ESA

Industrial Automation

IPC - Product Catalogue

![ESA logo]

To put more **control** in **your hands**
Making industrial processes **simpler, safer** and **more productive**

**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.
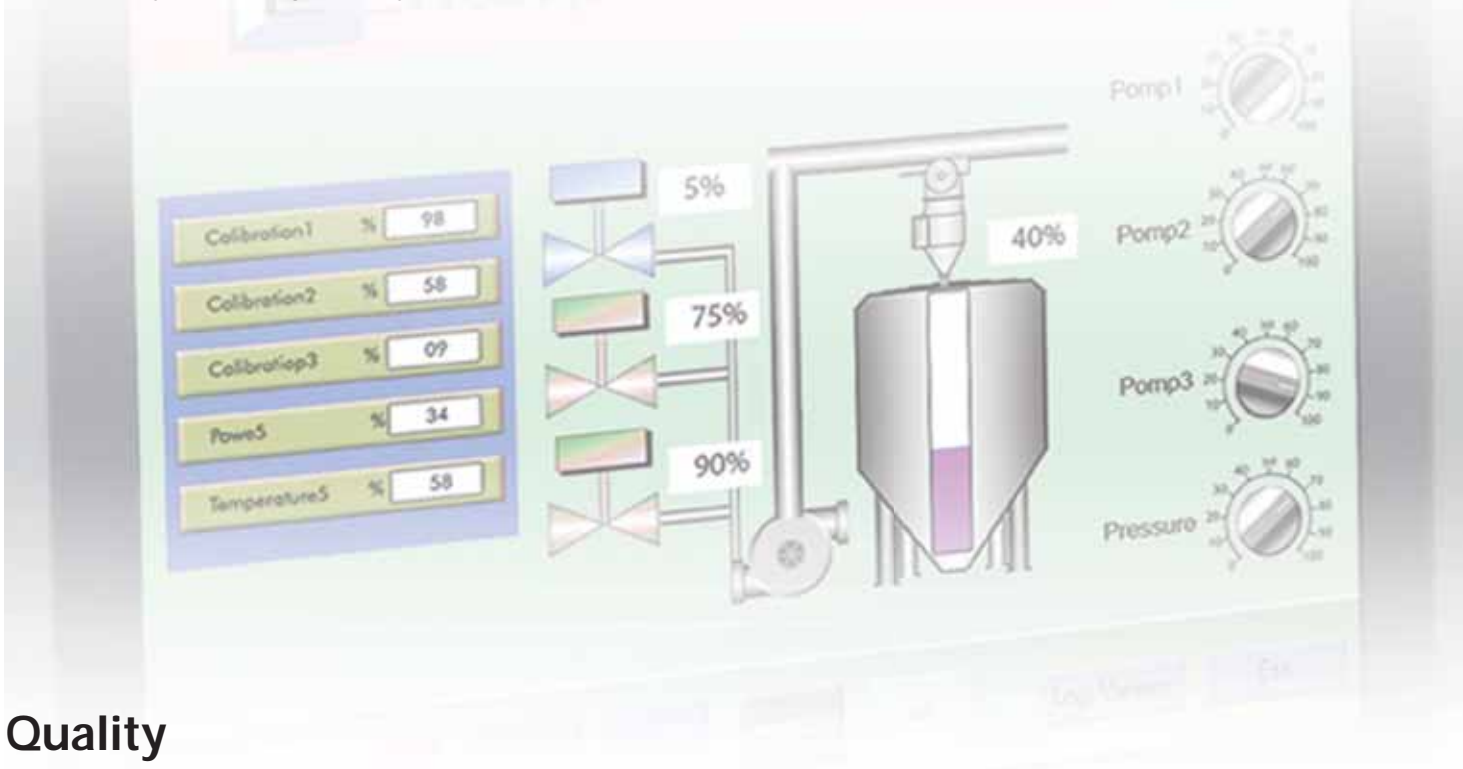
Quality

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**.

