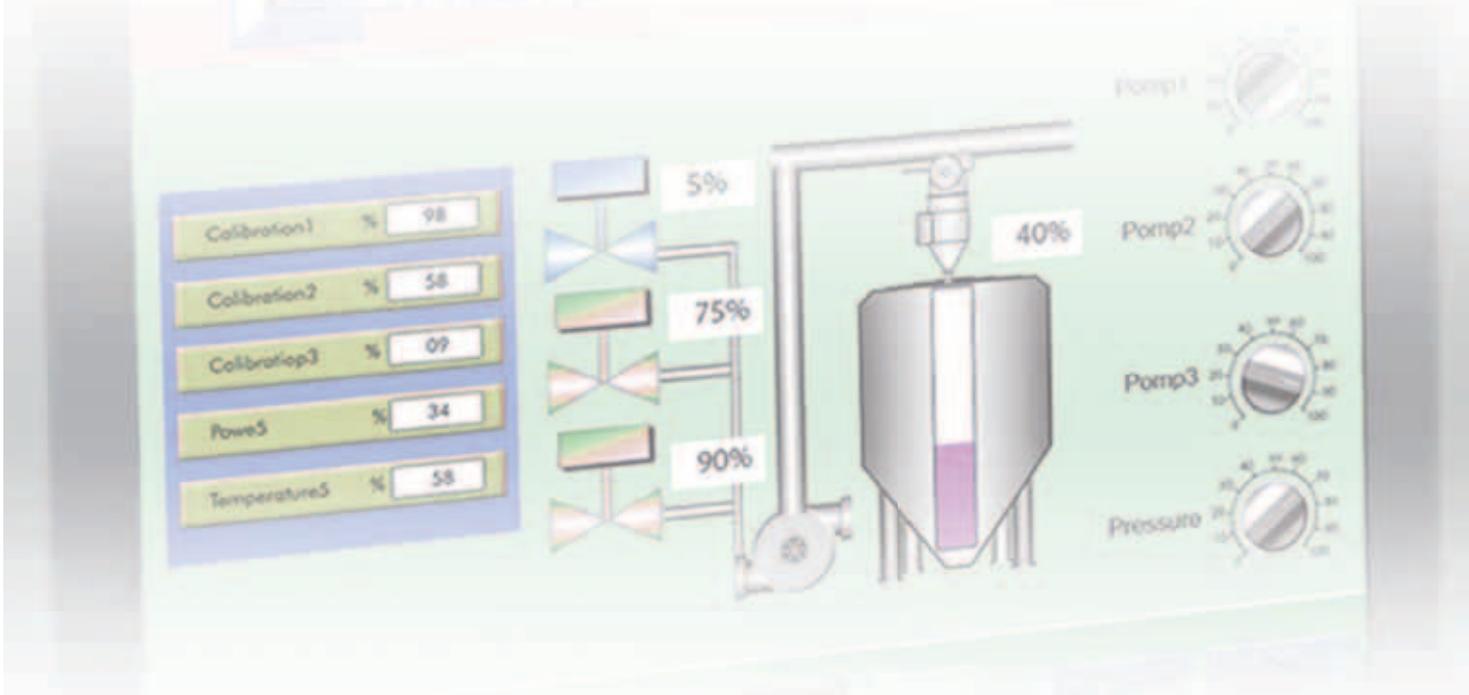
# Industrial Automation

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Established in 1975 in Italy, **ESA elettronica** is now a multinational company with **36 years' experience** in the field of Industrial Automation. It has **foreign branches strategically located** in important countries around the world and **agents in over 40 nations**, offering friendly, attentive customer service and impeccable post-sales assistance.

We aim to always to provide **the very best solutions** for controlling industrial processes in as **straightforward, secure and productive** a manner as possible. We design all of our products considering the human factor first and foremost. We are geared towards **constant improvement**.

We look ahead to anticipate market needs, channeling our creativity and with dedication, working diligently to offer efficient, easy-to-use, high-quality market driven products.



## Quality

In 1994, ESA was **one of the first electrical engineering companies in Europe to achieve the ISO 9001:1994 certification**, later upgraded to the ISO 9001:2008 version (vision2000).

Focusing on the quality of our products is an integral part of our corporate culture:

- **a close relationship with suppliers** thanks to a precise monitoring of the manufacturing process and of the quality of the single components
- **rigorous monitoring of all the production stages** in every department in order to ensure maximum efficiency and client satisfaction.
- **timely deliveries and extremely competent after-sales service**, who offer immediate and complete assistance
- use of the **CRM system**, allowing our clients **better technical support** and creating a system of **continuous updates** through **periodic newsletters**

In a world where communication boundaries are constantly evolving, people need to analyse and process a large amount of information before making important decisions in an increasingly shorter amount of time.

**Our aim** is to meet this requirement by offering a “**truly successful solution**”, not only through **state of the art hardware and software** products, but also through **expertise support** by means of our **professional, timely and friendly after-sales service**.

- **Touch-screen operator terminals and terminals with keypads** permitting unrivalled connectivity (in industrial environments and globally with other PCs) thanks to compatibility with a vast number of communication protocols such as **Profibus-DP, DeviceNet, CAN and Profinet that can be managed simultaneously**
- **Panel & Box industrial PCs, embedded systems and industrial monitors** designed with **modular architecture** suited to all kinds of conditions of use, guaranteeing maximum reliability at all times
- Extremely flexible and intuitive **new generation software**. State of the art programming of **operator panels** and development of **SCADA** applications on **PC platforms**
- **Custom-made and personalized solutions**: we work with leading international players to provide products developed according to specific requirements and with made-to-measure graphics

**ESA** products are the result of a **state of the art production system** specially designed to turn Quality into a “truly successful solution”: **Each product** undergoes a series of **rigorous tests (both hardware and software)** in order to **reduce any possible defect to ZERO**.



**ESA's** products conform to EC standards and are **c-UL** and **UL-us** (UL508 CSA C22.2 No. 14-M95), **ATEX** (Zone 2/22, category 3 G/D), **RINA** and **DNV** certified, to guarantee the complete safety and protection of the system.



