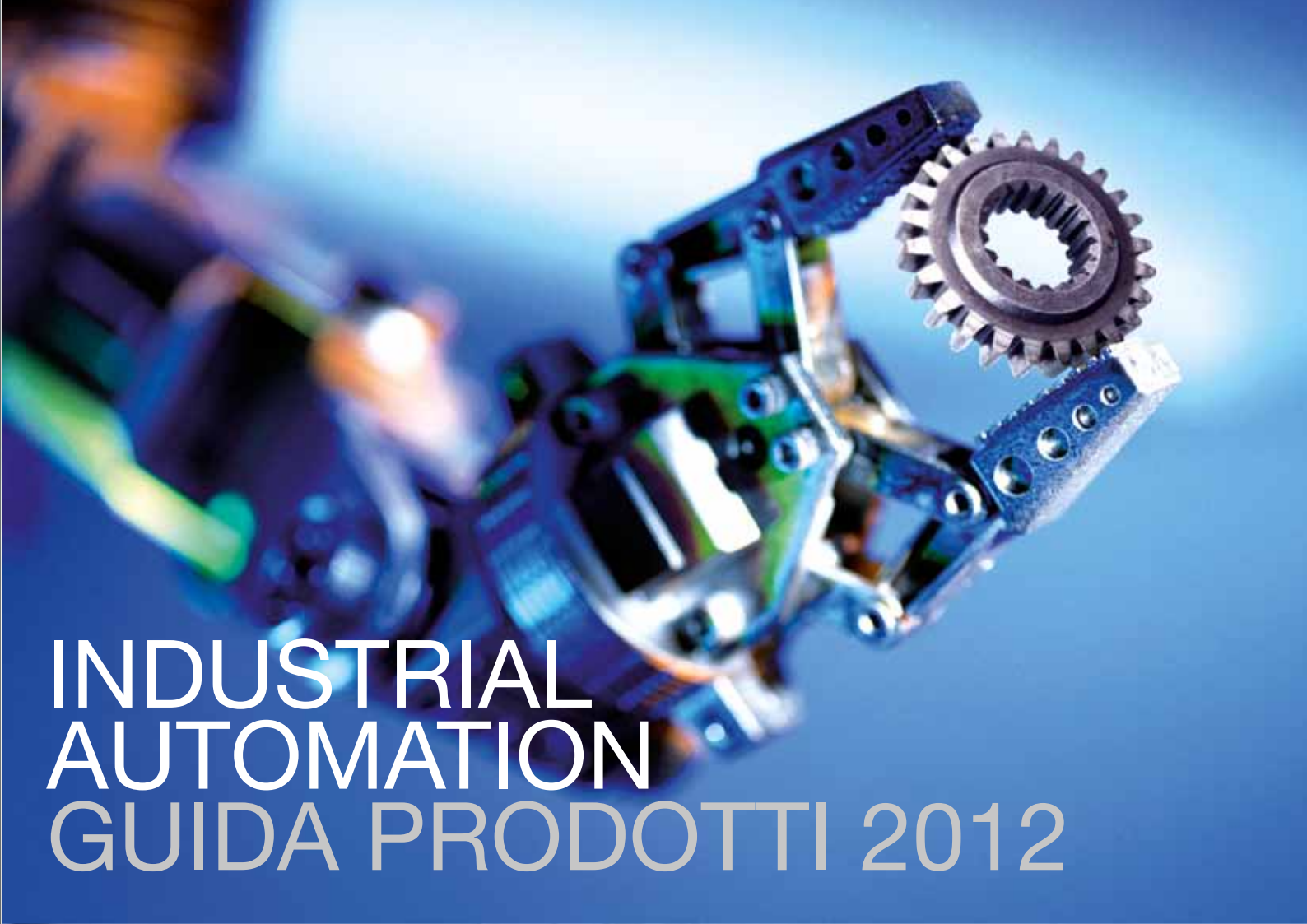




INDUSTRIAL AUTOMATION GUIDA PRODOTTI 2012



REV. 02



DIGITAL AUTOMATION TECHNOLOGIES



Indice

ASEM sviluppa e produce un'ampia gamma di PC embedded e industriali, integrati con software di visualizzazione (HMI) e di controllo (SoftPLC) per fornire al mondo dell'automazione industriale soluzioni complete, flessibili ed affidabili.

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CONTATTI

Company and markets

Asem Digital Automation Technologies

Fondata nel 1979 da Renzo Guerra, l'attuale presidente e amministratore delegato, ASEM S.p.A. è una delle aziende europee protagoniste del processo di convergenza tecnologica e d'integrazione digitale tra il mondo dell'Information Technology e dell'Industrial Automation.



Mercati

Industrial Automation
Home & Building Automation
Point of Sales Automation
IT Automation



Key winners

Esperienza

Dal 1979 ha vissuto tutte le fasi di evoluzione dell'Information Technology, acquisendo un bagaglio di esperienze ineguagliabile nello sviluppo di sistemi per la "Open PC Automation"

Competenze Tecniche

Know-how proprietario su tutte le fasi dello sviluppo e della produzione di sistemi per la supervisione e per il controllo industriale.

Ampio Portafoglio Prodotti

La più ampia e completa gamma di Industrial PC (Panel PC, Box, Rackmount, soluzioni Embedded) integrati con le piattaforme software di HMI, di controllo e di teleassistenza.

Filosofia Customer Oriented

Approccio market driven con grande attenzione alle necessità del cliente dal primo contatto all'assistenza post-vendita.

Affidabilità e continuità

Dal 2000 leader italiano e ai primi posti nel ranking europeo nella progettazione e vendita di Industrial PC.

Innovazione

La continuità nell'eccellenza tecnologica è garantita dall'investimento annuale del 10% del fatturato in attività di Ricerca&Sviluppo, che impegna il 30% delle risorse dell'organico aziendale.



ASEM, azienda leader nella "Open PC Automation", è specializzata nella progettazione, produzione e commercializzazione di soluzioni e sistemi basati sull'architettura open&standard del PC e sulle tecnologie embedded, e opera sui mercati europei dell'automazione industriale e della building automation. Nel contesto competitivo, l'azienda si pone non solo come leader nella realizzazione di piattaforme hardware ma anche come un partner affidabile e professionale in grado di proporre soluzioni complete che integrano software di visualizzazione e di controllo in un'architettura aperta e flessibile.

ASEM in numeri:

- 23,0 milioni di Euro (bilancio 2011)
- 125 dipendenti
- Sede legale e sede produttiva di 5.200 mq ad Arterga (UD)
- Unità produttiva di 3.000 mq ad Arterga (UD)
- Unità tecnico-commerciale a Giussano (MB)
- Unità tecnica a Verona (VR)
- Unità commerciale con sede in Germania



PRODUCT FAMILY SELECTOR

Portfolio

Teleassistenza

L'innovativa piattaforma software per la teleassistenza in ambienti Win CE e Win 32/64, che permette di intervenire e operar e sui sistemi di supervisione e controllo in impianti remoti annullando le distanze e limitando le trasferte.

Ubiquity

Ubiquity Router



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Panel PC

OT600

HT700

Fanless

Sistemi panel PC a basso consumo, senza ventilazione forzata, con processori ATOM, Celeron ULV, Core 2 Duo ULV, touchscreen, display LCD da 6.5" a 19" con

frontali in plastica, alluminio o acciaio INOX. Possibilità di integrare le schede fieldbus NETCore X per realizzare applicazioni di visualizzazione e controllo.



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Panel PC

Performance

Sistemi panel PC che garantiscono potenza di calcolo e capacità grafiche elevate grazie ai processori Pentium M e Core 2 Duo. Disponibili con touchscreen, display LCD

da 8,4" a 19" con frontali in plastica, alluminio o acciaio INOX. Possibilità di integrare le schede fieldbus NETCore X per realizzare applicazioni di visualizzazione e controllo.

Box PC

SMARTBOX

Fanless

Sistemi box PC basati su processori ATOM, Celeron ULV e Core 2 Duo ULV per installazione a parete o a

guida DIN, progettati per rispondere alle specifiche esigenze del mercato dell'automazione industriale.



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Vesa PC

VPK300

VPC15

I PC VESA sono sistemi compatti, fanless, ergonomici, dal design elegante e si distinguono per la flessibilità d'installazione. Basati su processori ATOM ultra low voltage, sono disponibili con contenitore plastico o in acciaio verniciato con frontale in alluminio.



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Rack PC

Soluzioni 4U a rack 19" con un'ampia scelta in termini configurazioni, processori, motherboard e slot di espansione. I processori Intel Core 2 Quad garantiscono un'elevata potenze di calcolo ed elevate performance per applicazioni di data storage.



HMI Solutions

I componenti hardware e software per soddisfare tutte le esigenze di visualizzazione

Software HMI

PREMIUM HMI 3

PREMIUM HMI 4

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HMI ARM



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HMI x86



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OT1100



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OT1200



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WS500



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WS500-TE



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WS550



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OT1300



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WS600



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WS600-TE



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WS650



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WS650-TE



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B-ONE



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PB300



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PB1200



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PB500



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PB550



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PR4040



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PR4044



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MERCURY901



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Monitor

Monitor industriali con LCD da 8,4" a 19", anche touchscreen, per installazioni a pannello, VESA o per montaggio a rack. Disponibili con frontale in alluminio o acciaio INOX e con remotazione integrata dei segnali video e USB.

Control Logic

SoftPLC

Logic 300

Fieldbus

I componenti hardware e software per soddisfare tutte le esigenze di comunicazione e controllo d'impianto e di macchina



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WS550-TE

FT500

FT500-TE

FT550

FT550-TE



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FT600

FT600-TE

FT650

FT650-TE



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Box PC

PB1300

PB600

PB650

Performance

Sistemi box PC basati su processori Pentium M e Core 2 Duo per installazione a parete o a guida DIN, che garantiscono potenza di calcolo e capacità grafiche elevate.



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MHXX

MTXX

MV15

MAXX

MPXX



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[new]

ASEM STANDARD

ASEM CUT-OUT

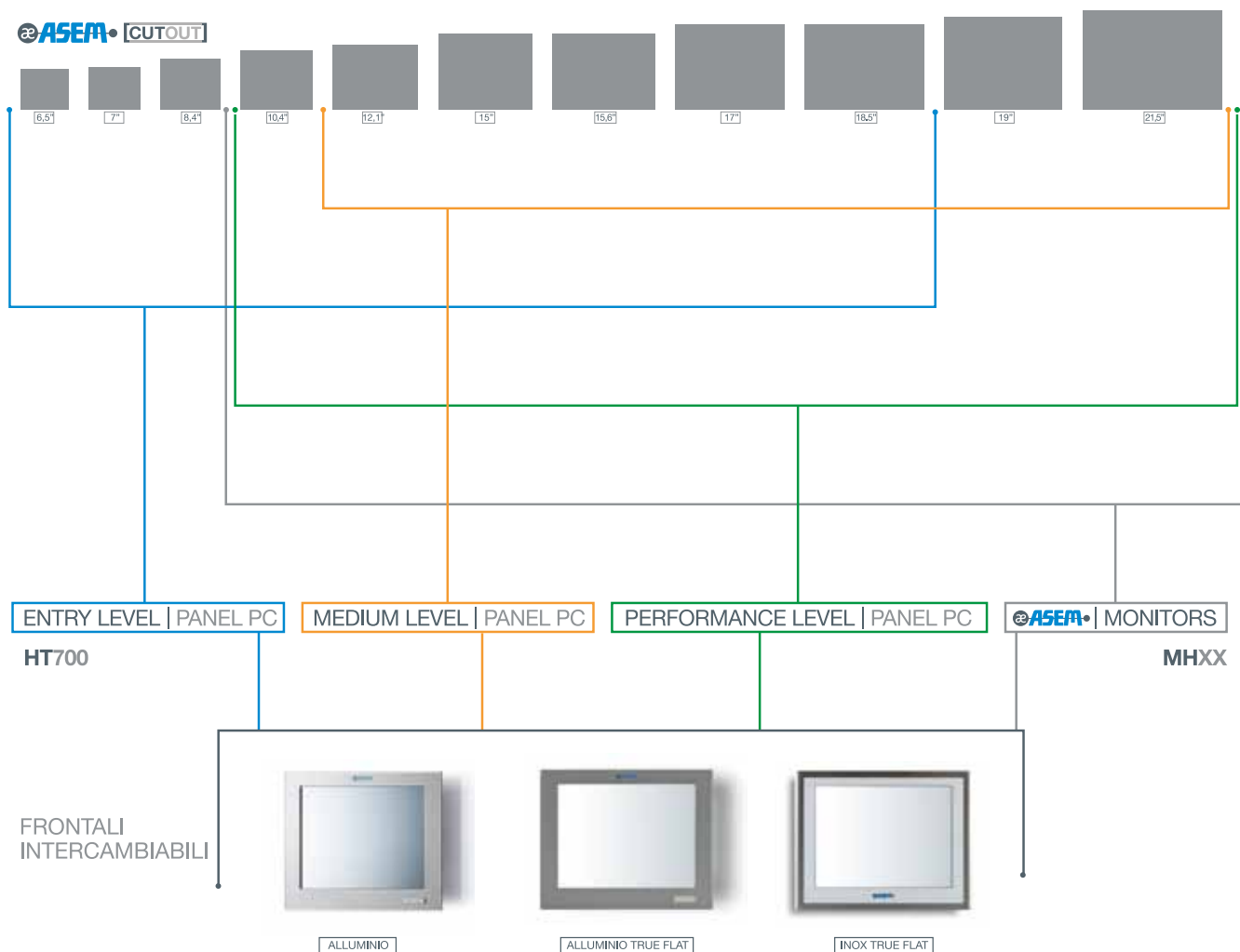


ASEM CUT-OUT è la nuova filosofia adottata nella progettazione dei panel PC e dei monitor.

Un'unica dima di foratura per taglio di display, permette di gestire l'interscambiabilità tra i sistemi senza più preoccuparsi della compatibilità meccanica.

Nuovi standard ASEM

- Unico cut-out
- 3 diversi pannelli frontali
- UPS integrato
- alimentatori isolati
- LCD a Led 4:3 e wide

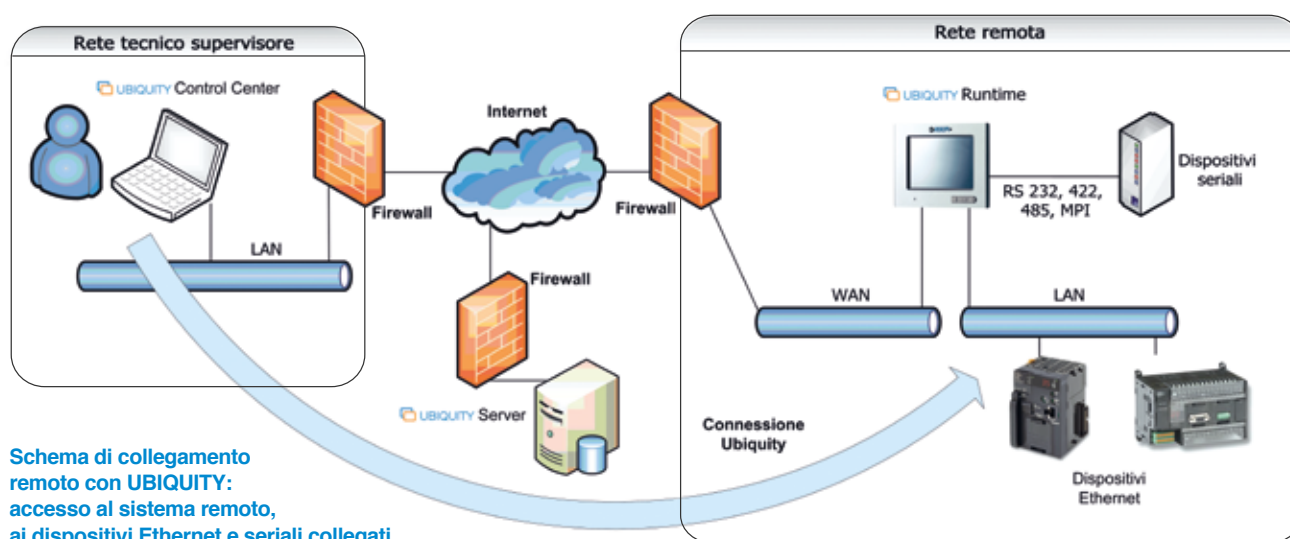




Tecnologia software per l'accesso remoto

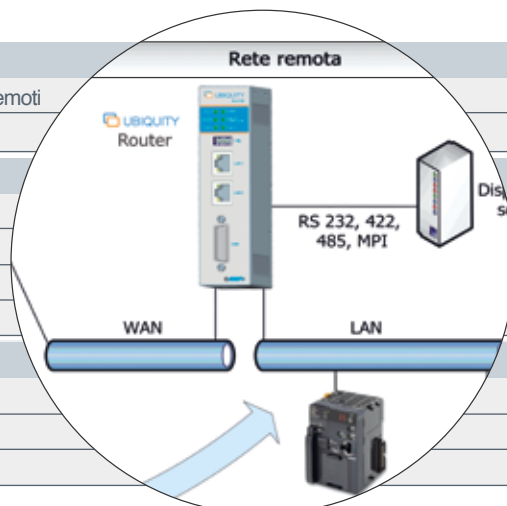
L'innovativa piattaforma software per la teleassistenza in ambienti Win CE e Win 32/64, che permette di intervenire e operare sui sistemi di supervisione e controllo in impianti remoti annullando le distanze e limitando le trasferte.

Possibili attività da remoto	Caratteristiche distintive
Teleassistenza	Semplicità di utilizzo
Messa in funzione	Non richiede HW aggiuntivo
Modifiche e aggiornamenti delle applicazioni	Disponibile per ambienti Win CE e Win 32/64
Debug PLC e dispositivi di automazione	Crittografia a protocollo SSL/TLS e certificati
Desktop remoto, remote process viewer, file management, chat,..	Utilizza il collegamento internet esistente
Manutenzione preventiva e predittiva	



UBIQUITY Router

Dove si utilizza
Nelle applicazioni in cui non si vuole o non si può installare UBIQUITY sui dispositivi remoti
Nelle applicazioni dove non è presente connessione internet
Versione BASE - Caratteristiche tecniche
1 porta Ethernet per UBIQUITY
1 porta Ethernet per Automazione
1 porta seriale multistandard
1 porta USB
Versione ESPANSA - Caratteristiche aggiuntive
4 porte switch Ethernet
Modem rete mobile 3G (HSDPA/HSUPA, UMTS, GPRS)
WiFi



Componenti software UBIQUITY

Control Center

Software eseguibile su qualsiasi sistema remoto Windows per accedere e gestire dispositivi

VPN livello 2 e livello 3 verso il sistema remoto e i dispositivi Ethernet collegati

Connessione seriale remota

Desktop remoto

Tool di scambio file remoti

Task manager remoto. Esecuzione e terminazione processi

Monitoraggio hardware e risorse del sistema operativo

Chat

Screenshot

Visualizzazione statistiche degli accessi

Gestione database utenti, dispositivi remoti, profili di accesso

Supporta Windows XP, Vista, 7 (32 bit e 64 bit)

Richiede .Net Framework 3.5

Runtime

Servizio software eseguibile sui sistemi remoti per renderli accessibili attraverso internet

Supporta sistemi remoti con 1 Ethernet (WAN) o 2 Ethernet (WAN + LAN), VPN livello 2 (data-link) e livello 3 (network, IP)

Attivabile in modo automatico, manuale o direttamente da qualsiasi applicativo

Permette di visualizzare lo stato del collegamento e il log degli accessi e delle operazioni remote eseguite

Ridotta occupazione di memoria e di CPU

Permette di evitare l'installazione di VNC, FTP server, condivisione cartelle, ambienti di sviluppo PLC, ecc.