| HMI | IPC | Custom | Software |

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**

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
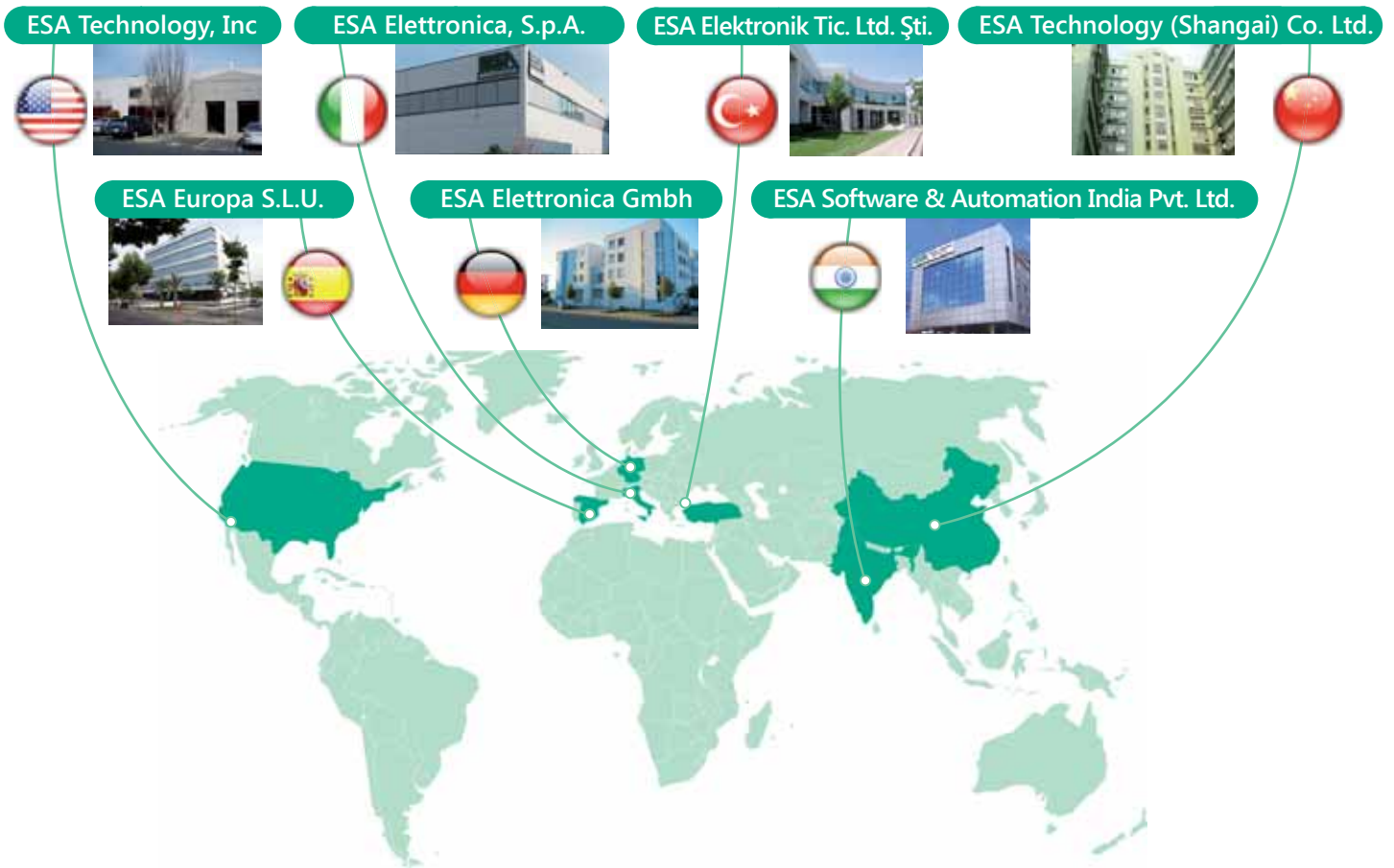
1999   2000   2001   2005   2006   2007

ESA in the world

ESA Technology, Inc

ESA Elettronica, S.p.A.

ESA Elektronik Tic. Ltd. Şti.

ESA Technology (Shangai) Co. Ltd.

ESA Europa S.L.U.

ESA Elettronica Gmbh

ESA Software & Automation India Pvt. Ltd.