**EN 60068**  
**ENVIRONMENTAL**  
**TESTS**

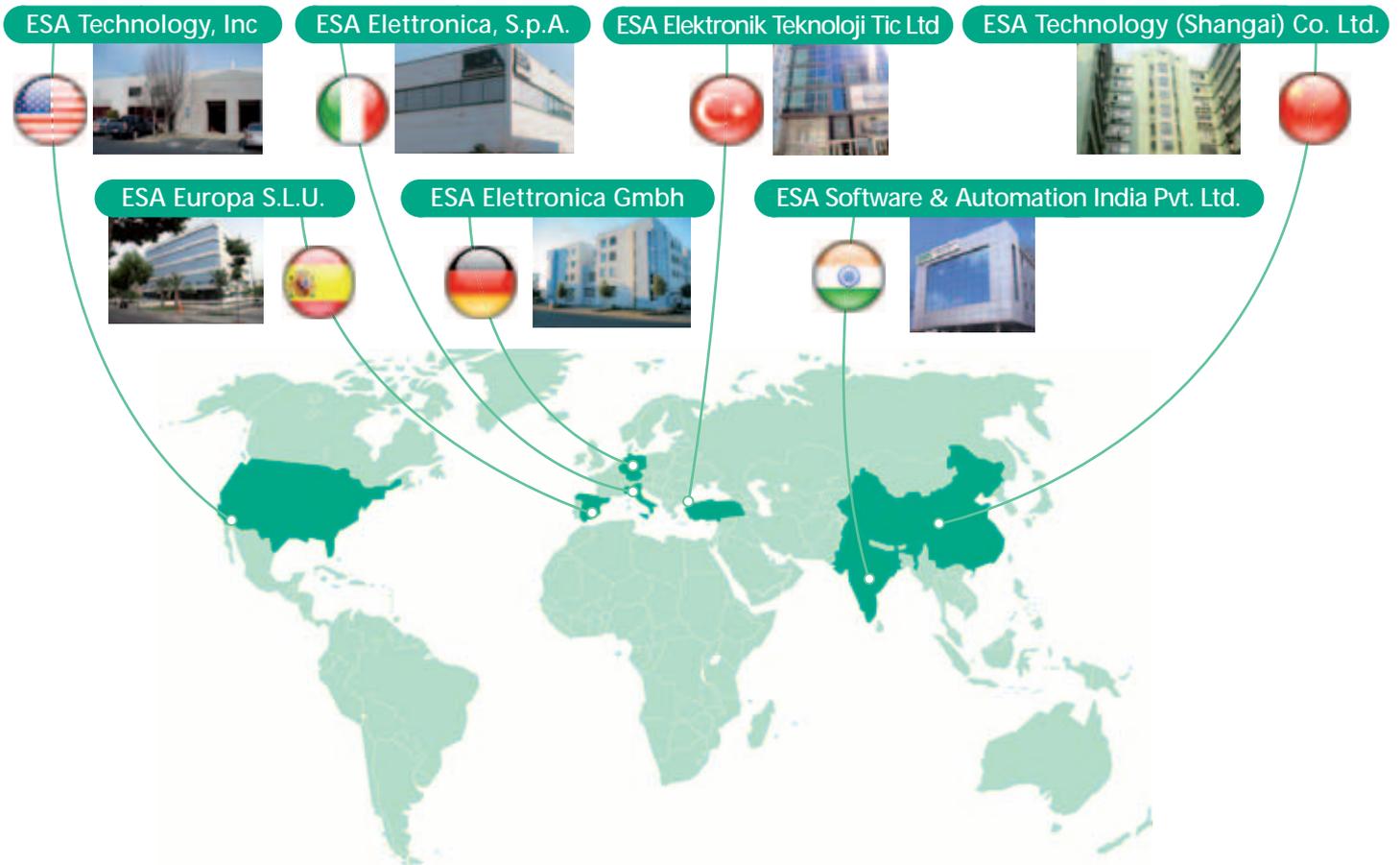
**IP66**

**IP69K**

**A history characterised by the entrepreneurial spirit and dedicated to offering only the best:**

- 1975** The company was established with the name Tecno System by 4 partners. Year after year, it constantly grew in the electrical equipment manufacturing sector.
- 1985** **ESA elettronica** was founded and supported Tecno System in the development of electronic equipment, in both custom and made-to-order, for industrial machinery
- 1990** ESA elettronica launched its first **range of HMI products** (human-machine interfaces) moving away from made-to-order production and focusing on solutions fully meeting all market demands and requirements
- 1991** ESA elettronica and Tecno System merged into ESA Elettronica S.r.l. becoming the first company in this sector to introduce a **new human machine interface concept: the universal operator terminal**
- 1992** ESA gained international recognition establishing a **world-wide sales network**
- 1994** ESA was **ISO 9001** certified
- 1996** ESA becomes a joint stock company
- 1997** A subsidiary was opened in **Spain**
- 1998** A subsidiary was opened in **Germany**
- 2000** A representative office was opened in **India**
- 2003** ESA Elettronica entered the **North American** market by acquiring EASON Technology; an American company in the same field
- 2004** A representative office was opened in **China**
- 2006** **ESA Software and automation India Pvt Ltd.** was inaugurated
- 2007** ESA entered the building automation market with a range of products specially designed for the sector
- 2008** The subsidiary **ESA Electronic Technology (Shanghai) Co. Ltd.** opened in China (PRC)
- 2009** The new **MyVision** software for the automated and intuitive creation of building and domestic projects was launched
- 2010** A **new generation** in the design of **Industrial PCs** was created
- 2011** The subsidiary **ESAElektronik Teknoloji Tic. Ltd.** opened.