Supporta le piattaforme Windows CE 5.0, 6.0, 7.0 (ARM, X86), Windows XP, XP Embedded, Vista, 7 (32 bit e 64 bit)

Richiede .Net Compact Framework 3.5, CPU 500 MHz o superiore RAM 256 MB per S.O. Win CE 6.0 (o superiore).

Richiede .Net Framework 2.0 SP1, CPU 500 MHz o superiore, RAM 512 MB per S.O. Win 32/64

Infrastruttura di rete

Server replicati e ridondati

Permette il collegamento sicuro tra supervisore e sistema remoto senza alcuna configurazione di firewall e NAT

Permette di gestire un numero illimitato di dispositivi e utenti, organizzabili in differenti profili e gruppi di accesso

Utilizza connessione con crittografia a protocollo SSL/TLS e certificati

Permette l'ottimizzazione delle prestazioni creando la connessione diretta tra supervisore e sistema remoto (esclusione del server)

CARATTERISTICHE del software ASEM UBIQUITY

Versione 1.2	WinCE		Win32/64	
	BASIC	PRO Eth	BASIC	PRO
Desktop remoto, file&task management, chat, screenshot	•	•	•	•
VPN fino al PC remoto	•	•	•	•
VPN con accesso alla sottorete Ethernet del PC remoto	NO	•	NO	•
Seriale remota (no MPI)	NO	NO	NO	•
API per interfaccia con applicativi software proprietari	•	•	•	•
Log persistente operazioni sul runtime	•	•	•	•
Connessioni multiple da differenti Control Center	•	•	•	•
Creazione del dominio, organizzazione degli utenti e PC remoti in modo strutturato	•	•	•	•
Creazione connessione in modo automatico	•	•	•	•

OPEN AUTOMATION SYSTEMS

PREMIUM HMI 4



PREMIUM HMI 4

Win32/64 PC/X86



WinCE PC/X86 & ARM

Sistema operativo

Architettura HW

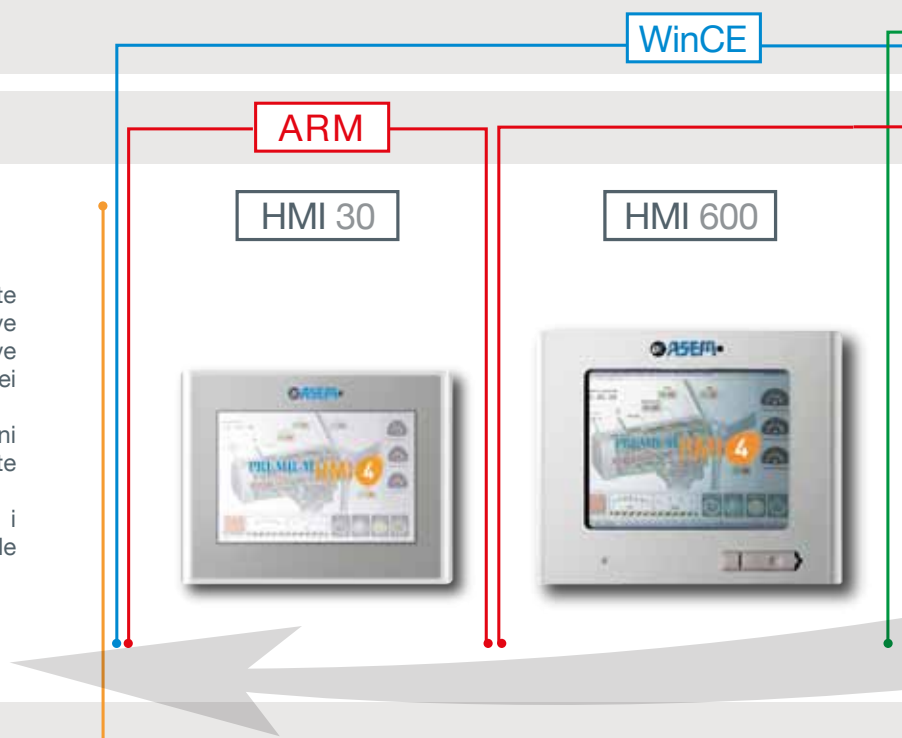
HMI

La nuova versione di PHMI, grazie ad un potente motore di rendering grafico, supporta le nuove tecnologie Microsoft® XAML e consente nuove sofisticate tecniche di visualizzazione tipiche dei dispositivi "mobile" di ultima generazione.

Tutti i progetti sviluppati con le precedenti versioni sono totalmente compatibili e automaticamente convertibili alla nuova versione.

PHMI 4 garantisce la massima trasversalità tra i sistemi operativi Win CE e Win 32/64 e le piattaforme hardware PC/X86 e ARM.

Software



PREMIUM HMI 4 RUNTIMES

Highlights

- WEB server integrato
- datalogger su DB XML ed SQL Server
- progetti compatibili CFR21 Parte 11
- grafica vettoriale di alto livello
- trend storici e dinamici
- ampia gamma di driver di comunicazione per i più importanti PLC, inverter e termoregolatori

[new] Nuove caratteristiche

- Oggetti grafici XAML
- Potente motore di rendering grafico
- Risoluzione oggetti grafici a 32 milioni di colori
- Effetti di trasparenza
- Sofisticata gestione delle sfumature
- "Gesture" di puntamento grafico

PHMI 4 WinCE runtime

	Basic	Advanced
RAM minima di sistema	512MB	512MB
I/O Bytes (Tags)	1024	4.096
Allarmi	512	2.048
Data Loggers	Max 2	●
Multi-Drivers	Max 2	Max 4
SMS/E-mails		●
Web Server		2 User

PHMI 4 Win32/64 runtime

	Basic	Pro	Advanced
RAM minima di sistema	1GB	1GB	1GB
I/O Bytes (Tags)	2.048	2.048	4.096
Allarmi	2.048	2.048	2.048
Data Loggers	Solo 2 e non su Database	●	●
Multi-Drivers	Max 2	Max 2	Max 4
SMS/E-mails			●
Web Server			Max 2 client connessi
VBA Multithreading		●	●
ActiveX- OCX		●	●
CFR21 part 11		●	●
Power Templates		●	●
Networking RAS		●	●

Win32/64

X86

HMI 700

HMI 1100

HMI 1200



PREMIUM HMI 3

PREMIUM HMI 4

OPEN AUTOMATION SYSTEMS

PREMIUM HMI 4 DRIVERS

DRIVERS DI COMUNICAZIONE SU PIATTAFORMA PREMIUM HMI 4

Protocolli/dispositivi	Drivers			Drivers	
	Seriale	Ethernet	Add-on	WinCE	Win32/64
Codesys, ELAU, KEB, PARKER,...		●		●	●
Rockwell DF1 and Data Highway	●			●	●
Rockwell Ethernet IP		●		●	●
Applicon cards			Applicon Cards		●
B&R PVI with protocol INA2000	●	●		●	●
BACNET IP		●			●
Beckhoff Twincat (ADS protocol)		●		●	●
CANOpen Master			NETcoreX CANOpen Master	●	●
CANOpen Slave solo PDO			NETcoreX CANOpen Slave	●	●
EIBUS	●	●			●
ELAP	●			●	●
GE FANUC SNP-X	●			●	●
Hilscher DPM in PROFIBUS, CANOPEN, DEVICENET			CIF cards	●	●
Hilscher MPI			CIF card	●	●
Hilscher NETLINK		●		●	●
Hilscher NETX MPI			NETCoreX MPI	●	●
Hilscher NETX PROFIBUS Slave			NETCoreX PROFIBUS SLAVE	●	●
Hitachi PLC serie H	●				●
IBH Softech		●		●	●
LENZE LECOM AB	●			●	●
LonWorks	●	●			●
Mitsubishi MELSEC A		●			●
Mitsubishi MELSEC FX	●			●	●
Mitsubishi MELSEC Q	●	●		●	●
Mistubishi FX3U TCP		●			●
Modbus Master / Slave	●			●	●
Modbus TCP IP		●		●	●
Moeller SUCOM	●			●	●
OMRON FINS	●	●		●	●
OMRON Host Link	●			●	●
PANASONIC FP MEWTOCOL	●	●		●	●
ROBOX		●		●	●
SIEMENS S7 TCP	●			●	●
SAIA via SCOMM DLL	●	●			●
SAIA S-BUS	●	●		●	●
SCHNEIDER UNITELWAY SLAVE	●			●	●
SIEMENS MPI PC ADAPTER	●			●	●
SIEMENS S5 CPU	●			●	●
SIEMENS S5 DK3864R	●			●	●
SIEMENS S7 200 PPI				●	●
SIEMENS SAPI S7			SIEMENS CP5611, 5613, 5614, 5412 e SIEMATIC NET		●

PANNELLI OPERATORE

HMI30

La famiglia HMI30 con processore ARM Cortex A8 permette l'utilizzo della piattaforma software Premium HMI 4. I sistemi "HMI Solutions" si distinguono per la loro facilità d'uso, la velocità di apprendimento e per la trasversalità della piattaforma software: un unico ambiente di sviluppo per sistemi operativi Win CE e Win 32 che permette di realizzare progetti di HMI evoluti compatibili con tutti i sistemi delle diverse famiglie HMI Solutions di ASEM, indipendentemente dall'architettura hardware X86 o RISC.



Frontale in alluminio True Flat



Frontale in alluminio

ARM-A8	512MB	5,7" 7"W 8,4" 10,4" 12,1" 15"
Alu	Alu TF	Res 4 Res 5
24VDC	WEC7	

FEATURES PLUS

- ✓ CPU ARM CORTEX A8
- ✓ SISTEMA OPERATIVO WINDOWS EMBEDDED COMPACT 7 PRO INSTALLATO SU FLASH
- ✓ FLASH DISK DATI SEPARATA
- ✓ PREMIUM HMI 4 HIGHLIGHTS:
 - WEB SERVER INTEGRATO
 - DATALOGGER SU DB XML ED SQL SERVER
 - PROGETTI COMPATIBILI CFR21 PARTE 11
 - SEMPLICE CONNETTIVITÀ E SCAMBIO DATI CON DISPOSITIVI CONNESSI SU RETE ETHERNET
 - GRAFICA VETTORIALE DI ALTO LIVELLO
 - TREND STORICI E DINAMICI
 - AMPIA GAMMA DI DRIVER DI COMUNICAZIONE PER I PIÙ IMPORTANTI PLC, INVERTER E TERMOREGOLATORI
- ✓ SOFTWARE ASEM UBIQUITY INTEGRATO PER GESTIONE E DEBUG REMOTO DEL PROGETTO DI HMI E DEI PLC COLLEGATI

HMI SOLUTIONS

System software characteristics			
Integrated system software	Operating System	Windows Embedded Compact 7 PRO (C7P)	
	HMI	Premium HMI 4 runtimes (BASIC, ADVANCED versions)	
	Remote control	ASEM Ubiquity runtime (PRO-Eth version)	
Premium HMI 4		BASIC	ADVANCED
	I/O Bytes (Tags)	1.024	4.096
	Synoptics	•	•
	Graphic libraries	•	•
	Power Templates	•	•
	Alarms	512	2.048
	Accelerators and menus	•	•
	Touchscreen	•	•
	History Log events	•	•
	Dynamic language change	•	•
	IL Logic (SoftLogic)	•	•
	VBA Multithreading	•	•
	ActiveX- OCX	•	•
	CFR21 part 11	•	•
	Debugger OnLine/Remote	•	•
	IP Camera	•	•
	Dynamic trends	•	•
	History trends, Data Analysys	•	•
	Recipes	•	•
	OPC DA Client	•	•
	Networking	•	•
	Data Loggers	Max 2	•
	Text Reports	•	•
	Multi-Drivers	Max 2	Max 4
	SMS/E-mails	No	•
	Web Server	No	2 User

System Hardware characteristics							
Display	LCD Size Resolution Colors Backlight	5,7" 640 x 480 (VGA) 256K Sidelight LED	7" W 800 x 480 (WVGA) 256K Sidelight LED	8,4" 800 x 600 (SVGA) 16M Sidelight LED	10.4" 800 x 600 (SVGA) 16M Sidelight LED	12.1" 800 x 600 (SVGA) 16M Sidelight LED	15" 1024 x 768 (XGA) 16M Sidelight LED
Touchscreen	Technology	4 wires – analog - resistive					
Motherboard	Model RTC Watch-dog Buzzer	All-in-one, ASEM R131 Hardware with battery Time programmable Yes					
CPU	Processor Memory bus	ARM Cortex A8 – 1 GHz 400MHz					
Graphic	Controller	GPU with integrated LCD controller					
System memory	Type / Size / Socket	512 MB, 1 GB / DDR3-800 / Soldered					
Serial interfaces	Type Optoisolation	1 x RS232/422/485 (DB15M) software selectable No					
Ethernet interfaces	Type	2 x 10/100Mbps (RJ45) with Link/Activity led					
USB interfaces	Type	2 x USB 2.0 (rear, TYPE-A, host port, single channel software switch off)					
Mass storage	Internal / not removable	NAND-FLASH: - 256 MB (Read Only) for O.S. eMMC 2 GB - 8 bit v. 4.4 compatible (File System organization)					
	External Access / Removable	SD/SDHC card slot V. 2.0 (push-push type)					
Battery	Type	Coin (CR2032 3V) removable					
	Lifetime	3 years					
Buttons, leds and keys	Reset buttons LEDs	System Power / Removable Storage activity					

Electrical characteristics		
Power supply	Type	Integrated on board, auto ranging
	Input voltage	18÷36 VDC with 3 poles connector
	Protections	Anti-inversion polarity, over-voltage, fuse
	Power consumption	7.5W@8,4" 512MB RAM typ.
	µUPS (optional)	300-500ms, with interrupt data safe

Mechanical characteristics					
Case	Type Material	Panel mount Steel, zinc galvanization			
Front panel	Protection Construction Color	IP65 Full Aluminium alloy -	IP65 Aluminium alloy True Flat frame with polyester foil PANTONE Cool Grey 4C		
Measurements mm		Aluminium (W x H x D)	True Flat Alu (W x H x D)	Cutout (W x H)	Weight (Kg)
	5,7"	175 x 145 x 40	175 x 145 x 40	164 x 134	TBD
	7"W	215 x 155 x 40	215 x 155 x 40	204 x 144	
	8,4"	255 x 190 x 48,5	255 x 190 x 48,5	243 x 179	
	10,4"	245 x 230 x 48,5	245 x 230 x 48,5	283 x 219	
	12,1"	325 x 260 x 48,5	325 x 260 x 48,5	313 x 249	
	15"	390 x 305 x 48,5	390 x 305 x 48,5	378 x 294	

Enviromental characteristics		
Temperature	Operation	0° ÷ +50°C
	Storage	-20° ÷ +60°C
Humidity	Operation/Storage	80% (non-condensing)

Warranty & Approvals		
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics
	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety

HMI SOLUTIONS Win CE

HMI600

HMI600 è un sistema integrato di visualizzazione con architettura PC based, piattaforma software Premium HMI 4 e sistema operativo Microsoft Windows CE® 6.0. Disponibile con i runtime BASIC e ADVANCED, soddisfa qualsiasi esigenza di visualizzazione con caratteristiche funzionali di uno SCADA con qualità grafiche di alto livello.



FANLESS



DISKLESS

6,5" 8,4" 12,1"

Alu

Res 4 Res 5

LX800

512MB

MiniPCI

12VDC 24VDC

CE6

FEATURES PLUS

- ✓ BASATO SULL'HARDWARE DEL SISTEMA OT600
- ✓ DISPONIBILE CON RUNTIME PREMIUM HMI 4 BASIC E ADVANCED
- ✓ SISTEMA OPERATIVO WINDOWS CE 6.0
- ✓ PREMIUM HMI 4 HIGHLIGHTS:
 - WEB SERVER INTEGRATO
 - DATALOGGER SU DB XML ED SQL SERVER
 - PROGETTI COMPATIBILI CFR21 PARTE 11
 - SEMPLICE CONNETTIVITÀ E SCAMBIO DATI CON DISPOSITIVI CONNESSI SU RETE ETHERNET
 - GRAFICA VETTORIALE DI ALTO LIVELLO
 - TREND STORICI E DINAMICI
 - AMPIA GAMMA DI DRIVER DI COMUNICAZIONE PER I PIÙ IMPORTANTI PLC, INVERTER E TERMOREGOLATORI
- ✓ SOFTWARE ASEM UBIQUITY INTEGRATO PER GESTIONE E DEBUG REMOTO DEL PROGETTO DI HMI E DEI PLC COLLEGATI

Per dettagli hardware
Vedere pag.28

Per dettagli software
Vedere pag.12

OPEN AUTOMATION SYSTEMS

HMI SOLUTIONS Win CE - Win 32/64

HMI700 [new]

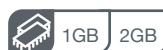
HMI700 è un sistema integrato di visualizzazione con architettura PC based, piattaforma software Premium HMI 4 e sistema operativo Microsoft Windows Embedded Compact 7 o Windows Embedded Standard 7. Disponibile con i runtime BASIC, PRO ADVANCED, soddisfa qualsiasi esigenza di visualizzazione con caratteristiche funzionali di uno SCADA con qualità grafiche di alto livello.



FANLESS



DISKLESS



FEATURES PLUS

- ✓ BASATO SULL'HARDWARE DEL SISTEMA HT700
- ✓ DISPONIBILE CON RUNTIME PREMIUM HMI 4 BASIC, PRO E ADVANCED
- ✓ SISTEMA OPERATIVO WINDOWS EMBEDDED COMPACT 7
O WINDOWS EMBEDDED STANDARD 7
- ✓ PREMIUM HMI 4 HIGHLIGHTS:
 - WEB SERVER INTEGRATO
 - DATALOGGER SU DB XML ED SQL SERVER
 - PROGETTI COMPATIBILI CFR21 PARTE 11
 - SEMPLICE CONNETTIVITÀ E SCAMBIO DATI CON DISPOSITIVI CONNESSI SU RETE ETHERNET
 - GRAFICA VETTORIALE DI ALTO LIVELLO
 - TREND STORICI E DINAMICI
 - AMPIA GAMMA DI DRIVER DI COMUNICAZIONE PER I PIÙ IMPORTANTI PLC, INVERTER E TERMOREGOLATORI

Per dettagli hardware
Vedere pag.30

Per dettagli software
Vedere pag.12

HMI SOLUTIONS Win 32/64

HMI1100

HMI1100 è l'integrazione tra la piattaforma hardware basata sui processori Intel® ATOM™ Z5XXP e la versatilità della piattaforma Premium HMI 4 con sistema operativo Windows Embedded Standard. HMI1100 offre un'ampia gamma di funzionalità software grazie alla disponibilità di tre differenti versioni di runtime: BASIC, PRO e ADVANCED.



Per dettagli hardware
Vedere pag.32

Per dettagli software
Vedere pag.12

HMI1200

HMI1200 è l'integrazione tra la piattaforma hardware basata sui processori Intel® Celeron M e la versatilità della piattaforma Premium HMI 4 con sistema operativo Windows Embedded Standard.

HMI1200 offre un'ampia gamma di funzionalità software grazie alla disponibilità di tre differenti versioni di runtime: BASIC, PRO e ADVANCED.