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**

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

CF Industrial SLC

HD/SSD extractable drawer

DVD

RAID

1 or 2 PCI Slot

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

FDA21 compliant
Design **EN1672-2**
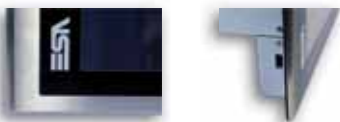
Inox V2A version
Touch screen **True-Flat**
Avoid dust accumulation

| 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			
Size	7″ wide	8,4″	12″
Technology	TFT		
Colours	262 K		
Backlight	LED		CCFL (2 lamps)
Lamp life (min at 25°C)	50.000 hours		
Resolution	800 x 480 pixel	800 x 600 pixel	
Touch screen			
Touch technology	Analog resistive (4 wires)		
Mother board / CPU			
CPU Fanless	Intel® ATOM 1,6 GHz N270		
Chipset	945GSE + ICH7M		
FSB	533 MHz		
System memory			
RAM	up to 2 GB DDR2 SODIMM 200pin		up to 2 GB DDR2 DIMM 240pin
Disk Drives			
Hard disk / SSD (optional)	min. 160 GB SATA 2,5″ / SSD 8GB		
Compact Flash Slots			
Internal (optional)	1 x		
External (optional)	1 x		
Interfaces			
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
PCI slots			
PCI Slot 1 (optional)	-		1 x
PCI Slot 2 (optional)	-	-	1 x
Mini PCIe	1 x		-
PCIe slot 1x (optional)	-	-	1x
Wi-Fi			
Wi-Fi card (optional)	Wi-Fi MiniPCIe / USB	Wi-Fi minipci / USB	PCI / USB / PCIe1x
Video / Audio interface			
Video port	1xVGA		1xVGA + 1x DVI-I *
Audio ports	-	-	MIC IN + Line IN + Line OUT
Networks			
Ethernet ports RJ45	2 x Ethernet 10/100/1000 Mbit		
Dimensions			
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)
Clock			
Back-up with battery	1 x		
Technical specifications			
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		
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 mounting	
Fixing brackets	YES		
Software			
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″
	TFT	
262 K	16,7 M	
CCFL (2 lamps)	CCFL (4 lamps)	
	50.000	
1024 x 768 pixel	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)	446 x 346 x 84 (mm)	508 x 384 x 92,5 (mm)
393 x 275 (mm)	426 x 326 (mm)	477 x 355 (mm)
	1 x	
18...30 Vcc max 85 W	18...30 Vcc max 95 W	
43	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		
Dimensione	12"	15"
Tecnologia	TFT	
Colori	262 K	
Retroilluminazione	CCFL (2 lamps)	
Durata lampada (min a 25°C)	50.000 hours	
Risoluzione	800 x 600 pixel	1024 x 768 pixel
Touch screen		
Touch technology	Analog resistive (4 wires)	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

XS712	XS715	XS717	XS719
12″	15″	17″	19″
TFT			
262 K		16,7 M	
CCFL (2 lamps)		CCFL (4 lamps)	
50.000 hours			
800 x 600	1024 x 768	1280 x 1024	
Analog resistive (4 wires)		Analog resistive (5 wires)	
Intel® Core2Duo Penryn P8400 2,26GHz / Intel® Celeron Core Duo T3100 1,9GHz			
GM45 + ICH9M			
1066 / 800 MHz			
Up to 8GB DDR3 SODIMM 204pin			
min. 160 GB SATA 2,5″ / SSD8GB			
1 x			
1 x			
1 x			
1 x			
1 x			
4 x			
1 x			
1 x			
1 x			
1 x			
-			
1 x			
PCI / USB / PCIe 1x			
1xVGA + 1x DVI-I *			
MIC IN + Line IN + Line OUT			
2 x Ethernet 10/100/1000 Mbit			
366 x 256 x 81 (mm)	425 x 300 x 85,5 (mm)	446 x 346 x 84 (mm)	508 x 384 x 92,5 (mm)
322 x 240 (mm)	393 x 275 (mm)	426 x 326 (mm)	477 x 355 (mm)
1 x			
18...30 Vcc max 75 W	18...30 Vcc max 85 W	18...30 Vcc max 95 W	
48/58	55/65	67/77	
IP 66 front			
0...+50 °C			
-20...+65 °C			
90%			
5,0	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			
YES			
YES			
external optional		internal optional	
YES			
Win7 - Win® XP Pro SP3 MUI - Xpe - CE			