## Europe

- |                    |             |                |
|--------------------|-------------|----------------|
| Albania            | Austria     | Belgium        |
| Bosnia Herzegovina | Bulgaria    | Czech Republic |
| Croatia            | Denmark     | Germany        |
| Estonia            | Finland     | France         |
| Greece             | Hungary     | Ireland        |
| Iceland            | Italy       | Latvia         |
| Lithuania          | Netherlands | Norway         |
| Poland             | Portugal    | Romania        |
| Russia             | Serbia      | Spain          |
| Slovakia           | Slovenia    | Sweden         |
| Switzerland        | Turkey      | United Kingdom |
| Ukraine            |             |                |

## America

- |           |           |            |
|-----------|-----------|------------|
| Argentina | Brasil    | Canada     |
| Chile     | Colombia  | Costa Rica |
| Messico   | Peru      | USA        |
| Uruguay   | Venezuela |            |

## Asia, India and Australia

- |           |           |             |
|-----------|-----------|-------------|
| Australia | China     | South Korea |
| India     | Indonesia | Pakistan    |
| Singapore | Taiwan    | Thailandia  |

## Africa and Middle East

- |              |         |                      |
|--------------|---------|----------------------|
| Algeria      | Egypt   | Iran                 |
| Israel       | Kenya   | Morocco              |
| Saudi Arabia | Syria   | Sri Lanka            |
| South Africa | Tunisia | United Arab Emirates |

For an updated list of the available countries and distributors please visit [www.esahmi.com](http://www.esahmi.com)

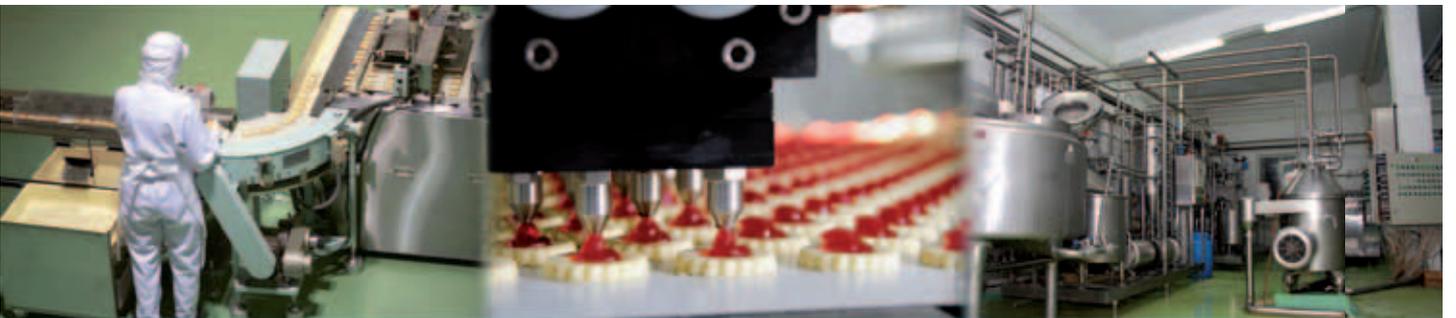
ESA's IPC family offers a complete range of **Industrial PC and Monitor**, *PANEL BOX* and *VESA* version, that can meet any automation requirement.

Accurate design, use of **high quality components**, **extreme mechanical sturdiness**, together with **configuration flexibility** make the ESA solution perfectly suited to difficult environments, such as those with high concentrations of **dust**, intense **vibrations** or particular **temperatures**.

## Machines and automatic plants



## Automatic machines for **food** and **Pharma** processing



## **Energy** management, **utilities**, **building** and **security**



**XS7**



**8**

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**XB300**



**14**

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**XM7**



**18**

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**Polymath Programming Software**



**24**

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CF Industrial SLC



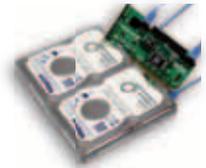
HD/SSD extractable drawer



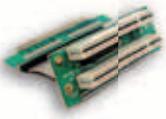
DVD



RAID



1 or 2 PCI Slot



Frontal USB with IP66 protection



FDA21 compliant  
Design EN1672-2



Inox V2A version  
Touch screen True-Flat  
Avoid dust accumulation



## XS7 Industrial Panel PC range

7" wide

8,4"

12,1"

15"

17"

19"

Intel® ATOM 1,6 GHz N270

10

*Fanless*



XS7W7



XS708



XS712



XS715



XS717



XS719

Intel® ATOM 1,66 GHz Core Duo D510

12

*Dynamic*



XS712



XS715

Intel® Celeron Core Duo 1,9 GHz T3100

Intel® Core 2 Duo 2,26 GHz P8400

13

*Dynamic*



XS712



XS715



XS717



XS719


**XS7W7**
**XS708**
**XS712**

Display	XS7W7	XS708	XS712
Size	7" wide	8,4"	12"
Technology		TFT	
Colours		262 K	
Backlight		LED	
Lamp life (min at 25°C)		50.000 hours	
Resolution	800 x 480 pixel	800 x 600 pixel	800 x 600 pixel (1024 x 768 optional)
<b>Touch screen</b>			
Touch technology	Analog resistive (4 wires)		Analog resistive (5 wires)
<b>Mother board / CPU</b>			
CPU Fanless	Intel® ATOM 1,6 GHz N270		
Chipset	945GSE + ICH7M		
FSB	533 MHz		
<b>System memory</b>			
RAM	up to 2 GB DDR2 SODIMM 200pin		up to 2 GB DDR2 DIMM 240pin
<b>Disk Drives</b>			
Hard disk / SSD (optional)	min. 160 GB SATA 2,5" / SSD 8GB		
<b>Compact Flash Slots</b>			
Internal (optional)		1 x	
External (optional)		1 x	
<b>Interfaces</b>			
RS232 serial port	1 x		2 x
RS485 serial port		1 x	
USB frontal (2.0) IP65		1 x	
USB rear (2.0)	2 x		4 x
Green Led Power ON		1 x	
PS/2 keyboard / mouse	-	-	1 x
<b>PCI slots</b>			
PCI Slot 1 (optional)	-		1 x
PCI Slot 2 (optional)	-	-	1 x
Mini PCIe	1 x		-
PCIe slot 1x (optional)	-	-	1x
<b>Wi-Fi</b>			
Wi-Fi card (optional)	Wi-Fi MiniPCIe / USB	Wi-Fi minipci / USB	PCI / USB / PCIe1x
<b>Video / Audio interface</b>			
Video port	1xVGA		1xVGA + 1x DVI-I *
Audio ports	-	-	MIC IN + Line IN + Line OUT
<b>Networks</b>			
Ethernet ports RJ45	2 x Ethernet 10/100/1000 Mbit		
<b>Dimensions</b>			
External (WxHxD)	228 x 155 x 80 (mm)	250 x 190 x 80 (mm)	336 x 256 x 81 (mm)
Cut-out (WxH)	219 x 145 (mm)	241 x 180 (mm)	321 x 240 (mm)
<b>Clock</b>			
Back-up with battery		1 x	
<b>Technical specifications</b>			
Power supply	18...30 Vcc max 50 W		18...30 Vcc max 75 W
Power consumption ** W	30		36
Protection degree		IP 66 front	
Operating temperature		0...+50 °C	
Storage temperature		-20...+65 °C	
Humidity		90%	
Weight (Kg)	2,5	3,0	5,0
Certifications	CE, cULus (in progress), Atex (Group II – cat.3 G D) / Environmental EN 60068-2-6/27/30 / Immunity EN 61000-6-2 / Emission EN 61000-6-4		
<b>Optional kit</b>			
INOX version True-flat Touch		YES - NO LED/USB front	
RAID feature 2xHDD	-		YES
Extractable HDD/SSD drawer	-		YES
DVD-RW Sata	-		external mounting
Fixing brackets		YES	
<b>Software</b>			
Operating System	Win7 - Win® XP Pro SP3 MUI - Xpe - CE		