Per dettagli hardware
Vedere pag.34

Per dettagli software
Vedere pag.12

FEATURES PLUS

- ✓ BASATI SULL'HARDWARE DEI SISTEMI OT1100 E OT1200
- ✓ DISPONIBILE NELLE VERSIONI BASIC, PRO E ADVANCED
- ✓ SISTEMA OPERATIVO WINDOWS EMBEDDED STANDARD
- ✓ PREMIUM HMI 4 HIGHLIGHTS:
 - WEB SERVER INTEGRATO
 - DATALOGGER SU DB XML ED SQL SERVER
 - PROGETTI COMPATIBILI CFR21 PARTE 11
 - SEMPLICE CONNETTIVITÀ E SCAMBIO DATI CON DISPOSITIVI CONNESSI SU RETE ETHERNET
 - GRAFICA VETTORIALE DI ALTO LIVELLO
 - TREND STORICI E DINAMICI
 - AMPIA GAMMA DI DRIVER DI COMUNICAZIONE PER I PIÙ IMPORTANTI PLC, INVERTER E TERMOREGOLATORI

OPEN AUTOMATION SYSTEMS

SoftPLC: CoDeSys

CoDeSys è la soluzione softPLC per gli Industrial PC di ASEM che permette il controllo real-time del sistema d'automazione con massima precisione ed affidabilità. CoDeSys coniuga le peculiarità di un PLC hardware con l'apertura e flessibilità di un sistema PC.



Caratteristiche

- ✓ Linguaggi di sviluppo IEC 61131-3:
 - Structured Text (ST),
 - Sequential Function Chart (SFC),
 - Continuous Function Chart (CFC),
 - Function Block Diagram (FBD),
 - Diagramma Ladder (LD) ed Instruction List (IL).
- ✓ Più di una rete di comunicazione contemporaneamente
- ✓ Debug facilitato grazie all'utilizzo di breakpoints, anche condizionati, e di modifiche in tempo reale al codice durante il funzionamento del PLC
- ✓ L'"oscilloscopio digitale" permette di registrare variabili o eventi.
- ✓ Facile comunicazione con altri software (tipo HMI) tramite l'OPC server o la libreria "PLCHandler".
- ✓ Librerie Motion disponibili.

Cross-Reference

Fieldbus	Win 32	Win CE	HW Necessario	OT600 / Smartbox	HT700	OT1100	VPC 15	OT1200 / PB1200	OT1300 / PB1300	500 Family	600 Family	550 Family	650 Family	VPK300	B-ONE / PB300
PROFIBUS Master	•	•	NetX	•		•	•	•	•	H3	H3/4	•	•		•
PROFIBUS Slave	•		NetX	•		•	•	•	•	H3	H3/4	•	•		•
CANopen Master	•	•	CAN RAW	•		•	•	•	•	H3	H3/4	H3	H3/4		•
CANopen Slave	•		CAN RAW	•		•	•	•	•	H3	H3/4	H3	H3/4		•
DeviceNet Scanner	•		CAN RAW	•		•	•	•	•	H3	H3/4	H3	H3/4		•
Ethercat Master	•	•	LAN	LAN2		•	•	•	•	•	•	•	•	•	•
PROFINET IO Controller	•	(*)	NetX	•		•	•	•	•	H3	H3/4	•	•		•
PROFINET IO Device	•		NetX	•		•	•	•	•	H3	H3/4	•	•		•
MODBUS TCP/IP Master	•	(*)	LAN	•		•	•	•	•	•	•	•	•	•	•
MODBUS TCP/IP Slave	•	•	LAN	•		•	•	•	•	•	•	•	•	•	•
MODBUS RTU Master	•	(*)	COM	•		•	•	•	•	•	•	•	•	•	•
ETHERNET IP Scanner	(*)	(*)	NetX	•		•	•	•	•	H3	H3/4	•	•		•
ETHERNET IP Device	•		LAN	•		•	•	•	•	•	•	•	•	•	•
NVRAM 512KB	•	•	NV	•		•	•			•*	•*	•*	•*		•

Legenda:
NetX: scheda NETcore X
CAN RAW: ASEM CAN RAW
H3: solo per sistemi H3

H3/4: solo per sistemi H3 o H4
NV: scheda NVRAM
LAN: Ethernet standard
LAN2: MiniPCI Ethernet

COM: Porta seriale standard
(*) disponibile su richiesta
•* disponibile solo con scheda CAN-RAW + NVRAM PCI

Requisiti minimi di sistema

Runtime	RAM	SSD/CF/HD
Win 32	2GB	≥ 4 GB
Win Embedded Standard	1GB	≥ 2 GB
Win CE	512MB	≥ 512 MB

CONTROL LOGIC

LOGIC 300

Logic300 è la soluzione compatta basata su architettura Intel® con microprocessore Atom™ Z5X0P dedicata a soluzioni di controllo SoftPLC. Il sistema operativo Windows CE 6.0 e l'estensione RealTime di Windows Embedded Standard, garantiscono il determinismo nell'esecuzione della logica di controllo del SoftPLC CoDeSys. Possibilità di scelta tra diversi fieldbus industriali per l'interfacciamento con dispositivi di I/O.



UBIQUITY

CoDeSys



FEATURES PLUS

- ✓ MICROPROCESSORI INTEL® ATOM AZ5X0P FINO A 1.6GHz
- ✓ SISTEMA OPERATIVO E SOFTPLC CODESYS INCLUSI
- ✓ SISTEMA OPERATIVO WIN CE/WIN 32
- ✓ CONTROLLO PLC: RUN/STOP/RESET, RELAY DI WD
- ✓ INTEGRAZIONE CON PREMIUM HMI 3 (OPZ.)
- ✓ SOFTPLC CODESYS HIGHLIGHTS:
 - DETERMINISMO CON S.O. REAL TIME
 - PROGRAMMAZIONE CON LINGUAGGI IEC 61131-3
 - SUPPORTO DI PIÙ FIELDBUS CONTEMPORANEAMENTE
 - INTERFACCIA VERSO ALTRI SOFTWARE TRAMITE OPC SERVER O PLC HANDLER
- ✓ SOFTWARE ASEM UBIQUITY INTEGRATO PER GESTIONE E DEBUG REMOTO

OPEN AUTOMATION SYSTEMS

LOGIC 300

System characteristics			
System Software Integrated	Operating System	Microsoft Windows CE 6.0, Microsoft Windows Embedded Standard	
	SoftPLC	CoDeSys V. 3.X	
Fieldbuses	Visualization	Premium HMI 3 (optional)	
	Remote control	ASEM Ubiquity Basic	
		Windows Compact 7	Windows Embedded Standard
	PROFIBUS Master	•	•
	CAN Open	•	•
	Ethercat Master	•	•
	PROFINET IO Controller	On demand	•
	MODBUS TCP/IP Master	On demand	•
	MODBUS TCP/IP Slave	•	•
	MODBUS RTU	-	•
ETHERNET IP	On demand	•	
DUAL CAN RAW	•	•	
Motherboard	Model	All-in-one, ASEM MB972	
	HW monitor	Voltages and temperature monitor	
CPU	Watch-dog	Time programmable	
	Processor	Intel® ATOM Z510P 1.1GHz	Intel® ATOM Z530P 1.6GHz
	FSB	400MHz	533MHz
	Cache	512KB L2	512KB L2
Graphic	Chipset	Intel® US15WP	Intel® US15WP
	Controller	GMA500 integrated in Intel® US15WP	
Video interfaces	Memory	Shared – 1MB, 4MB, 8MB system selectable	
System memory	Type	1 x VGA (DB15F - max resolution 1280x1024 SXGA)	
PLC functions	Type	DDR2 PC5300	
	Size	512 MB, 1 GB, 2 GB	
	Socket	1 x SODIMM module	
	NVRAM	512KB (optional)	
I/O (optional)	Switch	Run / stop /reset	
	Led	Power on / storage activity / user / system fail / bus fail / run / stop / over temperature / hardware wd	
	WD relay	3 poles contact N.C.	
	Non volatile variables	NVRAM 512KB (option)	
Serial interfaces	Digital Input/Output	8 x DIN + 8 x DOUT, optoisolated (alternative to fieldbus)	
Optional	Type	1 x RS232 (DB9M)	
	UART	16550 compatible (FIFO 16 byte)	
	Transfer rate	115Kbps max	
	Optoisolation	No	
Ethernet interfaces	Type	1 x RS-232/422/485 (DB15M)	
	UART	16550 compatible (FIFO 16 byte)	
	Transfer rate	115Kbps max	
	Optoisolation	Yes / No	
USB interfaces	Type	2 x 10/100/1000Mbps (RJ45)	
	Controller	Intel 82574L	
Compact Flash slots	Wake-on-Lan	Yes	
	Type	2 x USB 2.0 (TYPE-A, host port), optional with multistandard serial port 2 x USB 2.0 (TYPE-A, host port)	
Battery	Transfer rate	Up to 480Mbps (high speed)	
	Type	1 x Type I (external access)	
Buttons, leds and keys	Type	Coin (CR2032 3V)	
	Removable	Yes	
	Lifetime	2 years	
Electrical characteristics	Reset buttons	System reset / Watch-dog	
	LEDs	Power, HDD, Watchdog, System error	
Mechanical characteristics	Type	AT, integrated on board, auto ranging	
	Input voltage	18÷32 VDC	
	Power consumption	6.7W @ Logic300 ATOM Z 530P 1.6GHz 1GB RAM 1GB CF, no add-on, no USB	
Enviromental characteristics	Type	Book-like mount	
	Material	Aluminum	
Warranty & Approvals	Measurements	Dimensions (W x H x D)	Weight (Kg)
	mm	220 x 150 x 50	1,9
Temperature	Operation	0° ÷ +50°C	
	Storage	-20° ÷ +60°C	
	Humidity	80% (non-condensing)	
CE	Operation/Storage		
	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics	
	Immunity	Conforms to EN 61000-3-2 – Limits for harmonic current emissions	
	Safety	Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker	
Warranty		Conforms to EN 55024 Information technology equipment – Immunity characteristics	
	Management	Conforms to EN 60950-1 – Information technology equipment – Safety	
	Standard	By ASEM headquarters	
Extended	12 months		
	18 / 24 / 36 months (optional)		

Fieldbus: NETcore X

Le schede di comunicazione NETcore X sono la connessione tra il PC e i dispositivi di I/O a bordo macchina e permettono alle applicazioni di controllo e visualizzazione di ottenere le informazioni dal campo secondo i numerosi protocolli disponibili.



Type	Protocol		NETcore X MiniAPCI/APCI card	ASEM MiniPCI/PCI card	Embedded Controller on MB
Serial	Profibus	M	•		
		S	•		
	CANOpen	M	•	CAN RAW + stack	
		S	•	CAN RAW + stack	
	MPI		•		Only for WinCE
Ethernet	Modbus RTU				With stack
	EtherNET IP (*)	Sc	•		
		D	•		With stack
	EtherCAT	M	•		
		S (*)	•		
	ProfiNET IO	C	•		
		D	•		
	Modbus TCP				With stack

(*) available on demand | Protocol Stack ISN'T SUPPLIED BY ASEM

Modalità d'uso

NETcore X e applicazione proprietaria

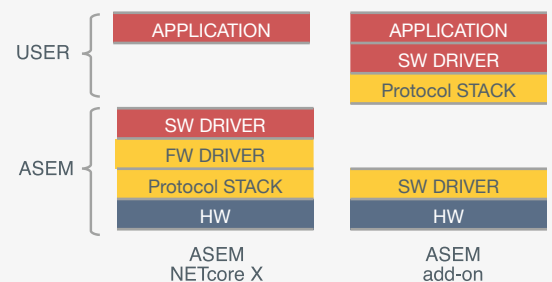
E' disponibile una libreria DLL per sviluppare applicazioni sotto sistemi Win32 (XP, Vista, Seven) o Windows CE. Sono ammessi tutti i linguaggi compatibili con lo sviluppo di DLL come C, C++ o .NET.

NETcore X con CoDeSys

Usando i protocolli PROFIBUS, CANOPEN, PROFINET ed ETHERNET IP l'integrazione con CoDeSys è automatica e non è necessario scrivere alcun codice per implementare lo stack di comunicazione.

NETcore X con Premium HMI

Premium HMI utilizza le schede NETCore X con i protocolli SIEMENS MPI e PROFIBUS Slave mediante un driver di comunicazione dedicato.



NETcore X
APCI / MiniAPCI / MB1021 format



NETcore X
APCI / MiniAPCI / MB1021 format



NETcore X
APCI / MiniAPCI / MB1021 format



Dual CAN-RAW
PCI / MiniPCI





Panel PC Fanless

Sistemi panel PC a basso consumo, senza ventilazione forzata, con processori ATOM, Celeron ULV, Core 2 Duo ULV, touchscreen, display LCD da 6.5" a 19" con frontali in plastica, alluminio o acciaio INOX. Possibilità di integrare le schede fieldbus NETCore X per realizzare applicazioni di visualizzazione e controllo.

Panel PC Performance

Sistemi panel PC che garantiscono potenza di calcolo e capacità grafiche elevate grazie ai processori Pentium M e Core 2 Duo. Disponibili con touchscreen, display LCD da 8,4" a 19" con frontali in plastica, alluminio o acciaio INOX. Possibilità di integrare le schede fieldbus NETCore X per realizzare applicazioni di visualizzazione e controllo.

PRODUCT FAMILY SELECTOR

Panel PC Fanless

	LCD	FRONT PANEL	PROCESSORS
			
OT600	6,5" 8,4" 12,1"	Alu	LX800
HT700	6,5" 7" 8,4" 10,4" 12,1" 15" 15,6" 18,5"	Alu Alu TF Inox	ATOM E6xx
OT1100	12,1" 15" 17" 19"	Alu Inox	ATOM
OT1200	8,4" 10,4" 12,1" 15" 17" 19"	Alu Inox	CeIM
WS500 WS500-TE	12,1" 15" 17"	Plastic	CeIM
WS550 WS550-TE	12,1" 15" 17"	Plastic	C2D
FT500 FT500-TE	12,1" 15" 17"	Alu	CeIM
FT550 FT550-TE	12,1" 15" 17" 19"	Alu Inox	C2D

Panel PC Performance

	LCD	FRONT PANEL	PROCESSORS
			
OT1300	8,4" 10,4" 12,1" 15" 17" 19"	Alu Inox	CeIM PM
WS600 WS600-TE	12,1" 15" 17"	Plastic	CeIM PM
WS650 WS650-TE	12,1" 15" 17"	Plastic	Cel C2D
FT600 FT600-TE	12,1" 15" 17"	Alu	CeIM PM
FT650 FT650-TE	12,1" 15" 17" 19"	Alu Inox	Cel C2D

Alu: alluminio | Inox: acciaio inossidabile true flat | Plastic: plastica con polycarbonato | Desk: montaggio desktop | WALL: montaggio a parete | DIN RAIL: montaggio a guida DIN | VESA: VESA 75/100 compatibile | ROLEC: Taraplast compatibile | RITTAL: serie CP-S compatibile | PXA: Intel® PXA270 | LX800: Geode LX800 | ATOM: Intel® ATOM Z5XXP | Cel: Intel® Celeron | CeIM: Intel® Celeron M | P: Intel® Pentium | PM: Intel® Pentium M | P4: Intel® Pentium 4 | C2D: Intel® Core 2 Duo | C2Q: Intel® Core 2 Quad | MiniPCI: MiniPCI bus | PC/104Plus: PC/104Plus

SLOT	POWER SUPPLY	O.S.	
			
MiniPCI	12VDC 24VDC	CE5 CE6 WES XP Pro	28
MiniPCI	24VDC	WEC7 WES	30
MiniPCI	24VDC	CE6 WES XP Pro W7	32
PC/104Plus PCI	24VDC UPS	CE5 CE6 WES XP Pro	34
PCI PCIe	24VDC 220VAC	WES XP Pro	36
PCI PCIe	24VDC 220VAC	WES XP Pro W7	38
PCI PCIe	24VDC 220VAC	WES XP Pro	40
PCI PCIe	24VDC 220VAC	WES XP Pro W7	42

SLOT	POWER SUPPLY	O.S.	PAGE
			
PC/104Plus PCI	24VDC	CE5 CE6 WES XP Pro	44
PCI PCIe	24VDC 220VAC	WES XP Pro	46
PCI PCIe	24VDC 220VAC	WES XP Pro W7	48
PCI PCIe	24VDC 220VAC	WES XP Pro	50
PCI PCIe	24VDC 220VAC	WES XP Pro W7	52

bus, PCI compatibile | PCI: PCI bus | PCIe: PCI Express bus | AGP: AGP bus | UPS: gruppo di continuità | RID: alimentatore ridondato | CE5: Microsoft® Windows CE 5.0 | CE6: Microsoft® Windows CE 6.0 | WEC7 con: Microsoft® Windows Embedded Compact 7 | WES: Microsoft® Windows Embedded Standard | XP Pro: Microsoft® Windows XP PRO Sp3 | W7: Microsoft® Windows Seven Professional FES 32/64bit | Res 4: touch screen resistivo 4 fili | Res 5: touch screen resistivo 5 fili | GFG: touch screen Glass Film Glass

OT600

OT600 è un panel PC fanless estremamente compatto, con display LCD da 6,5" a 12,1" anche touchscreen. Utilizza Compact Flash e SSD per l'archiviazione dati e consente l'installazione delle schede di comunicazione NETCore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



FANLESS



DISKLESS

6,5" 8,4" 12,1"

Alu

Res 4 Res 5

LX800

256MB 512MB 1GB

MiniPCI

12VDC 24VDC

CE5 CE6 WES XP Pro

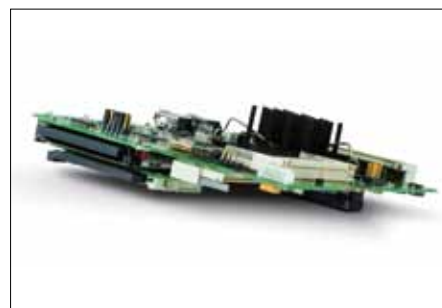


Foto 1: Due slot Compact Flash

Foto 2: Supervisione d'impianto con Premium HMI

Foto 3: Due slot MiniPCI

FEATURES PLUS

- ✓ 2 CFS PER SISTEMA OPERATIVO E SALVATAGGIO DATI
- ✓ ADATTO A SUPERVISIONE E CONTROLLO DI PICCOLI IMPIANTI
- ✓ 2 SLOT MINIPCI PER SCHEDE AGGIUNTIVE

HMI600
OT600+Premium HMI
Vedere pag.12

System characteristics				
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	6,5” Color LCD TFT 640 x 480 (VGA) 256K 0,207 x 0,207mm LED 800cd/m2 600:1 160°H, 140° V 50.000h	8,4” Color LCD TFT 800 x 600 (SVGA) 256K 0,213 x 0,213mm LED 400cs/m2 370:1 120° H 100°V 70.000h	12,1” Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm LED 450cd/m2 700:1 160°H 140°V 50.000h
Touchscreen Optional	Technology Light transimission Lifetime Linearity deviation Interface Glass Film Glass	4 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial No	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial No	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial Optional
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB831-V Temperature monitor Time programmable		
CPU	Processor Cache Socket	AMD LX800 500MHz 128KB L2 Soldered on board		
Graphic	Controller Memory	Integrated on board Shared - 2MB÷128MB system selectable		
System memory	Type Size Socket	DDR PC2700 256MB, 512 MB, 1 GB 1 x SODIMM module		
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45) Intel 82551QM		
USB interfaces	Type Transfer rate	2 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (front, TYPE-A, host port, protected) Up to480Mbit/s (high speed)		
Compact Flash slots	Type <i>optional</i>	1 x Type II (external access) 1 x Type II (internal access)		
Mass storage interfaces	Parallel	1 x ATA/66 Master/Slave (dedicated for CF Slots)		
Expansion slots	Type	2 x MiniPCI type III		
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 5 years		
Buttons, leds and keys	Reset button LEDs	Yes Power		
Electrical characteristics				
Power supply	Type Input voltage Power consumption	AT, Integrated on board, auto ranging 9÷36 VDC 10W – 13W basic configuration (without add-on)		
Mechanical characteristics				
Case	Type Material	Panel mount Steel, nickel treatment		
Front panel	Protection Construction	IP65 Aluminum alloy		
Measurements mm	6,5” 8,4” 12,1”	Dimensions (W x H x D) 201 x 168 x 68 240 x 202 x 73 321 x 262 x 73	Cutout (W x H) 176 x 149 213 x 179 292 x 239	Weight (Kg) 1,6 2,2 3,2
Enviromental characteristics				
Temperature	Operation Storage	0° ÷ +50°C -20° ÷ +60°C		
Humidity	Operation/Storage	80% (non-condensing)		
Warranty & Approvals				
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety		
UL	Marks Safety Certificate N°	 Conforms to UL-60950-1 – Information technology Equipment - Safety 2090306-E315863		
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)		

HT700 [new]

HT700 è la nuova famiglia di Panel PC fanless entry level basata sui nuovi microprocessori Intel® Atom™ TunnelCreek serie E6XX low power fino a 1,6GHz. La nuova architettura Intel® Atom™ integra direttamente nel microprocessore la gestione della memoria dinamica e tutte le funzionalità video a vantaggio delle prestazioni complessive dell'intera piattaforma.