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

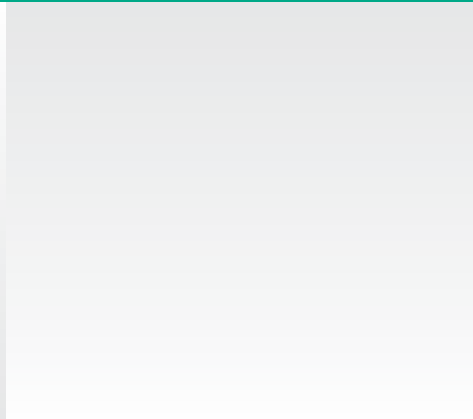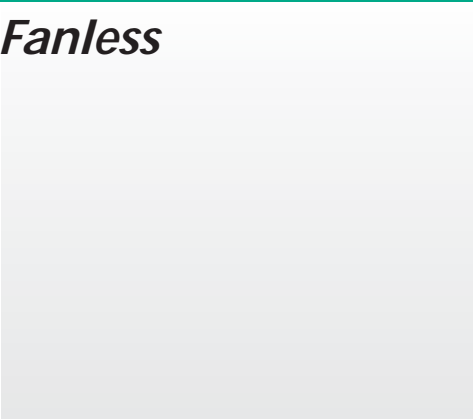## Intel® Celeron 1,9 GHz T3100
Intel® Core 2 Duo 2,26 GHz P8400   17

Fanless

Intel® Celeron 1,9 GHz T3100
Intel® Core 2 Duo 2,26 GHz P8400   17

Fanless

15
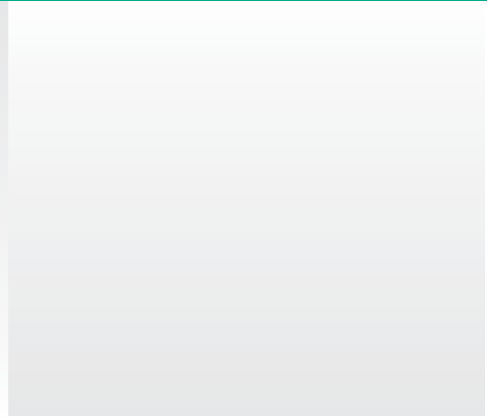
XB300	XB300

Mother board / CPU

	XB300	XB300
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	

Disk Drives

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

Compact Flash Slots

External access slot	1 x	

Interfaces

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

PCI slots

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

Wi-Fi

Wi-Fi card (optional)	USB internal / PCI	

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	

Dimensiones

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

Clock

Back-up with battery	1 x	

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	

** 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	
-	-	-
	-	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

	XM7W7	XM708	XM712
Display			
Dimensions	7" wide	8,4"	12"
Technology	TFT 262 K colors		
Backlight	LED		CCFL (2 lamps)
Brightness cd/m2	500	450	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 56,2 (mm)	250 x 190 x 56,2 (mm)	336 x 256 x 56,2 (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	380	400
Contrast	700:1	1000:1	1000:1
Viewing angle H-V	140-125	170-170	170-170
Resolution	1024 x 768 pixel	1280x1024	
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 56,7 (mm)	446 x 346 x 59,2 (mm)	508 x 384 x 63,7 (mm)
Cut-out (WxH)	393 x 275 (mm)	426 x 326 (mm)	477 x 92,5 (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

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

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: VGA port
2: DVI-I * port
3: VGA+DVI-I * ports

* digital signal only single-link

Operative systems

XWINES00M11

Windows Embedded Standard 2009

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

XWINES00M21

Windows Embedded Standard 2009

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

XWINXE00ML1

XP Professional for embedded, MUI version licence

XWIN7U00ML1

Windows 7 Ultimate, MUI version licence

XWINCE00EN1

Win CE, English version licence

XACCPE0KBTS00

On-Screen Keyboard XP/WES licence

Accessories

Codes and descriptions	
PWR220-24A	Universal power supply 220VAC-24VDC
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
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)