\*\* A 24 Vcc - basic config - NO PCI CARDS \* digital signal only single-link



## XS715

## XS717

## XS719

15"	17"	19"
262 K LED	TFT	16,7 M CCFL (4 lamps)
1024 x 768 pixel	50.000	1280 x 1024 pixel
Analog resistive (5 wires)		
Intel® ATOM 1,6 GHz N270 945GSE + ICH7M 533 MHz		
fino a 2 GB DDR2 DIMM 240pin		
min. 160 GB SATA 2,5" / SSD 8GB		
	1 x	
	1 x	
	2 x	
1 x	-	-
	1 x	
	4 x	
	1 x	
	1 x	
	1 x	
	1 x	
	-	
	1 x	
PCI / USB / PCIe1x		
1xVGA + 1x DVI-I *		1xVGA
MIC IN + Line IN + Line OUT		
2 x Ethernet 10/100/1000 Mbit		
425 x 300 x 85,5 (mm) 393 x 275 (mm)	446 x 346 x 84 (mm) 426 x 326 (mm)	508 x 384 x 92,5 (mm) 477 x 355 (mm)
	1 x	
18...30 Vcc max 85 W 43		18...30 Vcc max 95 W 55
	IP 66 frontal 0...+50 °C -20...+65 °C 90%	
6,5	9,0	11,0
CE, cULus (in progress), Atex (Group II – cat.3 G D) / Environmental EN 60068-2-6/27/30 / Immunity EN 61000-6-2 / Emission EN 61000-6-4		
YES - No LED/USB front		
YES		
YES		
internal mounting		
YES		
Win7 - Win® XP Pro SP3 MUI - Xpe - CE		



## XS712

## XS715

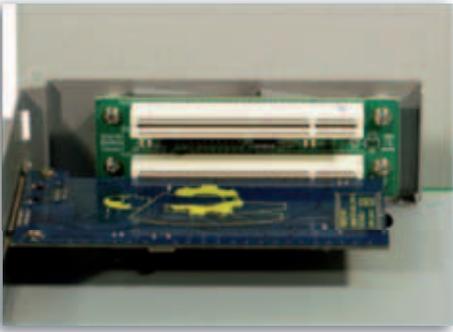
Display		12"	15"
Size		12"	15"
Technology			TFT
Colours			262 K
Backlight			LED
Lamp Life (min at 25°C)			50,000 hours
Resolution		800 x 600 pixel (1024 x 768 optional)	1024 x 768 pixel
Touch screen			
Touch technology		Analog resistive (5 wires)	
Mother board / CPU			
CPU Dynamic		Intel® ATOM Dual core 1,66GHz D510	
Chipset		ICH8M	
FSB		667 MHz	
System memory			
RAM		Up to 2GB DDR2 SODIMM 200pin	
Disk Drives			
Hard disk / SSD (optional)		min. 160 GB SATA 2,5" / SSD 8GB	
Compact Flash Slots			
Internal (opzionale)		1 x	
External (opzionale)		1 x	
Interfacce			
RS232 serial port		3 x	
RS485 serial port		1 x	
USB frontal (2.0) IP65		1 x	
USB rear (2.0)		4 x	
Green Led Power ON		1 x	
PS/2 tastiera / mouse		1 x	
PCI slots			
PCI Slot 1 (optional)		1 x	
PCI Slot 2 (optional)		1 x	
Mini PCIe		-	
PCIe slot 1x (optional)		1 x	
Wi-Fi			
Wi-Fi card (opzionale)		PCI / USB / PCIe1x	
Video / Audio interfaces			
Video port		1 x VGA	
Audio ports		MIC IN + Line IN + Line OUT	
Networks			
Ethernet ports RJ45		2 x Ethernet 10/100/1000 Mbit	
Dimensioni			
External (WxHxD)		366 x 256 x 81 (mm)	425 x 300 x 85,5 (mm)
Cut-out (WxH)		321 x 240 (mm)	393 x 275 (mm)
Clock			
Back-up with battery		1 x	
Technical specifications			
Power supply		18...30 Vcc max 85 W	
Power consumption ** W		43	50
Protection degree		IP 66 front	
Operating temperature		0...+50 °C	
Storage temperature		-20...+65 °C	
Humidity		90%	
Weight (Kg)		5,0	6,5
Certifications		CE, cULus (in progress), Atex (Group II – cat.3 G D) / Environmental EN 60068-2-6/27/30 / Immunity EN 61000-6-2 / Emission EN 61000-6-4	
Optional kit			
INOX version True-flat Touch		YES - NO LED / USB front	
RAID feature 2xHDD		YES	
Extractable HDD/SSD drawer		YES	
DVD-RW Sata		external optional	internal optional
Fixing brackets		YES	
Software			
Operative system		Win7 - Win® XP Pro SP3 MUI - Xpe - CE	