Le tre diverse finiture per i frontali, alluminio, alluminio True Flat e INOX True Flat, e l'adozione del cut-out ASEM, fanno di HT700 la prima famiglia della nuova generazione di panel PC ASEM.

HT700 garantisce il miglior rapporto prezzo/prestazione nella realizzazione di applicazioni di supervisione e controllo integrando i processori Intel® Atom™ E6xx e le schede di comunicazione ASEM NETcore® X con le piattaforme software Premium HMI 4 e SoftPLC CoDeSys.



ASEM **CUTOUT**



FANLESS



DISKLESS



6,5" 7"W 8,4" 10,4" 12,1" 15" 15,6"W 18,5"W



FEATURES PLUS

- ✓ TECNOLOGIA INTEL® ATOM™ TUNNEL CREEK
- ✓ FIELDBUS INDUSTRIALE OPZIONALE
- ✓ 2 SLOT MINIPCI PER SCHEDE DI ESPANSIONE
- ✓ ASEM CUT-OUT
- ✓ FRONTALI CON 3 FINITURE DIFFERENTI

HMI700
HT700+Premium HMI
Vedere pag.12

System characteristics									
Display	Size	6.5"	7"	8.4"	10.4"	12.1"	15.0"	15.6"	18.5"
	Type	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT
	Resolution	640x480 (VGA)	800x480 (WVGA)	800x600 (SVGA)	800x600 (SVGA)	800x600 (SVGA)	1024x768 (XGA)	1366x768 (WXGA)	1366x768 (WXGA)
	Colors	16.2M	16.2M	16.2M	16.2M	16.2M	16.2M	16.7M	16.7M
	Pixel pitch	0,207x0,207mm	0,1905x0,1905mm	0,213x0,213mm	0,264x0,264mm	0,3075x0,3075mm	0,297x0,297mm	0,252x0,252mm	0,300x0,300mm
	Backlight	LED	LED	LED	LED	LED	LED	LED	LED
	Luminance	800cd/m²	400cd/m²	450cd/m²	400cd/m²	450cd/m²	400cd/m²	300cd/m²	300cd/m²
	Contrast	600:1	1000:1	600:1	700:1	800:1	800:1	500:1	1000:1
	Viewing angle	160° H, 140° V	160° H, 160° V	160° H, 140° V	160° H, 140° V	160° H, 140° V	160° H, 145° V	190° H, 160° V	170° H, 160° V
	MTTF	50000h	50000h	50000h	50000h	50000h	50000h	50000h	50000h
Touchscreen Optional	Technology	5 wires – analog - resistive							
	Light transmission	80% ±2%							
	Lifetime	35mln activations							
	Linearity deviation	< 1 %							
	Interface	Serial							
Motherboard	Glass Film Glass	Optional							
	Model	All-in-one, ASEM MB931							
	HW monitor	Temperature monitor							
CPU	Watch-dog	Time programmable							
	Processor	Intel® Atom™ E620 600MHz				Intel® Atom™ E680 1.6GHz			
	Cache	512KB L2				512KB L2			
Graphic	Socket	Intel® EG20T				Intel® EG20T			
	Controller	Integrated in microprocessor, 320MHz				Integrated in microprocessor, 400MHz			
System memory	Memory	DVMT max 512MB				DVMT max 512MB			
	Type	DDR2 800MT/s							
Serial interfaces	Size	1 GB, 2 GB							
	Socket	memory down							
	Type	1 x RS232 (DB9M)							
	UART	16550 compatible (FIFO 16 byte)							
	Transfer rate	115kbps max							
Optional (note 2)	Optoisolation	No							
	Type	1 x RS-232/422/485 (DB15M)							
	UART	16550 compatible (FIFO 16 byte)							
	Transfer rate	187.5kbps max							
	Optoisolation	optional							
Ethernet interfaces	Type	2 x 10/100/1000Mbps (RJ45)							
	Controller 1	PHY: Realtek RTL8211E + MAC: Integrated into Intel EG20T							
	Controller 2	Intel 82574L							
USB interfaces	Jumbo frames/WOL	Yes/Yes							
	Type	2 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (front, TYPE-A, host port, protected)							
Compact Flash slots	Transfer rate	Up to 480Mbit/s (high speed)							
	Type	1 x Type I (external access)							
Mass storage interfaces	Type	1 x SATA							
Expansion slots	Type	2 x MiniPCI							
Battery	Type	Coin (CR2032 3V)							
	Removable	Yes							
	Lifetime	TBD							
Buttons, leds and keys	Reset buttons	System / Watch-dog							
	LEDs	Power / Storage / Watch-dog / System error							
Electrical characteristics									
Power supply	Type	AT, Integrated on board							
	Input voltage	18÷36 VDC							
	Power consumption	TBD							
	MicroUPS	Microbackup with supercapacitors (max interruption 500ms, first load 3', rearm time 30")							
	UPS	Optional							
Mechanical characteristics									
Case	Type	Panel mount							
	Material	Steel, zinc galvanization							
Front panel (note 1)	Protection	IP65				IP65		IP66K	
	Construction	Full aluminum alloy				Aluminium True Flat with polyester foil		Stainless Steel True Flat with polyester foil	
	Color	-				PANTONE Cool Gray 4C		RAL 7035	
Measurements mm	6.5"	Aluminium (W x H x D)		Aluminium TF (W x H x D)		Stainless Steel (W x H x D)		Cutout (W x H)	Weight (Kg)
	7"	TBD		TBD		TBD		TBD	TBD
	8.4"	215 x 165 x 64		215 x 165 x 64		230 x 190		207 x 157	
	10.4"	250 x 210 x 56,1		250 x 210 x 56,1		280 x 225		230 x 190	
	12.1"	300 x 245 x 67		300 x 245 x 67		315 x 250		280 x 225	
	15"	335 x 270 x 67		335 x 270 x 67		370 x 295		315 x 250	
	15.6"	390 x 315 x 67		390 x 315 x 67		TBD		370 x 295	
	18.5"	TBD		TBD		480 x 300		TBD	
		500 x 320 x 69		500 x 320 x 69					
Environmental characteristics									
Temperature	Operation	0° ÷ +50°C without HDD, 5° ÷ +45°C with HDD							
	Storage	-10° ÷ +60°C							
Humidity	Operation/Storage	80% (non-condensing)							
Warranty & Approvals									
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics							
		Conforms to EN 61000-3-2 – Limits for harmonic current emissions							
		Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker							
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics							
Warranty	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety							
	Management	By ASEM headquarters							
	Standard	12 months							
	Extended	18 / 24 / 36 months (optional)							
Notes									
1	With True Flat front panel, touchscreen is mandatory. Stainless Steel front panel have no USB port on the front								
2	RS-232/422/485 standard and optoisolated can be installed one alternative to the other								

OT1100

OT1100 è l'embedded panel PC fanless di ASEM che utilizza il processore low power Intel® Atom™ della serie Z5XXP fino ad 1.6GHz dotato della funzionalità 'Hyper Threading Technology'. Disponibile con display LCD, anche touchscreen, da 12.1", 15", 17" e 19", con pannelli frontali in alluminio o acciaio INOX, ha una profondità di soli 60mm. Mediante le schede di comunicazione ASEM NETcore® X e l'integrazione delle piattaforme software Premium HMI 4 e SoftPLC CoDeSys, è possibile realizzare applicazioni di supervisione e controllo.

**FANLESS****DISKLESS**

12,1" 15" 17" 19"



Alu Inox



Res 5 GFG



ATOM



512MB 1GB 2GB



MiniPCI



24VDC



CE6 WES XP Pro W7



Foto 1: Estremamente sottile

Foto 2: Fieldbus industriali su slot MiniAPCI

Foto 3: Tecnologia Intel® ATOM™

FEATURES PLUS

- ✓ TECNOLOGIA INTEL® ATOM™ LOW POWER
- ✓ Sisetma operativo embedded installato su SSD o CF
- ✓ Fieldbus industriale opzionale
- ✓ 2 slot MiniPCI per schede di espansione
- ✓ Pannello frontale TrueFlat in acciaio INOX opzionale

HMI1100
OT1100+Premium HMI
Vedere pag.12

System characteristics						
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	12,1" Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15,0" Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 2 lamps 400cd/m2 500:1 160° H, 140° V 50000h	17,0" Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h	19" Color LCD TFT 1280 x 1024 (SXGA) 16M 0,294 x 0,294mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V -	
Touchscreen Optional	Technology Light transmission Lifetime Linearity deviation Interface Glass film Glass	5 wires – analog - resistive 80% ±2% 35mIn activations < 1 % Serial Optional				
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB991/A Voltages and temperature monitor Time programmable				
CPU	Processor FSB Cache Chipset	Intel® ATOM Z510P 1.1GHz 400MHz 512KB L2 Intel® US15WP	Intel® ATOM Z530P 1.6GHz 533MHz 512KB L2 Intel® US15WP			
Graphic	Controller Memory	GMA500 integrated in Intel® US15WP Shared – 1MB, 4MB, 8MB system selectable				
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module				
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No				
Optional (note 2)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes				
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 8255QM - Intel 82574L				
USB interfaces	Type Transfer rate	2 x USB 2.0 (rear, TYPE-A, host port), 1 x USB 2.0 (front, TYPE-A, host port, protected), optional 3 x USB 2.0 (rear, TYPE-A, host port) Up to 480Mbit/s (high speed)				
Compact Flash slots	Type	1 x Type II (external access), 1 x Type I (internal access optional)				
Mass storage interfaces	Parallel	1 x ATA/66 Master/Slave				
Expansion slots	Type	2 x MiniPCI				
Battery	Type Removable Lifetime	Coin (CR2032 3V) Yes 5 years				
Buttons, leds and keys	Reset buttons LEDs	System / Watch-dog Power				
Electrical characteristics						
Power supply	Type Input voltage Power consumption	AT, Integrated on board, auto ranging 18÷36 VDC 23W@12,1"; 25W@15,0"; 27W@17,0" (ATOM 1.6GHz T/S 1GB RAM)				
Mechanical characteristics						
Case	Type Material	Panel mount Steel, zinc galvanization				
Front panel (note 1)	Protection Construction Color	IP65 Aluminum alloy frame with polycarbonate foil PANTONE 429C	IP66K Stainless Steel True Flat with polyester foil RAL 7035			
Measurements mm	12,1" 15" 17" 19"	Aluminium (W x H x D) 335 x 270 x 54 390 x 315 x 54 455 x 355 x 58 490 x 388 x 68	Stainless Steel (W x H x D) 335 x 270 x 54 398 x 315 x 54 455 x 355 x 58 490 x 388 x 68	Cutout (W x H) 315 x 250 370 x 295 435 x 335 470 x 368	Weight (Kg) 4,2 5,0 6,3 7,0	
Enviromental characteristics						
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with 17", 0° ÷ +45°C with HDD -20° ÷ +60°C				
Humidity	Operation/Storage	80% (non-condensing)				
Warranty & Approvals						
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety				
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)				
Notes						
1	With stainless steel front panel, touchscreen is mandatory and have no USB port on the front					
2	RS-232/422/485 standard and optoisolated can be installed one alternative to the other					

OT1200

OT1200 è l'embedded panel PC fanless basato su architettura Intel® con chipset 915 GME, controller video 900 GMA e processori Celeron M ULV fino a 1GHz. Disponibile in un'ampia gamma di display LCD da 8,4" a 19", anche touchscreen, con pannelli frontali in alluminio o acciaio INOX. L'espandibilità è garantita da uno slot PCI, su cui si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.

**FANLESS****DISKLESS**

8,4" 10,4" 12,1" 15" 17" 19"

Alu Inox

Res 5 GFG

CeIM

512MB 1GB 2GB

PC/104Plus PCI

24VDC UPS

CE5 CE6 WES XP Pro



FEATURES PLUS

- ✓ 1 SLOT PCI/PC104PLUS PER SCHEDE AGGIUNTIVE
- ✓ PANNELLO FRONTALE TRUEFLAT IN ACCIAIO INOX OPZIONALE
- ✓ MECCANICA POSTERIORE A PROFONDITA' RIDOTTA OPZIONALE (OT1200-SL)
- ✓ UPS OPZIONALE
- ✓ 4 TASTI FRONTALI PERSONALIZZABILI OPZIONALI
- ✓ SALVATAGGIO DATI SU SSD/CF/HDD

Foto 1: Frontale INOX True-Flat

Foto 2: Porte di comunicazione e UPS

Foto 3: Versione a profondità ridotta (OT1200-SL)

HMI1200
OT1200+Premium HMI
Vedere pag.12

System characteristics							
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	8,4” Color LCD TFT 800 x 600 (SVGA) 256K 0,213 x 0,213mm CCFL 2 lamps 400cd/m2 250:1 120° H, 100° V 50000h	10,4” Color LCD TFT 800 x 600 (SVGA) 256K 0,264 x 0,264mm CCFL 2 lamps 400cd/m2 450:1 120° H, 100° V 50000h	12,1” Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15” Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17” Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h	19” Color LCD TFT 1280 x 1024 (SXGA) 16M 0,294 x 0,294mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V -
Touchscreen Optional	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial Optional for 12”, 15” and 17”					
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB951 Voltages and temperatures monitor Time programmable					
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 600MHz 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M			Intel® Celeron M 1GHz (373) 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M		
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable					
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module					
Video interfaces	Type	1 x VGA (DB15F)					
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No					
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes					
Parallel interfaces Optional (note 3)	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M					
PS/2 interfaces	Type	1 x PS/2 Keyboard / Mouse					
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM – Intel 82562EZ					
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (front, TYPE-A, host port, protected), 1 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)					
Compact Flash slots	Type	1 x Type I (internal access), 1 x Type II (external access)					
Mass storage interfaces	Serial Parallel	1 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)					
Expansion slots	Type	1 x PC/104 Plus or 1 x PCI half size					
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years					
Buttons, leds and keys	Reset button LEDs Function keys	Yes Front: Power / Rear: power, HDD, system fail, watch-dog 4 programmable on front panel (optional), only for aluminum version excluded 19”					
Electrical characteristics							
Power supply	Type Input voltage Power consumption UPS	AT, Integrated on board, auto ranging 18÷36 VDC 39W @ OT1200 15” Celeron M 600MHz, T/S, 512MB RAM, CF 512MB, No add-on Optional					
Mechanical characteristics							
Case	Type Material	Panel mount Steel, nickel treatment					
Front panel (note 2)	Protection Construction Color	IP65 Aluminum alloy with polycarbonate foil PANTONE 429C			IP66K Stainless Steel True Flat with polyester foil - RAL 7035		
Measurements mm (note 3)	8,4” 10,4” 12,1” 15” 17” 19”	Aluminum (W x H x D) 250 x 210 x 103 300 x 245 x 103 335 x 270 x 103 390 x 315 x 103 455 x 355 x 103 490 x 388 x 113		Stainless Steel (W x H x D) - - 335 x 270 x 103 398 x 315 x 103 455 x 355 x 103 490 x 388 x 113		Cutout (W x H) 230 x 190 280 x 225 315 x 250 370 x 295 435 x 335 470 x 368	Weight (Kg) 3,1 4,0 4,6 5,3 6,7 7,3
Enviromental characteristics							
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with 17”, 0° ÷ +45°C with HDD -20° ÷ +60°C					
Humidity	Operation/Storage	80% (non-condensing)					
Warranty & Approvals							
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety					
UL	Marks Safety Certificate N°	 Conforms to UL-60950-1 – Information technology Equipment - Safety 2090306-E315863					
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)					
Notes							
1	RS-232/422/485 standard and optoisolated can be installed one alternative to the other						
2	With stainless steel front panel, touchscreen is mandatory and have no USB port on the front						
3	SL (SLIM) version is 86.5mm depth – parallel interface not available						

WS500 WS500-TE

I sistemi della famiglia WS500 utilizzano i processori Intel® Celeron M ULV e sono disponibili in differenti soluzioni meccaniche: pannello frontale plastico con o senza tastiera estesa, moduli laterali per pulsanti, luci o sistemi di puntamento. Disponibili con display LCD, anche touchscreen, da 12.1", 15" e 17". L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



FEATURES PLUS

- ✓ VERSIONE CON TASTIERA ESTESA (WS500-TE)
- ✓ DISPONIBILI MODULI LATERALI CON PREDISPOSIZIONE PER BOTTONI, TRACKBALL, TOUCHPAD O NEUTRI
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIe
- ✓ DVD/FDD FRONTALI O POSTERIORI OPZIONALI
- ✓ DISPONIBILE VERSIONE FRAMELESS (WS500-FL)

Foto 1: Versione senza tastiera

Foto 2: 2 slot PCI/PCIe nella versione H3

Foto 3: Moduli laterali con trackball/touchpad

System characteristics														
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	12,1" Color LCD TFT 800 x 600 (SVGA) 256K 0.307 x 0.307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15" Color LCD TFT 1024 x 768 (XGA) 16M 0.297 x 0.297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 145° V 50000h	17" Color LCD TFT 1280 x 1024 (SXGA) 16M 0.264 x 0.264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h										
Touchscreen	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% 2% 35mln activations < 1 % Serial Optional												
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB921 Voltages and temperatures monitor Time programmable												
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 373 ULV 1GHz 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M												
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable												
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 2 x SODIMM module												
Video interfaces	Type	1 x VGA (DB15F)												
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No												
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes												
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M												
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse												
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82559ER												
Alternative	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82573L												
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)												
Compact Flash slots	Type	1 x Type II (external access)												
Mass storage interfaces	Serial Parallel	2 x SATA 1 1.5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)												
Optical device interfaces	Type	H1 - H3 / H1-TE / H3-TE 1 x FDD, 1 x DVD-RW												
Expansion slots	Type <i>alternative</i>	H1 / H1-TE - - H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x1 half size on riser card												
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years												
Buttons, leds and keys	Reset button LEDs	Yes Power, HDD activity, LAN, Alarm fans/temperature												
Electrical characteristics														
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (<i>optional</i>) 40W @ WS500 H1, 15" T/S, Celeron M 1GHz, 1GB RAM, CF												
Mechanical characteristics														
Case	Type Material	Panel mount Steel, nickel treatment												
Front panel	Protection Construction Color Frameless	IP65 Plastic with polycarbonate foil Plastic: RAL 7040 (light grey) / Polycarbonate: Pantone 428C Optional only for H1, H3												
Keyboard module TE version	Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys												
Side modules Optional	4 rows x 2 columns Emergency Touch pad Track ball empty	H1 / H3 Yes Yes No No No H1-TE / H3-TE Yes Yes Yes Yes Yes												
Measurements mm	H1	Dimensions (W x H x D)				Cutout (W x H)		Weight (Kg)						
		WS500	WS500-TE	WS500	WS500-TE	WS500	WS500-TE							
		360 x 275 x 59 430 x 315 x 59 430 x 380 x 59	360 x 450 x 59 430 x 490 x 59 430 x 555 x 59	335 x 250 405 x 286 405 x 351	335 x 425 405 x 465 405 x 530	6,0 7,9 8,9	10,1 12,0 14,1							
	H3	360 x 275 x 115 430 x 315 x 115 430 x 380 x 115	360 x 450 x 115 430 x 490 x 115 430 x 555 x 115	335 x 250 405 x 286 405 x 351	335 x 425 405 x 465 405 x 530	7,6 9,5 10,5	10,7 12,6 14,6							
		12,1"												
		15"												
17"														
Enviromental characteristics														
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C												
Humidity	Operation/Storage	80% (non-condensing)												
Warranty & Approvals														
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety												
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)												
Notes														
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others													