Protfilm: 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

8,4" 12" 15" 17" 19"
7" Wide

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

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
CVADUSBB 9M	USB-B – 9-pin male adapter
CVAD9F25M	9-pin female- 25-pin male adapter
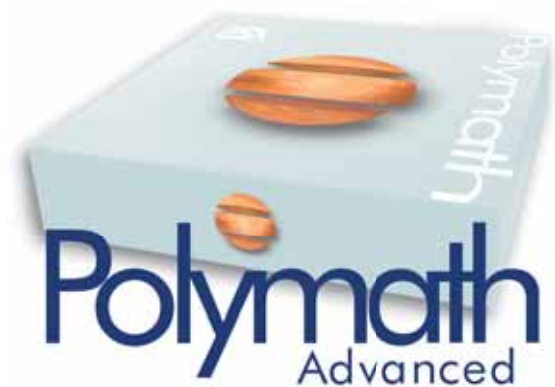
Polymath is compatible with **Windows 2000 SP4, Windows XP, Windows Vista** and **Windows 7**

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 end **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**).
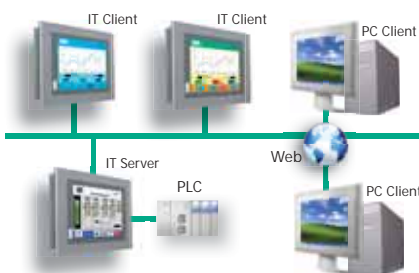
Network projects

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**.

Notifications via e-mail and sms

Polymath allows you to send **event and alarm notifications via SMS and e-mail**. Every single event or specific alarm occurrence can be associated with an **SMS and/or a customised e-mail**. With Polymath you can limit such notifications **by selecting groups of users** according to specific **time slots or days of the week**.

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**.

Unlimited connectivity: Polymath PC Machine Edition allows you to remotely verify the correct operation of a system by means of a simple **internet connection**, thanks to a tried and tested system **compatible with corporate firewalls**.

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	
PCMACHINEBASE	Runtime Polymath License without modules
PCUSBADP0SP2	External module to connect PC in RS232/485
PCUSBADP0CAN	External module to connect PC in CAN/DeviceNet
PCUSBADP0DP	External module to connect PC in Profibus-DP

Remote control

Today, thanks to **PC Remote Access**, having **all your production plants constantly under control** without geographical constraints and in a completely safe environment is possible. With this application, all you need is an **internet connection** to **monitor** every industrial plant **in real-time**, with no limitation and **from anywhere in the world**. Malfunctions and temporary unavailability may cause serious production losses: this solution provided by ESA allows you to **remotely** carryout **maintenance operations** or **fix possible malfunctions**, thus preventing unnecessary trips and wasting time. With PC Remote Access you can **use any PC to connect** to your plant and interact as if you were actually in front of the operator panel. You can also, for example, **monitor several production sites** and view trends, production data, alarms, load and amend recipes, run scripts, view feeds from video cameras connected to the panel and much more. VPN (Virtual Private Network), corporate LANs and Web connections are fully supported, allowing PC Remote Access to be used in any situation, meeting any requirement.

Codes and description	
PCREMOTEACCESS	PC Remote Access License

ESA web site: www.esahmi.com

- Direct contact with all ESA subsidiaries worldwide
- Fast interaction with the ESA world
- Comprehensive and easy-to-consult catalogue
- Guided product search
- News download sections (always up to date)
- Quality Desk and Reserved Area
- On-line shop

Customer service

- High level of expertise
- Many years of experience
- Prompt response to all requirements and questions
- Free of charge assistance
- Test laboratory
- Software and hardware testing

Newsletter

The use of new communication channels, such as the Internet and our website, allow us to always be in close touch with our clients and provide them with timely announcements and up-to-date news.

Refresher Training

- Highly qualified trainers
- Basic courses
- Advanced courses

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