\*\* A 24 Vcc - basic config - NO PCI CARDS \* digital signal single-link



Wide range of powerful  
**FANLESS CPU solutions**

Modular design allowing  
**1, 2 or 3 PCI cards**



**CF Industrial SLC**

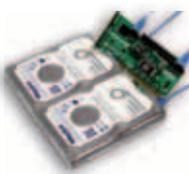


Extractable drawer



Wide range of interfaces:  
**VGA, DVI, RS232/485, USB, PS2**

**RAID**



0 slot PCI

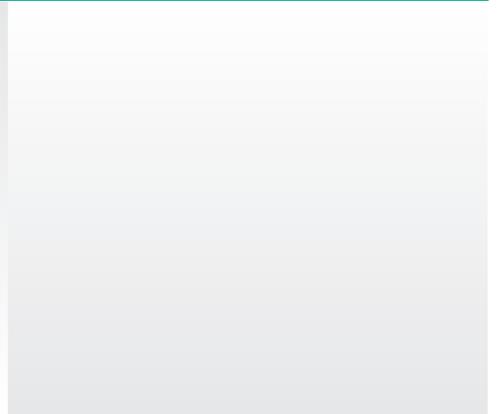
2 slot PCI

3 slot PCI

**Intel® ATOM 1,6 GHz N270**

**16**

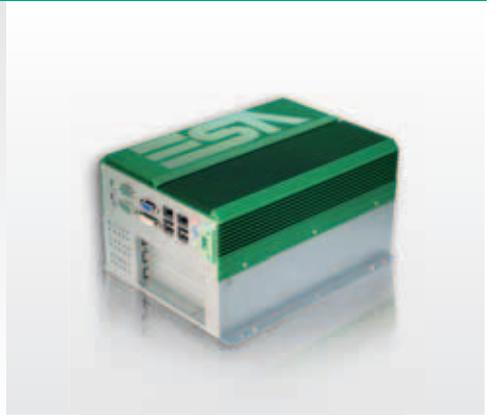
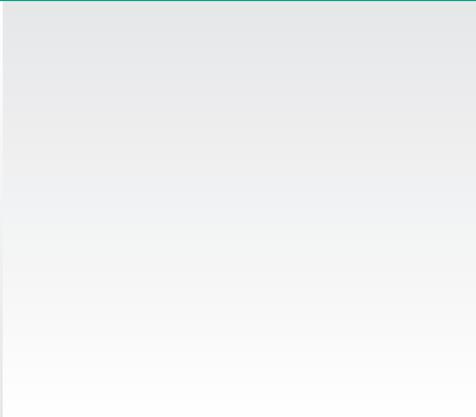
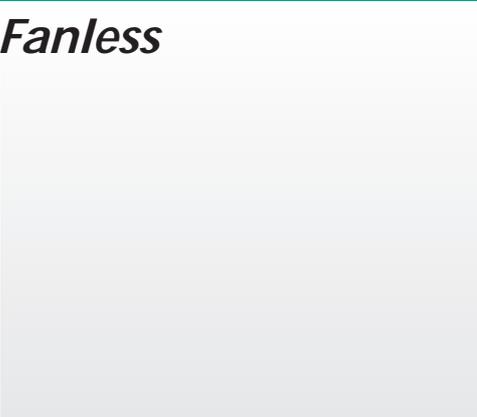
*Fanless*



**Intel® Celeron 1,9 GHz T3100**  
**Intel® Core 2 Duo 2,26 GHz P8400**

**17**

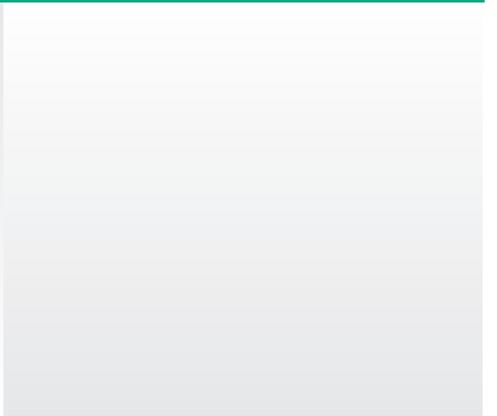
*Fanless*



**Intel® Celeron 1,9 GHz T3100**  
**Intel® Core 2 Duo 2,26 GHz P8400**

**17**

*Fanless*





### XB300

### XB300

#### Mother board / CPU

CPU Fanless Atom	Intel® ATOM 1,6GHz N270
CPU Fanless Celeron Core Duo	-
CPU Fanless Core 2 Duo	-
Chipset	945GSE+ICH7M
FSB	533 MHz

#### System memory

RAM	Up to 2 GB DDR2
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#### Disk Drives

Hard disk / SSD (optional)	min. 160 GB SATA 2,5" / SSD 8GB
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#### Compact Flash Slots

External access slot	1 x
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#### Interfaces

RS232 serial port	2 x
RS485 serial port	-
USB ports (2.0)	6 x
Green Led Power ON	1 x
Red Led HDD	1 x
ATX/APO selector	1 x
PS/2 keyboard / mouse	1 x

#### PCI slots

PCI Slot 2 (optional)	-	-
PCI Slot 3 (optional)	-	1 x
PCI Slot 2PCIe 1x + 1PCI (optional)	-	-

#### Wi-Fi

Wi-Fi card (optional)	USB internal / PCI
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#### Video / Audio interface

Video port	1xVGA + 1x DVI-I *
Audio ports	MIC IN + Line IN + Line OUT

#### Networks

Ethernet RJ45	2 x Ethernet 10/100/1000 Mbit
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#### Dimensiones

External (L/A/P)	194 x 268 x 104 (mm)	194 x 268 x 125 (mm)
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#### Clock

Back-up with battery	1 x
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#### Technical specifications

Power supply	11...32 Vcc max 95 W	
Power consumption ** W	30	
Grado di protezione	IP 20	
Operating temperature	0...+50 °C	
Storage temperature	-20...+65 °C	
Humidity	85%	
Weight (Kg)	4,5	5
Certifications	CE, Immunity EN 61000-6-2 / Emission EN 61000-6-4	

#### Optional kit

RAID feature 2xHDD	-	1 x
Extractable HDD-SSD drawer	-	1 x

#### Software

Operative system	Win® XP Pro SP3 MUI-Xpe-Win® 7-CE
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\*\* A 24 Vcc - basic config - NO PCI CARDS \* digital signal only single-link



## XB300

## XB300

## XB300

-		
Intel® Celeron Core Duo 1,9GHz T3100		
Intel® Core2Duo 2,26GHz P8400		
GM45+ICH9M		
800/1066 MHz		
Up to 8 GB DDR3		
min. 160 GB SATA 2,5" / SSD8GB		
1 x		
2 x		
-		
4 x		
1 x		
1 x		
1 x		
1 x		
-	-	1x
1 x	-	-
1 x	-	-
PCI / USB		
1xVGA + 1x DVI-I *		
MIC IN + Line IN + Line OUT		
2 x Ethernet 10/100/1000 Mbit		
194 x 268 x 143 (mm)	194 x 268 x 104 (mm)	194 x 268 x 125 (mm)
1 x		
11...32 Vcc max 95 W		
54/42	54/42	54/42
IP 20		
0...+50 °C		
-20...+65 °C		
85%		
5,5	4,5	5
CE, Immunity EN 61000-6-2 / Emission EN 61000-6-4		
1 x	-	1 x
1 x	-	1 x
Win7 - Win® XP Pro SP3 MUI - Xpe		