WS550 WS550-TE

WS550 è un panel PC fanless con frontale plastico, disponibile in diverse soluzioni meccaniche e basato sulla scheda madre ASEM 1021 che supporta i processori Intel® Core® 2 Duo Ultra Low Voltage con tecnologia a 65nm. Disponibili con display LCD, anche touchscreen, da 12.1", 15" e 17", i sistemi WS550 garantiscono elevate prestazioni, basso consumo e alta dissipazione di calore. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: Versione senza tastiera

Foto 2: 2 slot PCI/PCIe nella versione H3

Foto 3: Microprocessore Intel®

Core 2 Duo ULV e chipset 965GME

FEATURES PLUS

- ✓ INTEL® CORE 2 DUO ULV U7500 1,06GHZ
- ✓ CHIPSET INTEL® 965GME ED ACCELERATORE GRAFICO INTEL® GMA X3100
- ✓ VERSIONE CON TASTIERA ESTESA (WS550-TE)
- ✓ DISPONIBILI MODULI LATERALI CON PREDISPOSIZIONE PER BOTTONI, TRACKBALL, TOUCHPAD O NEUTRI
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD FRONTALI O POSTERIORI OPZIONALI
- ✓ DISPONIBILE VERSIONE FRAMELESS (WS550-FL)

System characteristics			
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	12.1” Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15” Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h
Touchscreen	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial Optional	
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB1021 Voltages and temperature monitor Time programmable	
CPU	Processor FSB Cache Socket Chipset	Intel® Core 2 Duo ULV U7500 1,06GHz 533MHz 2MB L2 Soldered on board Intel® 965GME + ICH8M	
Graphic	Controller Memory	GMA X3100 integrated in Intel® 965GME Shared – up to 256MB system selectable	
System memory	Type Size Socket	DDR2 PC5300 1 GB, 2 GB, 4GB 2 x SODIMM module	
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536QXGA 60Hz) , 1 x DVI-D (single link – max resolution 1600x1200 UXGA)	
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes	
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M	
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse	
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82566MM	
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal pin strip, host port, protected) Up to 480Mbit/s (high speed)	
Compact Flash slots	Type	1 x Type II (external access)	
Mass storage interfaces	Serial Parallel	3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot)	
Optical device interfaces	Type	H1 - - - H3 / H1-TE / H3-TE 1 x FDD, 1 x DVD-RW	
Expansion slots	Type alternative	H1 / H1-TE - - - H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x4 half size on riser card	
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years	
Buttons, leds and keys	Reset button LEDs	System / Watch-dog Power, HDD activity, LAN, Alarm fans/temperature	
Electrical characteristics			
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 45W @ WS550 H1, 15”, T/S, Core 2 Duo ULV 1.06GHz, 1GB RAM, CF	
Mechanical characteristics			
Case	Type Material	Panel mount Steel, nickel treatment	
Front panel	Protection Construction Color Frameless	IP65 Plastic with polycarbonate foil Plastic: RAL 7040 (light grey) / Polycarbonate: Pantone 428C Optional only for H1, H3	
Keyboard module TE version	Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys	
Side modules Optional	4 rows x 2 columns Emergency Touch pad Track ball empty	H1 / H3 Yes Yes No No No	H1-TE / H3-TE Yes Yes Yes Yes Yes
Measurements mm	H1 12.1” 15” 17” H3 12.1” 15” 17”	WS550 360 x 275 x 59 430 x 315 x 59 430 x 380 x 59 WS550-TE 360 x 450 x 59 430 x 490 x 59 430 x 555 x 59 335 x 250 335 x 425 405 x 286 405 x 351 335 x 250 335 x 425 405 x 286 405 x 351 WS550 335 x 425 405 x 465 405 x 530 WS550-TE 335 x 425 405 x 465 405 x 530 WS550 6,0 7,9 8,9 WS550-TE 7,6 12,0 14,1 7,6 12,6 14,6	
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others		

FT500 FT500-TE

I sistemi fanless della famiglia FT500, con frontale in alluminio dall'elegante design, utilizzano i processori Intel® Celeron M ULV, e sono disponibili con display LCD, anche touchscreen, da 12,1", 15" e 17". L'espandibilità è garantita da diverse configurazioni di slot PCI/PCle, sui quali si possono installare le schede di comunicazione ASEM NETcore® X.

L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.

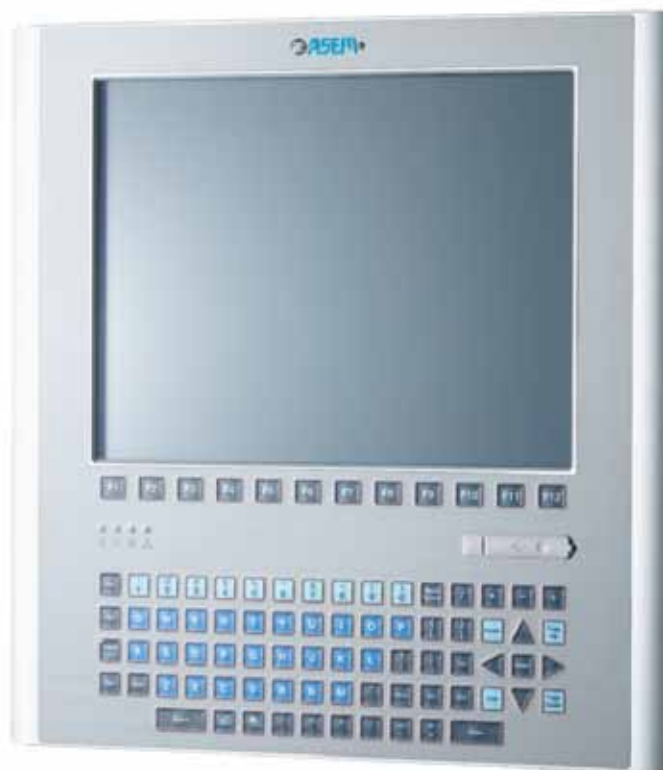


Foto 1: Versione senza tastiera

Foto 2: 2 slot PCI/PCle nella versione H3

Foto 3: Lettori ottici posteriori

FEATURES PLUS

- ✓ INTEL® CELERON M 373 ULV 1GHZ
- ✓ VERSIONE CON TASTIERA ESTESA (FT500-TE)
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD POSTERIORI OPZIONALI

System characteristics				
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	12,1" Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15" Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17" Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h
Touchscreen	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog – resistive 80% ±2% 35mln activations < 1 % Serial Optional		
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB921 Voltages and temperature monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 373 ULV 1GHz 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M		
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared – 64MB÷128MB system selectable		
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 2 x SODIMM module		
Video interfaces	Type	1 x VGA (DB15F)		
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes		
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M		
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse		
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM, Intel 82562EZ		
Alternative	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82573L		
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)		
Compact Flash slots	Type	1 x Type II (external access)		
Mass storage interfaces	Serial Parallel	2 x SATA 1 1.5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)		
Optical device interfaces	Type		H3 / H1-TE / H3-TE 1 x FDD, 1 x DVD-RW	
Expansion slots	Type <i>alternative</i>		H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x1 half size on riser card	
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years		
Buttons, leds and keys	Reset button LEDs	System / Watch-dog Power, HDD activity, LAN, Alarm fans/temperature		
Electrical characteristics				
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 40W @ FT500 H1, 15", T/S, Celeron M 1GHz, 1GB RAM, CF		
Mechanical characteristics				
Case	Type Material	Panel mount Steel, nickel treatment		
Front panel	Protection Construction Color	IP65 Aluminum with polycarbonate foil Polycarbonate: Pantone 429C		
Keyboard module TE version	Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys		
Measurements mm		Dimensions (W x H x D)	Cutout (W x H)	Weight (Kg)
	H1 12,1" 15" 17"	FT500-TE 360 x 400 x 84 425 x 440 x 84 455 x 485 x 86	FT500-TE 335 x 380 405 x 420 435 x 465	FT500-TE 9,0 11,0 13,0
	H3 12,1" 15" 17"	360 x 400 x 115 425 x 440 x 115 455 x 485 x 115	335 x 380 405 x 420 435 x 465	10,5 12,0 14,0
Enviromental characteristics				
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C		
Humidity	Operation/Storage	80% (non-condensing)		
Warranty & Approvals				
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety		
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)		
Notes				
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others			

FT550 FT550-TE

FT550 è il panel PC fanless con frontale in alluminio dall'elegante design, basato sulla scheda madre ASEM 1021 che supporta i processori Intel® Core® 2 Duo Ultra Low Voltage con tecnologia a 65nm. Disponibili con display LCD, anche touchscreen, da 12.1", 15", 17" e 19", i sistemi FT550 assicurano elevate prestazioni, basso consumo e alta dissipazione di calore. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.

**FANLESS****DISKLESS**

12,1" 15" 17" 19"



Alu Inox



Res 5 GFG



C2D



1GB 2GB 4GB



PCI PCIe



24VDC 220VAC



WES XP Pro W7



Foto 1: Versione senza tastiera

Foto 2: 2 slot PCI/PCIe nella versione H3

Foto 3: Microprocessore Intel® Core 2 Duo ULV e chipset 965GME

FEATURES PLUS

- ✓ INTEL® CORE 2 DUO ULV U7500 1,06GHZ
- ✓ CHIPSET INTEL® 965GME ED ACCELERATORE GRAFICO INTEL® GMA X3100
- ✓ VERSIONE CON TASTIERA ESTESA (FT550-TE)
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIe
- ✓ DVD/FDD POSTERIORI OPZIONALI
- ✓ PANNELLO FRONTALE TRUEFLAT IN ACCIAIO INOX OPZIONALE
- ✓ FT550 ANCHE CON PANNELLO FRONTALE DA 19"

System characteristics									
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MT F	12.1” Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15” Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17” Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h	19” Color LCD TFT 1280 x 1024 (SXGA) 16M 0,294 x 0,294mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V -				
Touchscreen	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35min activations < 1 % Serial Optional							
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB1021 Voltages and temperature monitor Time programmable							
CPU	Processor FSB Cache Socket Chipset	Intel® Core 2 Duo ULV U7500 1,06GHz 533MHz 2MB L2 Soldered on board Intel® 965GME + ICH8M							
Graphic	Controller Memory	GMA X3100 integrated in Intel® 965GME Shared – up to 256MB system selectable							
System memory	Type Size Socket	DDR2 PC5300 1 GB, 2 GB, 4GB 2 x SODIMM module							
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536QXGA 60Hz) , 1 x DVI-D (single link – max resolution 1600x1200 UXGA)							
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No							
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes							
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M							
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse							
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82566MM							
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal pin strip, host port, protected) Up to 480Mbit/s (high speed)							
Compact Flash slots	Type	1 x Type II (external access)							
Mass storage interfaces	Serial Parallel	3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot)							
Optical device interfaces	Type	H1 -	H3 / H1-TE / H3-TE 1 x FDD, 1 x DVD-RW						
Expansion slots	Type <i>alternative</i>	H1 / H1-TE -	H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x4 half size on riser card						
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years							
Buttons, leds and keys	Reset button LEDs	Yes Power, HDD activity, LAN, Alarm fans/temperature							
Electrical characteristics									
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 45W @ FT550 H1, 15”, T/S, Core 2 Duo ULV 1.06GHz, 1GB RAM, CF							
Mechanical characteristics									
Case	Type Material	Panel mount Steel, nickel treatment							
Front panel (note 2)	Protection Construction Color	IP65 Aluminum with polycarbonate foil PANTONE 429C	IP66K Stainless Steel True Flat with polyester foil RAL 7035						
Keyboard module TE version	Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys							
Measurements mm		Dimensions (W x H x D)		Cutout (W x H)		Weight (Kg)			
	H1	12.1” 15” 17” 19”	FT550 355 x 270 x 81 425 x 305 x 81 455 x 355 x 81 490 x 388 x 91	FT550-TE 360 x 400 x 84 425 x 440 x 84 455 x 485 x 86 -	Stainless Steel - 455 x 355 x 81 490 x 388 x 91	FT550 335 x 250 405 x 285 435 x 335 470 x 368	FT550-TE 380 x 335 380 x 335 420 x 405 465 x 435 -	FT550 6,0 7,9 8,9 9,9	FT550-TE 9,0 11,0 13,0 -
	H3	12.1” 15” 17” 19”	355 x 270 x 137 425 x 305 x 137 455 x 355 x 137 490 x 388 x 147	360 x 400 x 115 425 x 440 x 115 455 x 485 x 115 -	- 455 x 355 x 137 490 x 388 x 147	335 x 250 405 x 285 435 x 335 470 x 368	380 x 335 420 x 405 465 x 435 -	7,6 9,5 10,5 11,5	10,5 12,0 14,0 -
Enviromental characteristics									
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C							
Humidity	Operation/Storage	80% (non-condensing)							
Warranty & Approvals									
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety							
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)							
Notes									
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others								
2	With stainless steel front panel, touchscreen is mandatory and have no USB port on the front								

OT1300

OT1300 è l'embedded panel PC basato su architettura Intel® con microprocessori della classe Celeron M e Pentium M fino a 2 GHz. Disponibile in un'ampia gamma di display LCD da 8,4" a 19", anche touchscreen, con pannelli frontali in alluminio o acciaio INOX.

L'espandibilità è garantita da uno slot PCI, su cui si possono installare le schede di comunicazione ASEM NETcore® X.

L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.

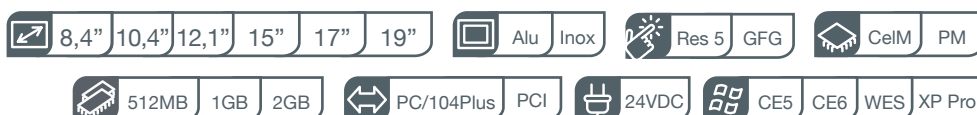


Foto 1: Frontale INOX True-Flat

Foto 2: 1 slot PCI

Foto 3: Microprocessori Intel® Celeron M e Pentium M fino a 2GHz

FEATURES PLUS

- ✓ 1 SLOT PCI/PC104PLUS PER SCHEDE AGGIUNTIVE
- ✓ PANNELLO FRONTALE TRUEFLAT IN ACCIAIO INOX OPZIONALE
- ✓ 4 TASTI FRONTALI PERSONALIZZABILI OPZIONALI
- ✓ SALVATAGGIO DATI SU SSD/CF/HDD

System characteristics							
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	8,4” Color LCD TFT 800 x 600 (SVGA) 256K 0,213 x 0,213mm CCFL 2 lamps 400cd/m2 250:1 120° H, 100° V 50000h	10,4” Color LCD TFT 800 x 600 (SVGA) 256K 0,264 x 0,264mm CCFL 2 lamps 400cd/m2 450:1 120° H, 100° V 50000h	12,1” Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15” Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17” Color LCD TFT 1280x1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h	19” Color LCD TFT 1280 x 1024 (SXGA) 16M 0,294 x 0,294mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V -
Touchscreen (note 2)	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial Optional for 12,1” , 15” and 17”					
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB951 Voltages and temperatures monitor Time programmable					
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 373 1,5GHz 400MHz 1MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M			Intel® Pentium M 740 1,73GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M		Intel® Pentium M 760 2GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable					
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module					
Video interfaces	Type	1 x VGA (DB15F)					
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No					
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes					
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M					
PS/2 interfaces	Type	1 x PS/2 Keyboard / Mouse					
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM - Intel 82562EZ					
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (front, TYPE-A, host port, protected), 1 x USB 2.0 (internal pin strip, host port, protected) Up to 480Mbit/s (high speed)					
Compact Flash slots	Type	1 x Type I (internal access), 1 x Type II (external access)					
Mass storage interfaces	Serial Parallel	1 x SATA 1 1.5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)					
Expansion slots	Type	1 x PC/104 Plus or 1 x PCI half size					
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years					
Buttons, leds and keys	Reset button LEDs Function keys	Yes Front: Power / Rear: power, HDD, system fail, watch-dog 4 programmable on front panel (optional), only for aluminum version excluded 19”					
Electrical characteristics							
Power supply	Type Input voltage Power consumption	AT, integrated on board, auto ranging 18÷36 VDC 60W @ OT1300 15”, T/S, Pentium M 2GHz, 1GB RAM, CF					
Mechanical characteristics							
Case	Type Material	Panel mount Steel, nickel treatment					
Front panel (note 2)	Protection Construction Color	IP65 Aluminum alloy with polycarbonate foil PANTONE 429C			IP66K Stainless Steel True Flat with polyester foil RAL 7035		
Measurements mm		Dimensions (W x H x D)		Stainless Steel (W x H x D)		Cutout (W x H)	Weight (Kg)
	8,4”	250 x 210 x 103		-		230 x 190	3,1
	10,4”	300 x 245 x 103		-		280 x 225	4,0
	12,1”	335 x 270 x 103		335 x 270 x 103		315 x 250	4,6
	15”	390 x 315 x 103		398 x 315 x 103		370 x 295	5,3
	17”	455 x 355 x 103		455 x 355 x 103		435 x 335	6,7
	19”	490 x 388 x 113		490 x 388 x 113		470 x 368	7,3
Enviromental characteristics							
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with 17”, 0° ÷ +45°C with HDD -20° ÷ +60°C					
Humidity	Operation/Storage	80% (non-condensing)					
Warranty & Approvals							
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety					
UL	Marks Safety Certificate N°	 Conforms to UL-60950-1 – Information technology Equipment - Safety 2090306-E315863					
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)					
Notes							
1	RS-232/422/485 standard and optoisolated can be installed one alternative to the other						
2	With stainless steel front panel, touchscreen is mandatory and have no USB port on the front						

WS600 WS600-TE

I sistemi della famiglia WS600 utilizzano processori Intel® Celeron M e Pentium M e sono disponibili in differenti soluzioni meccaniche: pannello frontale plastico con o senza tastiera estesa, moduli laterali per pulsanti, lampade o sistemi di puntamento, con display LCD, anche touchscreen, da 12.1", 15" e 17". L'espandibilità è garantita da diverse configurazioni di slot PCI/PCle, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.

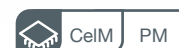


Foto 1: Versione senza tastiera

Foto 2: 4 slot PCI/PCle nella versione H4

Foto 3: Moduli laterali con trackball/touchpad

FEATURES PLUS

- ✓ VERSIONE CON TASTIERA ESTESA (WS600-TE)
- ✓ DISPONIBILI MODULI LATERALI CON PREDISPOSIZIONE PER BOTTONI, TRACKBALL, TOUCHPAD O NEUTRI
- ✓ VERSIONE H3 ED H4 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD FRONTALI O POSTERIORI OPZIONALI
- ✓ DISPONIBILE VERSIONE FRAMELESS (WS600-FL)

System characteristics						
Display	Size	12.1"	15"	17"		
	Type	Color LCD TFT	Color LCD TFT	Color LCD TFT		
	Resolution	800 x 600 (SVGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)		
	Colors	256K	16M	16M		
	Pixel pitch	0,307 x 0,307mm	0,297 x 0,297mm	0,264 x 0,264mm		
	Backlight	CCFL 2 lamps	CCFL 4 lamps	CCFL 2 lamps		
	Luminance	400cd/m2	450cd/m2	300cd/m2		
	Contrast	500:1	400:1	1000:1		
	Viewing angle	120° H, 100° V	160° H, 140° V	160° H, 160° V		
	MTTF	60000h	50000h	50000h		
Touchscreen	Technology	5 wires – analog - resistive				
	Light transmission	80% ±2%				
	Lifetime	35mIn activations				
	Linearity deviation	< 1 %				
	Interface	Serial				
	Glass Film Glass	Optional				
Motherboard	Model	All-in-one, ASEM MB921				
	HW monitor	Voltages and temperatures monitor				
	Watch-dog	Time programmable				
CPU	Processor	Intel® Celeron M 370 1,5GHz	Intel® Perntium M 740 1,73GHz	Intel® Perntium M 760 2GHz		
	FSB	400MHz	533MHz	533MHz		
	Cache	1MB L2	2MB L2	2MB L2		
	Socket	Socket 478 uFC-BGA	Socket 478 uFC-BGA	Socket 478 uFC-BGA		
	Chipset	Intel® 915GME + ICH6M	Intel® 915GME + ICH6M	Intel® 915GME + ICH6M		
Graphic	Controller	GMA900 integrated in Intel® 915GME				
	Memory	Shared - 64MB÷128MB system selectable				
System memory	Type	DDR2 PC5300				
	Size	512 MB, 1 GB, 2 GB				
	Socket	2 x SODIMM module				
Video interfaces	Type	1 x VGA (DB15F)				
Serial interfaces	Type	2 x RS232 (DB9M)				
	UART	16550 compatible (FIFO 16 byte)				
	Transfer rate	115Kbps max				
	Optoisolation	No				
Optional (note 1)	Type	1 x RS-232/422/485 (DB15M)				
	UART	16550 compatible (FIFO 16 byte)				
	Transfer rate	115Kbps max				
	Optoisolation	No / Yes				
Parallel interfaces Optional	Type	1 x SPP, EPP, ECP bidirectional				
	Connection	DB25M				
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse				
Ethernet interfaces	Type	2 x 10/100Mbps (RJ45)				
	Controller	Intel 82551QM, Intel 82562EZ				
Alternative	Type	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45)				
	Controller	Intel 82551QM, Intel 82573L				
USB interfaces	Type	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal, pin strip, host port, protected)				
	Transfer rate	Up to 480Mbit/s (high speed)				
Compact Flash slots	Type	1 x Type II (external access)				
Mass storage interfaces	Serial	2 x SATA 1 1,5Gb/s				
	Parallel	1 x ATA/100 Master/Slave (dedicated for CF Slots)				
Optical device interfaces	Type			H3 / H4 / H1-TE / H3-TE / H4-TE 1 x FDD, 1 x DVD-RW		
Expansion slots	Type	H1 / H1-TE - 1/2AA Lithium (3.6V) Yes 20 years	H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x1 half size on riser card	H4 / H4-TE 4 x PCI half size 3 x PCI, 1 x PCI-e x1 half size on riser card		
Battery	Type					
	Removable					
	Lifetime					
Buttons, leds and keys	Reset button	System / Watch-dog				
	LEDs	Power, HDD activity, LAN, Alarm fans/temperature				
Electrical characteristics						
Power supply	Type	Auto ranging				
	Input voltage	110÷230VAC 140W				
	Power consumption	18÷36 VDC 140W (optional) 60W @ WS600 15", T/S, Pentium M 2GHz, 1GB RAM, CF				
Mechanical characteristics						
Case	Type	Panel mount				
	Material	Steel, nickel treatment				
Front panel	Protection	IP65				
	Construction	Plastic with polycarbonate foil				
	Color	Plastic: RAL 7040 (light grey) / Polycarbonate: Pantone 428C				
	Frameless	Optional only for H1, H3, H4				
Keyboard module TE version	Type	Membrane, alphanumeric				
	Layout	US-International				
	Function keys	F1-F12, directions and control keys				
Side modules Optional	4 rows x 2 columns		H1 / H3 / H4	H1-TE / H3-TE / H4-TE		
	Emergency		Yes	Yes		
	Touch pad		Yes	Yes		
	Track ball		No	Yes		
	empty		No	Yes		
Measurements mm	H1	12.1" 15.1" 17"	Dimensions (W x H x D) WS600 360 x 275 x 59 WS600-TE 360 x 450 x 59 360 x 315 x 59 430 x 380 x 59	Cutout (W x H) WS600 335 x 250 WS600-TE 335 x 425 405 x 286 405 x 351	WS600 335 x 425 WS600-TE 405 x 465 405 x 530	Weight (Kg) WS600 6.0 WS600-TE 10.1 7.9 12.0 8.9 14.1
	H3	12.1" 15.1" 17"	360 x 275 x 115 360 x 450 x 115 430 x 315 x 115 430 x 380 x 115	335 x 250 335 x 425 405 x 286 405 x 351	335 x 425 405 x 465 405 x 530	7.6 9.5 10.5
	H4	12.1" 15.1" 17"	360 x 275 x 152 360 x 450 x 150 430 x 315 x 152 430 x 380 x 152	335 x 250 335 x 425 405 x 286 405 x 351	335 x 425 405 x 465 405 x 530	9.2 11.1 11.7
						11.0 12.9 14.9
Enviromental characteristics						
Temperature	Operation	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD				
	Storage	-20° ÷ +60°C				
Humidity	Operation/Storage	80% (non-condensing)				
Warranty & Approvals						
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics				
		Conforms to EN 61000-3-2 – Limits for harmonic current emissions				
		Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker				
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics				
	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety				
Warranty	Management	By ASEM headquarters				
	Standard	12 months				
	Extended	18 / 24 / 36 months (optional)				
Notes						
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others					

WS650 WS650-TE

WS650 è un panel PC con frontale plastico, disponibile in diverse soluzioni meccaniche e basato sulla scheda madre ASEM 1021 che supporta i processori Intel® Celeron Dual Core, Pentium Dual Core e Core® 2 Duo con tecnologia a 45nm. Disponibili con display LCD, anche touchscreen, da 12.1", 15" e 17", i sistemi WS650 si distinguono per l'elevata potenza di calcolo e le funzionalità grafiche. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCle, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: Versione senza tastiera

Foto 2: 4 slot PCI/PCle nella versione H4

Foto 3: Microprocessori Intel® Core 2 Duo and 965GME chipset

FEATURES PLUS

- ✓ MICROPROCESSORI INTEL® CORE 2 DUO FINO A 2,4GHZ
- ✓ CHIPSET INTEL® 965GME ED ACCELERATORE GRAFICO INTEL® GMA X3100
- ✓ VERSIONE CON TASTIERA ESTESA (WS650-TE)
- ✓ DISPONIBILI MODULI LATERALI CON PREDISPOSIZIONE PER BOTTONI, TRACKBALL, TOUCHPAD O NEUTRI
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD FRONTALI O POSTERIORI OPZIONALI
- ✓ DISPONIBILE VERSIONE FRAMELESS (WS650-FL)

System characteristics

Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTT F	12,1" Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15" Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17" Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h
Touchscreen	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial Optional		
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB1021 Voltages and temperatures monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Pentium dual core T4400 2,2GHz 800MHz 1MB L2 Socket P Intel® 965GME + ICH8M	Intel® Core 2 Duo T6400 2GHz 800MHz 1MB L2 Socket P Intel® 965GME + ICH8M	Intel® Core 2 Duo T9300 2,5GHz 800MHz 6MB L2 Socket P Intel® 965GME + ICH8M
Graphic	Controller Memory	GMA X3100 integrated in Intel® 965GME Shared – up to 256MB system selectable		
System memory	Type Size Socket	DDR2 PC5300 1 GB, 2 GB, 4GB 2 x SODIMM module		
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536QXGA 60Hz) , 1 x DVI-D (single link – max resolution 1600x1200 UXGA)		
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes		
Parallel interfaces Optional	Type Connection	1 x SPR, EPP, ECP bidirectional DB25M		
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse		
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82566MM		
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal pin strip, host port, protected) Up to 480Mbit/s (high speed)		
Compact Flash slots	Type	1 x Type II (external access)		
Mass storage interfaces	Serial Parallel	3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot)		
Optical device interfaces	Type	H1 -	H3 / H4 / H1-TE / H3-TE / H4-TE 1 x FDD, 1 x DVD-RW	
Expansion slots	Type <i>alternative</i>	H1 / H1-TE - -	H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x4 half size on riser card	H4 / H4-TE 3 x PCI, 1 x PCI-e x4 half size on riser card 2 x PCI, 1 x PCI-e x4, 1 x PCI-e x1 half size on riser card
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years		
Buttons, leds and keys	Reset button LEDs	Yes Power, HDD activity, LAN, Alarm fans/temperature		

Electrical characteristics

Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 65W @ WS650 H1, 15", T/S, Core 2 Duo T8300, 1GB RAM, CF
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Mechanical characteristics

Case		Type Material	Panel mount Steel, nickel treatment						
Front panel		Protection Construction Color Frameless	IP65 Plastic with polycarbonate foil Plastic: RAL 7040 (light grey) / Polycarbonate: Pantone 428C Optional only for H1, H3, H4						
Keyboard module TE version		Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys						
Side modules Optional		4 rows x 2 columns Emergency Touch pad Track ball empty	H1 / H3 / H4 Yes Yes No No No		H1-TE / H3-TE / H4-TE Yes Yes Yes Yes Yes				
Measurements mm			Dimensions (W x H x D)			Cutout (W x H)		Weight (Kg)	
			WS650	WS650-TE		WS650	WS650-TE		WS650-TE
H1	12,1"		360 x 275 x 59	360 x 450 x 59		335 x 250	335 x 425	6,0	10,1
	15"		430 x 315 x 59	430 x 490 x 59		405 x 286	405 x 465	7,9	12,0
	17"		430 x 380 x 59	430 x 555 x 59		405 x 351	405 x 530	8,9	14,1
H3	12,1"		360 x 275 x 115	360 x 450 x 115		335 x 250	335 x 425	7,6	10,7
	15"		430 x 315 x 115	430 x 490 x 115		405 x 286	405 x 465	9,5	12,6
	17"		430 x 380 x 115	430 x 555 x 115		405 x 351	405 x 530	10,5	14,6
H4	12,1"		360 x 275 x 152	360 x 450 x 150		335 x 250	335 x 425	9,2	11,7
	15"		430 x 315 x 152	430 x 490 x 150		405 x 286	405 x 465	11,1	13,6
	17"		430 x 380 x 152	430 x 555 x 150		405 x 351	405 x 530	11,7	15,6

Enviromental characteristics

Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C
Humidity	Operation/Storage	80% (non-condensing)

Warranty & Approvals

CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)

Notes

1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others
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FT600 FT600-TE

I sistemi della famiglia FT600 con frontale in alluminio dall'elegante design, utilizzano i processori Intel® Celeron M e Pentium M e sono disponibili con display LCD, anche touchscreen, da 12,1", 15" e 17".

L'espandibilità è garantita da diverse configurazioni di slot PCI/PCle, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: Versione senza tastiera

Foto 2: 4 slot PCI/PCle nella versione H4

Foto 3: Lettori ottici posteriori

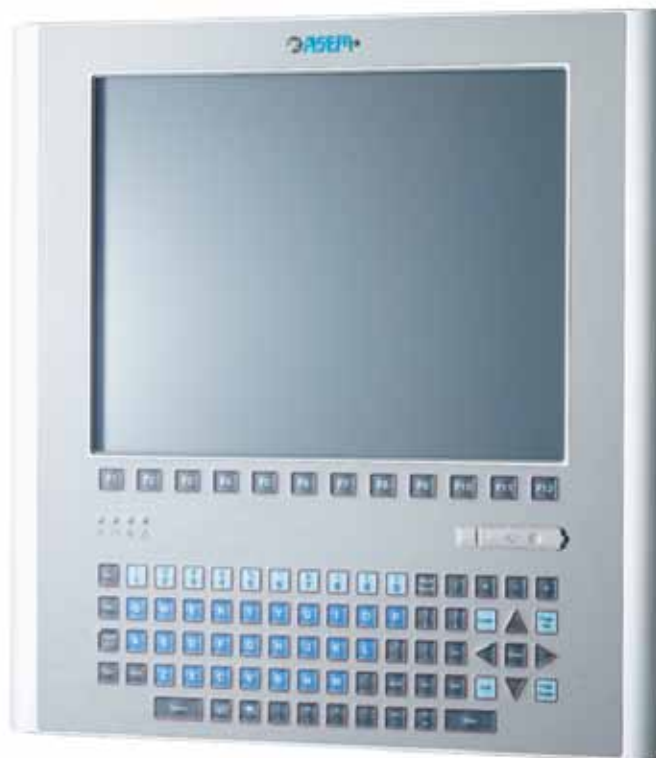
FEATURES PLUS

- ✓ VERSIONE CON TASTIERA ESTESA (FT600-TE)
- ✓ VERSIONE H3 ED H4 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD POSTERIORI OPZIONALI

System characteristics				
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTT F	12,1” Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15” Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17” Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h
Touchscreen	Technology Light transimission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35mIn activations < 1 % Serial Optional		
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB921 Voltages and temperatures monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 370 1,5GHz 400MHz 1MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Perntium M 740 1,73GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Perntium M 760 2GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable		
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 2 x SODIMM module		
Video interfaces	Type	1 x VGA (DB15F)		
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes		
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M		
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse		
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM, Intel 82562EZ		
Alternative	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82573L		
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)		
Compact Flash slots	Type	1 x Type II (external access)		
Mass storage interfaces	Serial Parallel	2 x SATA 1 1.5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)		
Optical device interfaces	Type	H1 -		H3 / H4 / H1-TE / H3-TE / H4-TE 1 x FDD, 1 x DVD-RW
Expansion slots	Type <i>alternative</i>	H1 / H1-TE - 1 x PCI, 1 x PCI-e x1 half size on riser card	H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x1 half size on riser card	H4 H4-TE 4 x PCI half size 3 x PCI, 1 x PCI-e x1 half size on riser card
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years		
Buttons, leds and keys	Reset button LEDs	Yes Power, HDD activity, LAN, Alarm fans/temperature		
Electrical characteristics				
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 60W @ FT600 H1, 15", T/S, Pentium M 2GHz, 1GB RAM, CF		
Mechanical characteristics				
Case	Type Material	Panel mount Steel, nickel treatment		
Front panel	Protection Construction Color	IP65 Aluminum with polycarbonate foil Polycarbonate: Pantone 429C		
Keyboard module TE version	Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys		
Measurements mm	H1 12,1” 15” 17” H3 12,1” 15” 17” H4 12,1” 15” 17”	Dimensions (W x H x D) FT600 355 x 270 x 81 425 x 305 x 81 455 x 355 x 81 FT600-TE 360 x 400 x 81 425 x 440 x 81 455 x 485 x 81 FT600 335 x 250 405 x 285 435 x 335 FT600-TE 335 x 250 405 x 285 435 x 335 FT600 335 x 380 405 x 420 435 x 465 FT600-TE 335 x 380 405 x 420 435 x 465 FT600 7,6 9,5 10,5 FT600-TE 7,6 9,5 10,5 FT600 8,8 10,7 11,5 FT600-TE 10,5 12,0 14,0 11,7 13,2 15,2		Weight (Kg) 9,0 11,0 13,0
Enviromental characteristics				
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C		
Humidity	Operation/Storage	80% (non-condensing)		
Warranty & Approvals				
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety		
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)		
Notes				
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others			

FT650 FT650-TE

FT650 è il panel PC con frontale in alluminio dall'elegante design, basato sulla scheda madre ASEM 1021 che supporta i processori Intel® Celeron Dual Core, Pentium Dual Core e i Core® 2 Duo con tecnologia a 45nm. Disponibili con display LCD, anche touchscreen, da 12.1", 15", 17" e 19", i sistemi FT650 si distinguono per l'elevata potenza di calcolo e le funzionalità grafiche. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



FEATURES PLUS

- ✓ INTEL® CORE 2 DUO FINO A 2,5GHZ
- ✓ CHIPSET INTEL® 965GME ED ACCELERATORE GRAFICO INTEL® GMA X3100
- ✓ VERSIONE CON TASTIERA ESTESA (FT650-TE)
- ✓ VERSIONE H3 ED H4 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD POSTERIORI OPZIONALI
- ✓ PANNELLO FRONTALE TRUEFLAT IN ACCIAIO INOX OPZIONALE
- ✓ FT650 ANCHE CON PANNELLO FRONTALE DA 19"

Foto 1: Versione senza tastiera

Foto 2: 4 slot PCI/PCle nella versione H4

Foto 3: Microprocessori Intel®

Core 2 Duo e chipset 965GME

System characteristics									
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTT F	12,1" Color LCD TFT 800 x 600 (SVGA) 256K 0,307 x 0,307mm CCFL 2 lamps 400cd/m2 500:1 120° H, 100° V 60000h	15" Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 4 lamps 450cd/m2 400:1 160° H, 140° V 50000h	17" Color LCD TFT 1280 x 1024 (SXGA) 16M 0,264 x 0,264mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V 50000h	19" Color LCD TFT 1280 x 1024 (SXGA) 16M 0,294 x 0,294mm CCFL 2 lamps 300cd/m2 1000:1 160° H, 160° V -				
Touchscreen	Technology Light transmission Lifetime Linearity deviation Interface Glass Film Glass	5 wires – analog - resistive 80% ±2% 35mIn activations < 1 % Serial Optional							
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB1021 Voltages and temperatures monitor Time programmable							
CPU	Processor FSB Cache Socket Chipset	Intel® Pentium dual core T4400 2,2GHz 800MHz 1MB L2 Socket P Intel® 965GME + ICH8M	Intel® Core 2 Duo T6400 2GHz 800MHz 2MB L2 Socket P Intel® 965GME + ICH8M	Intel® Core 2 Duo T9300 2,5GHz 800MHz 6MB L2 Socket P Intel® 965GME + ICH8M					
Graphic	Controller Memory	GMA X3100 integrated in Intel® 965GME Shared – up to 256MB system selectable							
System memory	Type Size Socket	DDR2 PC5300 1 GB, 2 GB, 4GB 2 x SODIMM module							
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536QXGA 60Hz) , 1 x DVI-D (single link – max resolution 1600x1200 UXGA)							
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No							
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes							
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M							
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse							
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82566MM							
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected), 2 x USB 2.0 (internal pin strip, host port, protected) Up to 480Mbit/s (high speed)							
Compact Flash slots	Type	1 x Type II (external access)							
Mass storage interfaces	Serial Parallel	3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot)							
Optical device interfaces	Type	H1 -	H3 / H4 / H1-TE / H3-TE / H4-TE 1 x FDD,1 x DVD-RW						
Expansion slots	Type <i>alternative</i>	H1 / H1-TE - -	H3 / H3-TE 2 x PCI half size 1 x PCI, 1 x PCI-e x4 half size on riser card						
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years	3 x PCI, 1 x PCI-e x4 half size on riser card 2 x PCI, 1 x PCI-e x4, 1 x PCI-e x1 half size on riser card						
Buttons, leds and keys	Reset button LEDs	Yes Power, HDD activity, LAN, Alarm fans/temperature							
Electrical characteristics									
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (<i>optional</i>) 65W @ FT650 H1, 15", T/S, Core 2 Duo 2,4GHz, 1GB RAM, CF							
Mechanical characteristics									
Case	Type Material	Panel mount Steel, nickel treatment							
Front panel (note 2)	Protection Construction Color	IP65 Aluminum with polycarbonate foil PANTONE 429C	IP66K Stainless Steel True Flat with polyester foil RAL 7035						
Keyboard module TE version	Type Layout Function keys	Membrane, alphanumeric US-International F1-F12, directions and control keys							
Measurements mm	H1	Dimensions (W x H x D) FT650 355 x 270 x 81 425 x 305 x 81 455 x 355 x 81 490 x 388 x 91 FT650-TE 360 x 400 x 81 425 x 440 x 81 455 x 485 x 81 -		Stainless Steel - 455 x 355 x 81 490 x 388 x 91	Cutout (W x H) FT650 335 x 250 405 x 285 435 x 335 470 x 368 FT650-TE 335 x 380 405 x 420 435 x 465 -		Weight (Kg) FT650 6,0 7,9 8,9 9,9 FT650-TE 9,0 11,0 13,0 -		
	H3	355 x 270 x 137 425 x 305 x 137 455 x 355 x 137 490 x 388 x 147 360 x 400 x 137 425 x 440 x 137 455 x 485 x 137 -		455 x 355 x 137 490 x 388 x 147	335 x 250 405 x 285 435 x 335 470 x 368 335 x 380 405 x 420 435 x 465 -		7,6 9,5 10,5 11,5 8,8 10,7 11,5 12,5 10,5 12,0 14,0 -		
	H4	355 x 270 x 175 425 x 305 x 175 455 x 355 x 175 490 x 388 x 185 360 x 400 x 175 425 x 440 x 175 455 x 485 x 175 -		455 x 355 x 175 490 x 388 x 185	335 x 250 405 x 285 435 x 335 470 x 368 335 x 380 405 x 420 435 x 465 -		8,8 10,7 11,5 12,5 11,7 13,2 15,2 -		
Enviromental characteristics									
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C							
Humidity	Operation/Storage	80% (non-condensing)							
Warranty & Approvals									
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety							
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)							
Notes									
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others								
2	With stainless steel front panel, touchscreen is mandatory and have no USB port on the front								

PANEL PC

Inox true flat front panel

Attraverso un particolare processo costruttivo è possibile realizzare pannelli frontali completamente piatti dotati di touch-screen e protezione IP66K.