**OSD**  
Keys for monitor settings



Frontal **USB** with **IP66** protection



Wide range of interfaces:  
DVI-I \*, VGA, USB , RS232



# XM7 Industrial Monitors range



## XM7W7

## XM708

## XM712

Display			
Dimensions	7" wide	8,4"	12"
Technology	TFT 262 K colors		
Backlight	LED		CCFL (2 lamps)
Brightness cd/m2	500	350	370
Contrast	600:1	600:1	600:1
Viewing angle H-V	70-60	75-75	140-120
Lamp life (min a 25°C)	50.000 hours		
Resolution	800 x 480 pixel	800 x 600 pixel	
Touch screen			
Touch technology	Analog resistive (4 wires)		Analog resistive (5 wires)
RS232 / USB interface	YES		
Interfaces			
USB frontal IP66 / USB rear (2.0)	1 x		
Green Led Power ON	1 x		
Video interface			
VGA/DVI-I */S-Video/Video composite	VGA / DVI-I *		1 x
Dimensions			
External (WxHxD)	228 x 155 x 66,7 (mm)	250 x 190 x 66,7 (mm)	336 x 256 x 56,7 (mm)
Cut-out (WxH)	219 x 145 (mm)	241 x 180 (mm)	321 x 240 (mm)
Technical specifications			
Power supply	18...30 Vcc max 50 W		
Power consumption W	30	30	35
Protection degree	IP66 front		
Operating temperature	0...50°C		
Storage temperature	-20...+65 °C		
Humidity	90%		
Weight (Kg)	2,2	2,6	4,0
Certifications	CE, cULus (in progress), Atex (Group II – cat.3 G D), Environmental EN60068-2-6/27/30, Immunity EN61000-6-2 / Emission EN 61000-6-4		
Optional Kit			
INOX version - True-flat Touch	-	-	SI
External power supply 220/24VDC	YES		



## XM715

## XM717

## XM719

Display			
Dimensions	15"	17"	19"
Technology	TFT 16,2 M colori	TFT 16,7 M colori	
Backlight	CCFL (2 lamps)		CCFL (4 lamps)
Brightness cd/m2	350	350	450
Contrast	700:1	1000:1	1000:1
Viewing angle H-V	140-125	170-170	170-170
Resolution	1024 x 768 pixel	1280x1024 pixel	
Touch screen			
Touch technology	Analog resistive (5 wires)		
RS232 / USB interface	YES		
Interfaces			
USB front IP66 / USB rear (2.0)	1 x		
Green Led Power ON	1 x		
Video interface			
VGA/DVI-I */S-Video/Video composite	1 x		
Dimensions			
External (WxHxD)	425 x 300 x 57,2 (mm)	446 x 346 x 59,7 (mm)	508 x 384 x 64,2 (mm)
Cut-out (WxH)	393 x 275 (mm)	426 x 326 (mm)	477 x 353 (mm)
Technical specifications			
Power supply	18...30 Vcc max 50 W		
Power consumption W	35	45	45
Protection degree	IP66 front		
Operating temperature	0...50°C		
Storage temperature	-20...+65 °C		
Umidity	90%		
Weight (Kg)	6,0	7,5	9,0
Certifications	CE, cULus (in progress), Atex (Group II – cat.3 G D), Environmental EN60068-2-6/27/30, Immunity EN61000-6-2 / Emission EN 61000-6-4		
Optional Kit			
INOX version - True-flat Touch	YES		
External power supply 220/24VDC	YES		

\* digital signal only single-link

X S 7 0 8 - - - - - - - -

### LCD

- 7W7: 7" wide
- 708: 8,4"
- 712: 12,1"
- 715: 15"
- 717: 17"
- 719: 19"

### Front finishing

- X: INOX w/o frontal USB/LED
- S: Standard with frontal USB/LED
- U: Standard w/o frontal USB/LED

### FANLESS

- F: Fanless
- P: No fanless

### CPUs

- 1: Atom N270 1,60GHz
- 2: Atom D510 Core Duo 1,66GHz
- 3: Celeron core2 T3100 1,9GHz
- 4: Core2duo P8400 2,26GHz

### RAM

- 1: 1 GB
- 2: 2 GB
- 3: 4 GB
- 4: 8 GB

### Internal Drives

- 0: No HDD
- 1: Hard Disk 160 GB SATA 2,5"
- 2: Hard Disk 250 GB SATA 2,5"
- 3: 2 x Hard Disk 160 GB SATA 2,5"
- A: Solid State Disk 8 GB SATA 2,5"
- B: Solid State Disk 16 GB SATA 2,5"
- C: Solid State Disk 32 GB SATA 2,5"
- D: Solid State Disk 64 GB SATA 2,5"
- R: RAID 2 x HDD 160 GB SATA 2,5"

### Internal CF

- 0: No
- 1: CF 2 GB UDMA Industrial
- 2: CF 4 GB UDMA Industrial
- 3: CF 8 GB UDMA Industrial
- 4: CF 16 GB UDMA Industrial

### Expansion Slots

- 0: No slots
- 1: 1 x PCI
- 2: 2 x PCI
- 3: 1 x PCIe

### External Drives

- 0: No
- 1: 1 x accessible CF slot
- 2: 1 x DVD-RW
- 3: 1 x accessible CF slot + DVD-RW

# XB300 and XM7 range configurator

X   B   3   0   0   -   -   -   -   -   -   -

**Front finishing**

S: Standard

**FANLESS**

F: Fanless

**CPUs**

- 1: Atom N270 1,60GHz
- 3: Celeron CoreDuo T3100 1,9GHz
- 4: Core2duo P8400 2,26GHz

**RAM**

- 1: 1 GB DDR2/3
- 2: 2 GB DDR2/3
- 3: 4 GB DDR2/3
- 4: 8 GB DDR2/3

**Internal Drives**

- 0: No HDD
- 1: Hard Disk SATA 2,5" 160 GB
- 2: Hard Disk SATA 2,5" 250 GB
- A: Solid State Disk 8 GB SATA 2,5"
- B: Solid State Disk 16 GB SATA 2,5"
- C: Solid State Disk 32 GB SATA 2,5"
- D: Solid State Disk 64 GB SATA 2,5"
- R: Raid 2x HDD 160 GB SATA 2,5"