Una sottile pellicola in poliestere è incollata sul touch-screen e sul frontale in acciaio, proteggendo il sensore anche durante la pulizia. In particolare, i Panel PC con il frontale in acciaio INOX TRUE FLAT soddisfano le normative richieste nei mercati farmaceutico ed alimentare e pertanto non dispongono di porte USB sul frontale.



Foto 1: Dettaglio pannello

Foto 2: Led di power-on integrato nell'estetica

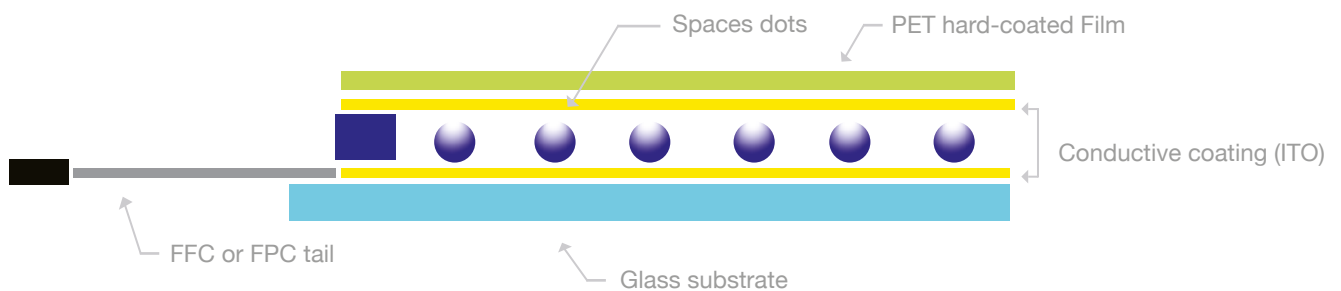
Touchscreen Glass-Film -Glass technology

L'opzione Glass-Film-Glass (GFG) per touchscreen 12", 15" e 17" è disponibile per la maggior parte dei panel PC e dei monitor presenti a catalogo.

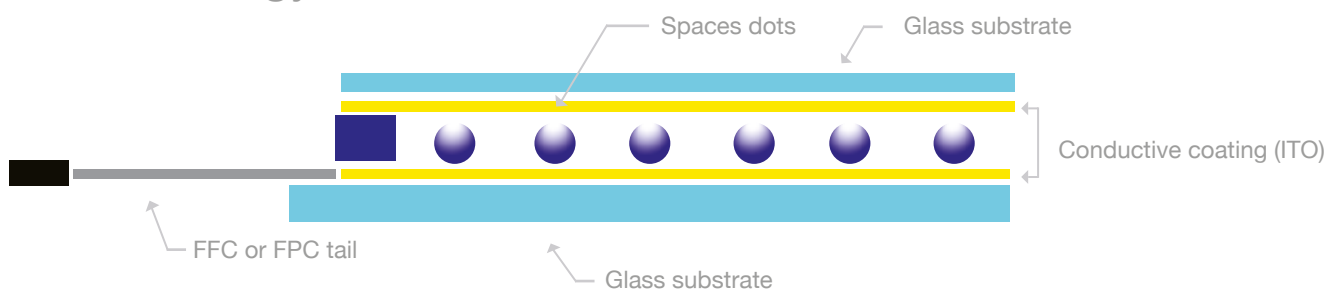
Nei touchscreen GFG è presente sulla superficie touch un film aggiuntivo di vetro sottile che garantisce una maggiore resistenza ai graffi e alla pulizia dei prodotti.



Standard technology



GFG technology





Box PC Fanless

Sistemi box PC basati su processori ATOM, Celeron ULV e Core 2 Duo ULV per installazione a parete o a guida DIN, progettati per rispondere alle specifiche esigenze del mercato dell'automazione industriale.

Box PC Performance

Sistemi box PC basati su processori Pentium M e Core 2 Duo per installazione a parete o a guida DIN, che garantiscono potenza di calcolo e capacità grafiche elevate.

PRODUCT FAMILY SELECTOR

Box PC Fanless

	MOUNTING	PROCESSORS	SLOTS
			
SMARTBOX	DIN RAIL WALL	LX800	MiniPCI
B-ONE	DESK WALL DIN RAIL	ATOM	MiniPCI
PB300 PB300-E	WALL DIN RAIL	ATOM	MiniPCI
PB1200	DIN RAIL WALL	CeIM	PC/104Plus PCI
PB500	DIN RAIL WALL	CeIM	PCI PCIe
PB550	DIN RAIL WALL	C2D	PCI PCIe

Box PC Performance

	MOUNTING	PROCESSORS	SLOTS
			
PB1300	DIN RAIL WALL	CeIM PM	PC/104Plus PCI
PB600	DIN RAIL WALL	CeIM PM	PCI PCIe
PB650	DIN RAIL WALL	Cel C2D	PCI PCIe

Alu: alluminio | Inox: acciaio inossidabile true flat | Plastic: plastica con polycarbonato | Desk: montaggio desktop | WALL: montaggio a parete | DIN RAIL: montaggio a guida DIN | VESA: VESA 75/100 compatibile | ROLEC: Taraplast compatibile | RITTAL: serie CP-S compatibile | PXA: Intel® PXA270 | LX800: Geode LX800 | ATOM: Intel®ATOM Z5XXP | Cel: Intel® Celeron | CeIM: Intel® Celeron M | P: Intel® Pentium | PM: Intel® Pentium M | P4: Intel® Pentium 4 | C2D: Intel® Core 2 Duo | C2Q: Intel® Core 2 Quad | MiniPCI: MiniPCI bus | PC/104Plus: PC/104Plus

POWER SUPPLY	O.S.	PAGE
		
12VDC 24VDC	CE5 CE6 WES XP Pro	60
24VDC 220VAC	CE6 WES W7	62
24VDC	CE6 WES W7	64
24VDC UPS	CE5 CE6 WES XP Pro	66
24VDC 220VAC	WES XP Pro	68
24VDC 220VAC	WES XP Pro	70

POWER SUPPLY	O.S.	PAGE
		
24VDC UPS	CE5 CE6 WES XP Pro	72
24VDC 220VAC	WES XP Pro	74
24VDC 220VAC	WES XP Pro W7	76

bus, PCI compatibile | PCI: PCI bus | PCIe: PCI Express bus | AGP: AGP bus | UPS: gruppo di continuità | RID: alimentatore ridondato | CE5: Microsoft® Windows CE 5.0 | CE6: Microsoft® Windows CE 6.0 | WEC7 con: Microsoft® Windows Embedded Compact 7 | WES: Microsoft® Windows Embedded Standard | XP Pro: Microsoft® Windows XP PRO Sp3 | W7: Microsoft® Windows Seven Professional FES 32/64bit | Res 4: touch screen resistivo 4 fili | Res 5: touch screen resistivo 5 fili | GFG: touch screen Glass Film Glass

SMARTBOX

Il BOX PC fanless SMARTBOX è il sistema altamente integrato che combina ridotti consumi, dimensioni compatte ed un set completo di interfacce di comunicazione. Utilizza Compact Flash ed SSD per l'archiviazione dati e consente l'installazione delle schede di comunicazione NETCore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.


FANLESS

DISKLESS

DIN RAIL
WALL

LX800

256MB
512MB
1GB

MiniPCI

12VDC
24VDC

CE5
CE6
WES
XP Pro


Foto 1: Schede di comunicazione per fieldbus industriali

Foto 2: Slot per Compact Flash

Foto 3: 2 slot MiniPCI

FEATURES PLUS

- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ DIMENSIONI COMPATTE
- ✓ PERFETTO PER SUPERVISIONE E CONTROLLO DI PICCOLI IMPIANTI
- ✓ 2 CF PER SISTEMA OPERATIVO ED ARCHIVIO DATI
- ✓ 2 SLOT MINIPCI PER SCHEDE AGGIUNTIVE

System characteristics			
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB831-V Temperature monitor Time programmable	
CPU	Processor Cache Socket	AMD LX800 500MHz 128KB L2 Soldered on board	
Graphic	Controller Memory	Integrated on board Shared - 2MB÷128MB system selectable	
System memory	Type Size Socket	DDR PC2700 256MB, 512 MB, 1 GB 1 x SODIMM module	
Video interfaces	Type	1 x VGA (DB15F)	
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45) Intel 82551QM	
USB interfaces	Type Transfer rate	3 x USB 2.0 (rear, TYPE-A, host port) Up to 480Mbps (high speed)	
Compact Flash slots	Type <i>Optional</i>	1 x Type II (external access), 1 x Type II (internal access)	
Mass storage interfaces	Parallel	1 x ATA/66 Master/Slave	
Expansion slots	Type	2 x MiniPCI type III	
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years	
Buttons, leds and keys	Reset buttons LEDs	System / Watch-dog Power	
Electrical characteristics			
Power supply	Type Input voltage Power consumption	AT, integrated on board, auto ranging 9÷36 VDC 6W basic configuration (without add-on)	
Mechanical characteristics			
Case	Type Material	Wall and DIN rail mount Steel, zinc galvanization	
Measurements mm		Dimensions (W x H x D) 221 x 163,1 x 61,1	Weight (Kg) 1,3
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +50°C, 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker	
	Immunity Safety	Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
UL	Marks Safety Certificate N°	 Conforms to UL-60950-1 – Information technology Equipment - Safety 2090306-E315863	
Warranty	Management	By ASEM headquarters	
	Standard Extended	12 months 18 / 24 / 36 months (<i>optional</i>)	

B-ONE 300-D

B-ONE 300-WM

B-ONE 300 è il nuovo fanless box PC con dissipatore in alluminio basato sulla scheda madre ASEM 972 con microprocessori Intel® Atom™ Z5XXP fino a 1.6GHz dotati della funzionalità 'Hyper Threading Technology'. L'espandibilità, nella versione WME, è garantita da due slot MiniPCI, sui quali è possibile installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: Versione per montaggio a parete (B-one 300 WM)

Foto 2: Connettori posteriori

Foto 3: Microprocessori Intel® ATOM Z5XXP

FEATURES PLUS

- ✓ MICROPROCESSORI INTEL® ATOM Z510P E Z530P FINO A 1.6GHZ
- ✓ DIMENSIONI COMPATTE
- ✓ MONTAGGIO A PARETE O A GUIDA DIN OPZIONALE (BONE 300 WM)
- ✓ 2 SLOT MINIPCI PER SCHEDE AGGIUNTIVE (B-ONE 300 WME)

System characteristics			
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB972 Temperature monitor Time programmable	
CPU (note1)	Processor FSB Cache Chipset	Intel® ATOM Z510P 1.1GHz 400MHz 512KB L2 Intel® US15WP	Intel® ATOM Z530P 1.6GHz 533MHz 512KB L2 Intel® US15WP
Graphic	Controller Memory	GMA500 integrated in Intel® US15WP Shared – 1MB, 4MB, 8MB system selectable	
Video interfaces	Type <i>alternative</i>	1 x VGA (max resolution) 1 x DVI-I (single link – max resolution 1600x1200 UXGA)	
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module	
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max DC	
 Optional note 2	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Ethernet interfaces	Type Controller Features	2 x 10/100/1000Mbps (RJ45) Intel 82574L Jumbo Frames and magic packet (Wake on LAN support)	
USB interfaces	 Type Transfer rate	 B-one 300 D 4 x USB 2.0 (rear, TYPE-A, host port, 2 on the front) Up to 480Mbps (high speed)	 B-one 300 W / B-one 300 WME 2 x USB 2.0 (rear, TYPE-A, host port) Up to 480Mbps (high speed)
 Optional note 1	Type Transfer rate	2 x USB 2.0 (rear, TYPE-A, host port) Up to 480Mbps (high speed)	
Compact Flash slots	Type	1 x Type I (external access)	
Mass storage interfaces	Parallel Serial	1 x ATA/66 Master/Slave 1 x SATA 2 3Gbps Master/Slave	
Expansion slots	 Type	 B-one 300 D / B-one 300 WM -	 B-one 300 WME 2 x MiniPCI
Battery	Type Removable Lifetime	Coin (CR2032 3V) Yes 2 years	
Buttons, leds and keys	Reset buttons LEDs Switches	System reset / Watch-dog Power, HDD, system fail, watch-dog Power-on (only on B-one D version)	
Electrical characteristics			
Power supply	Type Input voltage Power consumption	 B-one 300 D ATX with push buttorn, integrated on board, auto ranging 220 VAC with external power supply 30W @ ATOM 1.1GHz 1GB RAM, 1GB CF, No USB, no add-on	 B-one 300 W / B-one 300 WME AT, integrated on board, auto ranging 18÷36 VDC 35W @ B-One 300 WME ATOM 1.6GHz 512MB RAM
Mechanical characteristics			
Case	Type Material Top enclosure	 B-one 300 D Desktop Aluminium Extruded aluminium black anodization	 B-one 300 W / B-one 300 WE Panel or DIN rail mount Steel, painted Extruded aluminium black anodization
Measurements mm		Dimensions (W x H x D) 215 x 148 x 62	Weight (Kg) 1.8
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	B-One 300 WME available only with CPU ATOM Z530P 1.6GHz		
2	RS-232/422/485 and optional 2 x USB ports have to be ordered together		

PB300 PB300-E

PB300 è il nuovo fanless box PC per installazione a parete o a guida DIN basata sulla scheda madre ASEM 972 con microprocessori della famiglia Intel® Atom™ Z5XXP dotati della funzionalità 'Hyper Threading Technology'. La versione PB300-E (Espansa) ha 2 slot MiniPCI, sui quali è possibile installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: Meccanica completamente chiusa

Foto 2: 2 slot MiniPCI

Foto 3: Processori Intel® Atom

FEATURES PLUS

- ✓ MICROPROCESSORI INTEL® ATOM Z510P E Z530P FINO A 1,6GHZ
- ✓ MECCANICA COMPLETAMENTE CHIUSA OPZIONALE
- ✓ 2 SLOT MINIPCI PER SCHEDE AGGIUNTIVE (PB300-E)
- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ 2 PORTE GIGABIT ETHERNET CON WAKE-ON-LAN E JUMBO FRAMES

System characteristics			
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB972 Temperature monitor Time programmable	
CPU (note 1)	Processor FSB Cache Chipset	Intel® ATOM Z510P 1.1GHz 400MHz 512KB L2 Intel® US15WP	Intel® ATOM Z530P 1.6GHz 533MHz 512KB L2 Intel® US15WP
Graphic	Controller Memory	GMA500 integrated in Intel® US15WP Shared – 1MB, 4MB, 8MB system selectable	
Video interfaces	Type	1 x VGA (DB15F - max resolution 1280x1024 SXGA) , optional 1 x DVI-I (single link – max resolution 1600x1200 UXGA)	
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module	
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Optional	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Ethernet interfaces	Type Controller Wake-on-Lan	2 x 10/100/1000Mbps (RJ45) Intel 82574L Yes	
USB interfaces	Type Transfer rate	2 x USB 2.0 (rear, TYPE-A, host port), optional 2 x USB 2.0 (rear, TYPE-A, host port) Up to 480Mbps (high speed)	
Compact Flash slots	Type	1 x Type I (external access)	
Mass storage interfaces	Serial	1 x SATA II 3Gb/s Master/Slave	
Expansion slots	Type	2 x MiniPCI	
Battery	Type Removable Lifetime	Coin (CR2032 3V) Yes 2 years	
Buttons, leds and keys	Reset buttons LEDs	System reset / Watch-dog Power, HDD, Watchdog, System error	
Electrical characteristics			
Power supply	Type Input voltage Power consumption	AT, integrated on board, auto ranging 18÷32 VDC 6.7W @ PB300 ATOM 1.1GHz 1GB RAM 1GB CF, no add-on, no USB 25W fully loaded	
Mechanical characteristics			
Case	Type Material Top enclosure	Panel mount and optional kit for DIN rail mount Steel, zinc galvanization With holes. Completely closed as optional	
Measurements mm		Aluminium (W x H x D) 220 x 150 x 50	Weight (Kg) 1,9
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +50°C without HDD, , 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	PB300-E version is available only with ATOM Z530P 1.6GHz		

PB1200

PB1200 è un BOX PC fanless per montaggio a parete o guida DIN con cellula in acciaio nichelato, basato su architettura Intel® con chipset 915 GME, controller video 900 GMA e processori Celeron M ULV fino a 1GHz. L'espandibilità è garantita da uno slot PCI, su cui si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: Modulo UPS opzionale

Foto 2: Schede di comunicazione per fieldbus industriali

Foto 3: Uno slot PCI

FEATURES PLUS

- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ 1 SLOT PCI/PC104PLUS PER SCHEDE AGGIUNTIVE
- ✓ UPS OPZIONALE
- ✓ SALVATAGGIO DATI SU SSD/CF/HDD CON WAKE-ONLAN

System characteristics			
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB951 Voltages and temperatures monitor Time programmable	
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 600MHz 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Celeron M 1GHz (373) 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable	
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536 QXGA)	
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module	
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes	
Parallel interfaces Optional (note2)	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M	
PS/2 interfaces	Type	1 x PS/2 Keyboard / Mouse	
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM - Intel 82562EZ	
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)	
Compact Flash slots	Type	1 x Type I (internal access), 1 x Type II (external access)	
Mass storage interfaces	Parallel Serial	1 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)	
Expansion slots	Type	1 x PC/104 Plus or 1 x PCI half size	
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years	
Buttons, leds and keys	Reset buttons LEDs	System / Watch-dog Power, HDD, system fail, watch-dog	
Electrical characteristics			
Power supply	Type Input voltage Power consumption UPS	AT, integrated on board, auto ranging 18÷36 VDC 19W @ PB1200 Celeron M 600MHz 512MB RAM Optional	
Mechanical characteristics			
Case	Type Material	Wall and DIN rail mount Steel, nickel treatment	
Measurements mm (note 2)		Dimensions (W x H x D) 252 x 190 x 90	Weight (Kg) 2,0
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
UL	Marks Safety Certificate N°	 Conforms to UL-60950-1 – Information technology Equipment - Safety 2090306-E315863	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	RS-232/422/485 standard and optoisolated can be installed one alternative to the other		
2	SL (SLIM) version is 73.2mm depth – parallel interface not available		

PB500

I sistemi fanless della famiglia PB500, con cellula PC di acciaio nichelato e installabili a parete o a guida DIN, utilizzano i processori Intel® Celeron M ULV a bassissimo consumo. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: 2 slot PCI/PCIe nella versione H3

Foto 2: Lettori ottici opzionali

Foto 3: 3 porte seriali

FEATURES PLUS

- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD OPZIONALI

System characteristics			
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB921 Voltages and temperatures monitor Time programmable	
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 373 ULV 1GHz 400MHz 512KB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable	
Video interfaces	Type	1 x VGA (DB15F)	
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 2 x SODIMM module	
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes	
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M	
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse	
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM, Intel 82562EZ	
Alternative	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82562EZ	
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)	
Compact Flash slots	Type	1 x Type II (external access)	
Mass storage interfaces	Serial Parallel	H1 2 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)	H3 2 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots) 1 x FDD, 1 x DVD-RW
Expansion slots	Type <i>alternative</i>	H1 - -	H3 2 x PCI half size 1 x PCI, 1 x PCI-e x1 half size on riser card
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years	
Buttons, leds and keys	Buttons LEDs	System reset / Watch-dog reset Power, HDD activity, LAN, Alarm fans/temperature	
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 20W @ PB500 H1 Celeron M 1GHz 1GB RAM	
Mechanical characteristics			
Case	Type Material	Wall and DIN rail mount Steel, nickel treatment	
Measurements mm	H1 H3	Weight (Kg) 4,8 6,4	
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others		

PB550

PB550 è il box PC fanless per installazione a parete o guida DIN, basato sulla scheda madre ASEM 1021 che supporta i processori Intel® Core® 2 Duo Ultra Low Voltage con tecnologia a 65nm. I sistemi PB550 garantiscono elevate prestazioni, basso consumo e alta dissipazione di calore. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.