**Internal CF**

- 0: No
- 1: CF 2 GB UDMA Industrial
- 2: CF 4 GB UDMA Industrial
- 3: CF 8 GB UDMA Industrial
- 4: CF 16 GB UDMA Industrial

**Expansion Slots**

- 0: No slots
- 2: 2 x PCI
- 4: 3 x PCI
- 5: 2 x PCIe 1x + 1PCI

X   M   -   -   -   -   -   -   -   -

**LCD**

- 7W7: 7" wide
- 708: 8,4"
- 712: 12,1"
- 715: 15"
- 717: 17"
- 719: 19"

**Front finishing**

- X: INOX
- S: Standard

**USB frontal**

- U: Frontal USB port
- F: No frontal USB

**Touch screen**

- T: Resistive touch screen

**Power supply**

- 1: 24VDC
- 2: 220VAC/24VDC ext. Adapter 120 W

**Video interface**

- 1: N.A.
- 2: N.A.
- 3: VGA+DVI-I\* + S-Video + C-Video ports

\* digital signal only single-link

## Operative systems

### XWINES00M11

Windows Embedded Standard 2009

Operating system with MUI support for:  
IT EN DE FR ES

### XWINXE00ML1

XP Professional for embedded, MUI version licence

### XWINCE600EN1

Win CE 6.0 R3 Professional licence (English)

### XWINES00M21

Windows Embedded Standard 2009

Operating system with MUI support for:  
IT EN DE FR ES TK PT BRA CK RUS PL CHIs CHIt

### XWIN7U00ML1

Windows 7 Ultimate, MUI version licence

### XACCPE0KBTS00

On-Screen Keyboard XP/WES licence



## Accessories

### Codes and descriptions

PWR220-24A	Universal power supply 220VAC-24VDC
PWR220-24B	Universal power supply 220VAC-24VDC - Schuko
DISPAD015RK019	Adapter panel for 19" Rack mounting (XS715 only)
PCIWI FICARD	Wi-Fi IEEE 802.11 PCI card complete with antenna cable 2m.
XCF2INDSLC	Industrial Compact Flash 2 GB
XCF4INDSLC	Industrial Compact Flash 4 GB
XCF8INDSLC	Industrial Compact Flash 8 GB
XCF16INDSLC	Industrial Compact Flash 16 GB
XPCI2RS232	PCI card 2 x RS232 (SUB-D 9 pin)
XPCI2RS485	PCI card 2 x RS485 (SUB-D 9 pin)
XPCILAN1000	PCI card Ethernet 10/100/1000
XPCILPTCARD	PCI card Parallel Port (SUB-D 25 pin)
XPCIETHERCAT	PCI card 1 EtherCAT port 10-100Mb

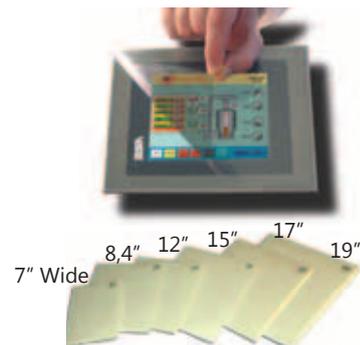


## Protofilm: protecting your touch screen

**PROTFILM** is a (treatable and removable) **transparent PET adhesive film**, 0.2 mm thick, that can be **applied to the touch screen for protection against scratches and cuts**. Each pack includes 5 protective film sheets.

### Codes and description

PROTFILM7W	Protection sheet adhesive and transparent for XS7 - XM7 with 7" wide display
PROTFILM6	Protection sheet adhesive and transparent for XS7 - XM7 with 8,4" display
PROTFILM12	Protection sheet adhesive and transparent for XS7 - XM7 with 12" display
PROTFILM15	Protection sheet adhesive and transparent for XS7 - XM7 with 15" display
PROTFILM17	Protection sheet adhesive and transparent for XS7 - XM7 with 17" display
PROTFILM19	Protection sheet adhesive and transparent for XS7 - XM7 with 19" display



## Repairs and Spare Parts

The **ESA repair service** relies on a well-equipped laboratory adjacent to standard production and on highly qualified personnel. The **repaired product passes through all the stages provided for production**, including an 8-hour 'Burn-In' and a 48-hour 'Run-In', in order to guarantee total reliability of the repaired product.



Moreover, **ESA** can also **supply single spare parts** in order to **replace any component of the product autonomously and safely directly on-site**. ESA also provides a **manual** with hundreds of pictures and explanatory drawings, allowing anybody to repair and **replace the terminal parts** in a **safe, quick and easy way**. This manual is a particularly useful tool, providing great added value.

### Codes and descriptions

SPARE PARTS CD	CD with Spare Parts manual and Price List in Italian and English
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# Polymath

**Polymath** is an **extremely flexible and intuitive, state of the art software** for programming **all operator panels in the ESA range** and for developing **SCADA applications on PC platforms** for plant monitoring and control.

Polymath was developed with .NET technology and is equipped with a **modern and complete interface**, allowing for easy and intuitive programming, thereby optimising the project development and execution stages, both in terms of time and efficacy. Among the advantages offered by Polymath, there is the option to **import variables directly from PLC databases**, thus preventing any unnecessary waste of time for filling in the project variable table.

Thanks to the **immense number of supported communication protocols**, with Polymath there are no longer connectivity limitations both in the industrial environment and in the PC world. In addition, all the major communication buses, such as **Profibus, DeviceNet, Can and Profinet** are available.

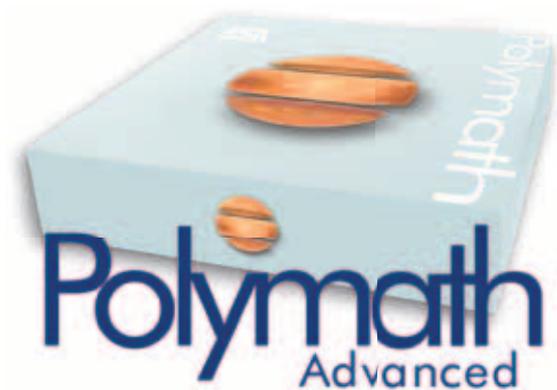
With Polymath, the user can also make use of a tool for **importing and exporting recipes, alarms, translations and variables in standard Excel format**, and has a **dictionary** for automatic term translation.

## POLYMATH ADVANCED

**Polymath Advanced** is an integrated programming system, that allows developing applications for the entire ESA range of products: from VT text terminals, to advanced supervision projects on PC, passing through the IT family of products.

### Codes and descriptions

POLYMATHKIT	Kit software Polymath - Advanced Version
The kit includes the following cables and adapters:	
CVUSB11102	PC USB-A ->IT USB-B programming cable
CVADUSBB9M	USB-B – 9-pin male adapter
CVAD9F25M	9-pin female- 25-pin male adapter

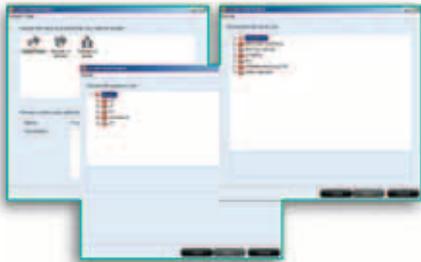


**Polymath** is compatible with **Windows 2000 SP4, Windows XP, Windows Vista and Windows 7**



# Polymath: simplicity first

The advanced Polymath controls 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. Once you have chosen the required control, it can be placed inside the project page and **easily configured**.



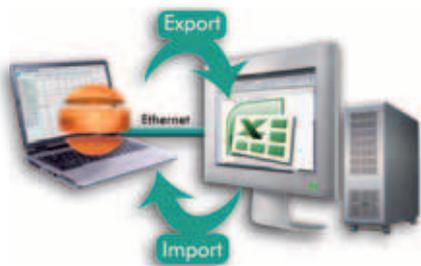
## Guided project creation

By using specially designed wizards you can **create a project in just a few clicks**: all you have to do is select the available panel and the interface device and the **entire application will be automatically configured**.



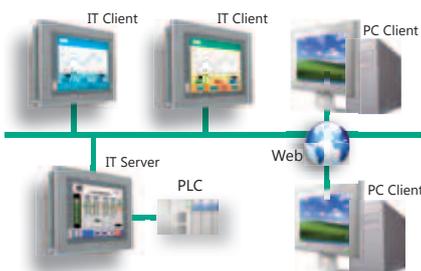
## Rich object library

**Polymath** has a **rich library of objects** with **fantastic graphical and functional impact**. Such objects are **divided by category** and can be easily placed in the pages by **simply dragging and dropping them**. Furthermore, the library can be **customised according to one's requirements**, inserting objects created directly by the user.



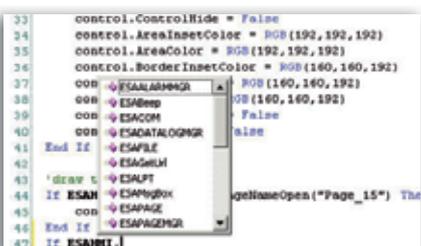
## Importing/exporting project data

**Polymath** provides convenient utilities for **importing and exporting all the data** used for creating a project, such as **recipes, alarms, list of variables and texts**. Polymath also allows importing variables directly from PLC databases (e.g., **Siemens, Allen-Bradley and Codesys**).



## Network projects

The creation of network projects allows you to **share and transmit data from one device to another** within a corporate network. Data can be accessed and displayed through the **corporate intranet and the Internet** through **client-server connections between the panels**. An efficient network allows you to view and **monitor every station in a plant from any other workstation**.



## VB script with intellisense

**Polymath** offers a further level of customized **application** with **VBScript programming language**, allowing you to **create your own routines for managing the project elements in an easy and intuitive way**. Thanks to the **"Intellisense" function**, the user can access (through a convenient context menu) a **library of powerful functions developed by ESA** for its operator terminals.



## Remote supervision

Any project made in the **Polymath Advanced** development environment can also be run on PC with Microsoft Windows 2000 SP4, XP, Vista and Seven, as well as on **all ESA industrial PCs**. With **Polymath PC Machine Edition**, an ordinary computer becomes a **powerful supervision and control station**, that can connect directly to the system and manage a **massive number of communication protocols**, including **Profibus-DP**, **CanOpen** and **DeviceNet**.

Using Polymath Machine Edition PC you will have the opportunity to **connect the PC directly to the field** through a multitude of integrated communication protocols. All Polymath communication drivers are supported, as well as the most common fieldbuses used in the industrial sector, such as **Profibus-DP** and **CanOpen**.

### Codes and descriptions

PCMACHINE-512	Polymath PC Machine Edition runtime license – 512 variables
PCMACHINE-1024	Polymath PC Machine Edition runtime license – 1024 variables
PCMACHINE-2048	Polymath PC Machine Edition runtime license – 2048 variables
PCMACHINE-4096	Polymath PC Machine Edition runtime license – 4096 variables

ESA offers three different models to meet any communication requirement:

- **PC-USB SP**: serial version with RS232/RS485 interface towards the field supporting all the **serial drivers** in Polymath and Siemens **MPI** (both at the speed of 187,500 KBit/s and 1.5Mbit/s)
- **PC-USB DP**: version supporting **Profibus DP**
- **PC-USB CAN**: version supporting **CANOpen** and **Devicenet** protocols



### Codes and description

PCUSBADPOSP2	External module to connect PC in RS232/485
PCUSBADPOCAN	External module to connect PC in CAN/DeviceNet
PCUSBADPODP	External module to connect PC in Profibus-DP



## Automatic connection to relational databases

This dedicated Tool allows **exporting data to the most popular relational databases**, such as **SQL server**. The data is recovered and arranged autonomously **relieving the system from any other task**. This way, you can **freely manage the data structure** to be exported in order to **perfectly adapt to existing situations** without annoying and expensive conversion operations.

The **operator panels in the IT range** and **Polymath PC Machine Edition** can be connected to a production plant and the **production data can be exported directly to a remote Database (such as SQL Server)** using the integrated Ethernet port. Just indicate the names of the variables to be monitored and, when necessary, their values are automatically read by the PLC and inserted in the specific location of the chosen database.

### Codes and descriptions

ESADBCONNECT	ESA Database Connection Software License
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## ESA web site: [www.esahmi.com](http://www.esahmi.com)

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