FANLESS

DISKLESS


DIN RAIL

WALL



C2D



1GB

2GB

4GB



PCI

PCIe



24VDC

220VAC



WES

XP Pro



Foto 1: 2 slot PCI/PCIe nella versione H3

Foto 2: Lettori ottici opzionali

Foto 3: Fieldbus industriali

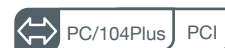
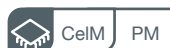
FEATURES PLUS

- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ INTEL®CORE 2 DUO ULV U7500 1,06GHZ
- ✓ CHIPSET INTEL® 965GME CON ACCELERATORE GRAFICO INTEL® GMA X3100
- ✓ VERSIONE H3 PER ESPANSIONI PCI/PCIe
- ✓ DVD/FDD OPZIONALI
- ✓ USCITA VIDEO DVI E VGA

System characteristics			
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB1021 Voltages and temperature monitor Time programmable	
CPU	Processor FSB Cache Socket Chipset	Intel® Core 2 Duo ULV U7500 1,06GHz 533MHz 2MB L2 Soldered on board Intel® 965GME + ICH8M	
Graphic	Controller Memory	GMA X3100 integrated in Intel® 965GME Shared – up to 256MB system selectable	
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536QXGA 60Hz) , 1 x DVI-D (single link – max resolution 1600x1200 UXGA)	
System memory	Type Size Socket	DDR2 PC5300 1 GB, 2 GB, 4GB 2 x SODIMM module	
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes	
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M	
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse	
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82566MM	
USB interfaces	Type Transfer rate	2 x USB 2.0 (internal, pin strip, host port, protected) 2 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)	
Compact Flash slots	Type	1 x Type II (external access)	
Mass storage interfaces	Parallel Serial	H1 3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot)	H3 3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot) 1 x FDD, 1 x DVD-RW
Expansion slots	Type <i>alternative</i>	H1 - -	H3 2 x PCI half size 1 x PCI, 1 x PCI-e x4 half size on riser card
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years	
Buttons, leds and keys	Reset button LEDs	Yes Power, HDD activity, watch-dog	
Electrical characteristics			
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 25W @PB550 H1 Core 2 Duo 1.06GHz 1GB RAM	
Mechanical characteristics			
Case	Type Material	Wall and DIN rail mount Steel, nickel treatment	
Measurements mm	H1 H3	Dimensions (W x H x D) 370 x 236 x 60,5 370 x 236 x 117	Weight (Kg) 4,8 6,4
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others		

PB1300

PB1300 è l'embedded box PC per installazione a parete o a guida DIN, basato su architettura Intel® con microprocessori della classe Celeron M e Pentium M fino a 2 GHz dotati di ventilazione forzata. L'espandibilità è garantita da uno slot PCI, su cui si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



FEATURES PLUS

- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ 1 SLOT PCI/PC104PLUS PER SCHEDE AGGIUNTIVE
- ✓ 2 PORTE FASTETHERNET
- ✓ PORTA PARALLELA OPZIONALE
- ✓ UPS OPZIONALE
- ✓ USCITA VIDEO VGA
- ✓ SALVATAGGIO DATI SU SSD/CF/HDD CON WAKE-ONLAN

Foto 1: Fieldbus industriali

Foto 2: 1 slot PCI

Foto 3: Processore Intel® Celeron M e Pentium M fino a 2GHz

System characteristics				
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB951 Voltages and temperature monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 373 1,5GHz 400MHz 1MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Pentium M 740 1,73GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Pentium M 760 2GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable		
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536 QXGA)		
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module		
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes		
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M		
PS/2 interfaces	Type	1 x PS/2 Keyboard / Mouse		
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM - Intel 82562EZ		
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)		
Compact Flash slots	Type	1 x Type I (internal access), 1 x Type II (external access)		
Mass storage interfaces	Parallel Serial	1 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)		
Expansion slots	Type	1 x PC/104 Plus or 1 x PCI half size		
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years		
Buttons, leds and keys	Reset button LEDs	System / Watch-dog Power, HDD, system fail, watch-dog		
Electrical characteristics				
Power supply	Type Input voltage Power consumption UPS	AT, integrated on board, auto ranging 18÷36 VDC 40W @ PB1300 Pentium M 2GHz 1GB RAM Optional		
Mechanical characteristics				
Case	Type Material	Wall and DIN rail mount Steel, nickel treatment		
Measurements mm		Dimensions (W x H x D) 252 x 190 x 96-160		Weight (Kg) 2,0
Enviromental characteristics				
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C		
Humidity	Operation/Storage	80% (non-condensing)		
Warranty & Approvals				
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety		
UL	Marks Safety Certificate N°	 Conforms to UL-60950-1 – Information technology Equipment - Safety 2090306-E315863		
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)		
Notes				
1	RS-232/422/485 standard and optoisolated can be installed one alternative to the other			

PB600

I sistemi della famiglia PB600, con cellula PC in acciaio nichelato e installabili a parete o a guida DIN, utilizzano i processori Intel® Celeron M e Pentium M. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: 4 slot PCI/PCIe nella versione H4

Foto 2: Lettori ottici opzionali

Foto 3: Fieldbus industriali

FEATURES PLUS

- ☒ INSTALLAZIONE A PARETE O A GUIDA DIN
- ☒ VERSIONE H3 E H4 PER ESPANSIONI PCI/PCIE
- ☒ DVD/FDD OPZIONALI

System characteristics				
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB921 Voltages and temperature monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 370 1,5GHz 400MHz 1MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Perntium M 740 1,73GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Perntium M 760 2GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable		
Video interfaces	Type	1 x VGA (DB15F)		
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 2 x SODIMM module		
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes		
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M		
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse		
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82573L		
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)		
Compact Flash slots	Type	1 x Type II (external access)		
Mass storage interfaces	Parallel Serial	H1 2 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots)	H3 / H4 2 x SATA 1 1,5Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slots) 1 x FDD,1 x DVD-RW	
Expansion slots	Type <i>alternative</i>	H1 / H1-TE - - 1 x PCI, 1 x PCI-e x1 half size on riser card	H3 2 x PCI half size 3 x PCI, 1 x PCI-e x1 half size on riser card	H4 4 x PCI half size
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years		
Buttons, leds and keys	Reset button LEDs	System / Watch-dog Power, HDD activity, LAN, Alarm fans/temperature		
Electrical characteristics				
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 40W @ PB600 H1 Pentium M 2GHz 1GB RAM		
Mechanical characteristics				
Case	Type Material	Wall and DIN rail mount Steel, nickel treatment		
Measurements mm	H1 H3 H4	Dimensions (W x H x D) 370 x 236 x 60,5 370 x 236 x 117 370 x 236 x 160		Weight (Kg) 4,8 6,4 8,0
Enviromental characteristics				
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C		
Humidity	Operation/Storage	80% (non-condensing)		
Warranty & Approvals				
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety		
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)		
Notes				
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others			

PB650

PB650 è il box PC per installazione a parete o guida DIN, basato sulla scheda madre ASEM 1021 che supporta i processori Intel® Core® 2 Duo con tecnologia a 45 nm e chipset Intel® 965 GME.

I sistemi PB650 si distinguono per l'elevata potenza di calcolo e le funzionalità grafiche. L'espandibilità è garantita da diverse configurazioni di slot PCI/PCIe, sui quali si possono installare le schede di comunicazione ASEM NETcore® X. L'integrazione con la piattaforma software Premium HMI 4 e il SoftPLC CoDeSys permette la realizzazione di applicazioni di supervisione e controllo.



Foto 1: 4 slot PCI/PCIe nella versione H4

Foto 2: Lettori ottici opzionali

Foto 3: Microprocessori Intel Core 2 Duo e chipset 965GME

FEATURES PLUS

- ✓ INSTALLAZIONE A PARETE O A GUIDA DIN
- ✓ MICROPROCESSORI INTEL® CORE 2 DUO FINO A 2,5GHZ
- ✓ CHIPSET INTEL® 965GME CON ACCELERATORE GRAFICO INTEL® GMA X3100
- ✓ VERSIONI H3 ED H4 PER ESPANSIONI PCI/PCIE
- ✓ DVD/FDD OPZIONALI
- ✓ 1 PORTA ETHERNET GIGABIT ED 1 FASTETHERNET
- ✓ USCITA VIDEO DVI E VGA

System characteristics				
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB921 Voltages and temperature monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Pentium dual core T4400 2,2GHz 800MHz 1MB L2 Socket P Intel® 965GME + ICH8M	Intel® Core 2 Duo T6400 2GHz 800MHz 2MB L2 Socket P Intel® 965GME + ICH8M	Intel® Core 2 Duo T9300 2,5GHz 800MHz 6MB L2 Socket P Intel® 965GME + ICH8M
Graphic	Controller Memory	GMA X3100 integrated in Intel® 965GME Shared – up to 256MB system selectable		
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536QXGA 60Hz), 1 x DVI-D (single link – max resolution 1600x1200 UXGA)		
System memory	Type Size Socket	DDR2 PC5300 1 GB, 2 GB, 4GB 2 x SODIMM module		
Serial interfaces	Type UART Transfer rate Optoisolation	2 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes		
Parallel interfaces Optional	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M		
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse		
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM, Intel 82566MM		
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (internal, pin strip, host port, protected) Up to 480Mbit/s (high speed)		
Compact Flash slots	Type	1 x Type II (external access)		
Mass storage interfaces	Serial Parallel	H1 3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot)	H3 / H4 3 x SATA 2 3Gb/s 1 x ATA/100 Master/Slave (dedicated for CF Slot) 1 x FDD, 1 x DVD-RW	
Expansion slots	Type <i>alternative</i>	H1 - - 1 x PCI, 1 x PCI-e x4 half size on riser card	H3 2 x PCI half size 3 x PCI, 1 x PCI-e x4 half size on riser card 2 x PCI, 1 x PCI-e x4, 1 x PCI-e x1 half size on riser card	H4 1 x PCI, 1 x PCI-e x4 half size on riser card
Battery	Type Removable Lifetime	½AA Lithium (3.6V) Yes 20 years		
Buttons, leds and keys	Reset button LEDs	System / Watch-dog Power, HDD activity, LAN, Alarm fans/temperature		
Electrical characteristics				
Power supply	Type Input voltage Power consumption	Auto ranging 110÷230VAC 140W 18÷36 VDC 140W (optional) 45W @ PB650 H1 Core 2 Duo T8300 2GHz 1GB RAM		
Mechanical characteristics				
Case	Type Material	Wall and DIN rail mount Steel, nickel treatment		
Measurements mm	H1 H3 H4	Dimensions (W x H x D) 370 x 236 x 60,5 370 x 236 x 117 370 x 236 x 160		Weight (Kg) 4,8 6,4 8,0
Enviromental characteristics				
Temperature	Operation Storage	0° ÷ +50°C without HDD, 0° ÷ +45°C with HDD -20° ÷ +60°C		
Humidity	Operation/Storage	80% (non-condensing)		
Warranty & Approvals				
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety		
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)		
Notes				
1	RS-232/422/485 standard and optoisolated and parallel port can be installed one alternative to the others			



Vesa PC

I PC VESA sono sistemi compatti, fanless, ergonomici, dal design elegante e si distinguono per la flessibilità d'installazione. Basati su processori ATOM ultra low voltage, sono disponibili con contenitore plastico o in acciaio verniciato con frontale in alluminio.



PRODUCT FAMILY SELECTOR

Vesa PC

		VPK300	VPC15
	LCD	8,4	15
	PROCESSORS	ATOM	ATOM
	SLOTS		MiniPCI
	MOUNTING	VESA	VESA RITTAL ROLEC
	POWER SUPPLY	24VDC	24VDC
	O.S.	CE 6 XPe W7	CE 6 XPe W7
	PAGE	82	84

Alu: alluminio | Inox: acciaio inossidabile true flat | Plastic: plastica con policarbonato | Desk: montaggio desktop | WALL: montaggio a parete | DIN RAIL: montaggio a guida DIN | VESA: VESA 75/100 compatibile | ROLEC: Taraplus compatibile | RITTAL: serie CP-S compatibile | PXA: Intel® PXA270 | LX800: Geode LX800 | ATOM: Intel®ATOM Z5XXP | Cel: Intel® Celeron | CelM: Intel® Celeron M | P: Intel® Pentium | PM: Intel® Pentium M | P4: Intel® Pentium 4 | C2D: Intel® Core 2 Duo | C2Q: Intel® Core 2 Quad | MiniPCI: MiniPCI bus | PC/104Plus: PC/104Plus bus, PCI compatibile | PCI: PCI bus | PCIe: PCI Express bus | AGP: AGP bus | UPS: gruppo di continuità | RID: alimentatore ridondato | CE5: Microsoft® Windows CE 5.0 | CE6: Microsoft® Windows CE 6.0 | WEC7 con: Microsoft® Windows Embedded Compact 7 | WES: Microsoft® Windows Embedded Standard | XP Pro: Microsoft® Windows XP PRO Sp3 | W7: Microsoft® Windows Seven Professional FES 32/64bit | Res 4: touch screen resistivo 4 fili | Res 5: touch screen resistivo 5 fili | GFG: touch screen Glass Film Glass



VPK300

VPK300 è un sistema con display touchscreen da 8,4" basato su processori Intel® ATOM con telaio in resina termoplastica ad attacco VESA. VPK300, in combinazione con il software di visualizzazione Premium HMI 4, rappresenta la perfetta unione tra prestazioni e dimensioni compatte per soddisfare i requisiti delle applicazioni di test&misura e di desk visualization.



FANLESS **DISKLESS**

8,4" ATOM Res 4 512MB 1GB Plastic VESA 24VDC CE6 XPe W7

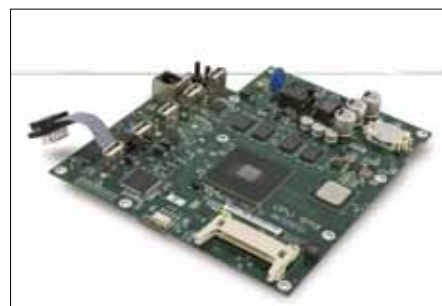


Foto 1: Connessioni posteriori

Foto 2: Contenitore plastico con supporto da tavolo

Foto 3: Microprocessori Intel ATOM

FEATURES PLUS

- ✓ MICROPROCESSORI INTEL® ATOM Z510P E Z530P LOW POWER FINO A 1,6GHZ
- ✓ DIMENSIONI COMPATTE
- ✓ FINO A 2 PORTE GIGABIT ETHERNET

System characteristics			
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	8,4" Color LCD TFT 800 x 600 (SVGA) 256K 0,213 x 0,213mm Sidelight LEDs 400cd/m2 400:1 120° H, 100° V 70.000h	
Touchscreen	Technology Light transmission MTBF Linearity deviation Interface	4 wires – analog - resistive 80% ±5% @ 550nm 35mln touches < 1 % Serial	
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB973 Temperature monitor Time programmable	
CPU	Processor FSB Cache Chipset	Intel® ATOM Z510P 1.1GHz 400MHz 512KB L2 Intel® US15WP	Intel® ATOM Z530P 1.6GHz 533MHz 512KB L2 Intel® US15WP
Graphic	Controller Memory	GMA500 integrated in Intel® US15WP Shared – 1MB, 4MB, 8MB system selectable	
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB Soldered on board	
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Ethernet interfaces	Type Controller	1 x 10/100/1000Mbps (RJ45) Intel 82574L	
Optional	Type Transfer rate	1 x 10/100/1000Mbps (RJ45) Intel 82574L	
USB interfaces	Type Transfer rate	5 x USB 2.0 (rear, TYPE-A, host port), 1 x USB 2.0 (internal, TYPE-A, host port), 1 x USB 2.0 (internal for USB dongle key) Up to 480Mbit/s (high speed)	
Compact Flash slots	Type	1 x Type I internal access	
Mass storage interfaces	Paralle	1 x ATA/66 Master (dedicated for CF Slot)	
Battery	Type Removable Lifetime	Coin (CR2032 3V) Yes 2 years	
Electrical characteristics			
Power supply	Type Input voltage Max current Power consumption	Integrated on board, auto ranging 18÷36 VDC 1,6 A 20W basic configuration (with 5USB peripherals)	
Mechanical characteristics			
Case	Type Material Protection Color	For VESA 75 arm mounting Plastic IP65 frontal Grey	
Measurements mm	8,4"	Dimensions (W x H x D) 250 x 184 x 48	Weight (Kg) 1,8
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +45°C -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	

VPC15

Il sistema VPC15 è l'embedded VESA PC fanless che utilizza il processore low power Intel® Atom™ della serie Z5XXP fino ad 1.6GHz dotato della funzionalità 'Hyper Threading Technology'. Disponibile con display LCD da 15", anche touchscreen, in soli 60mm presenta una perfetta integrazione estetica e funzionale con la tastiera esterna e le pulsantiere laterali. Mediante le schede di comunicazione ASEM NETcore® X e l'integrazione delle piattaforme software Premium HMI 4 e SoftPLC CoDeSys, è possibile realizzare applicazioni di supervisione e controllo.



Foto 1: Connessioni posteriori

Foto 2: Moduli laterali opzionali con predisposizione per pulsantiera

Foto 3: Sistema di montaggio semplice

FEATURES PLUS

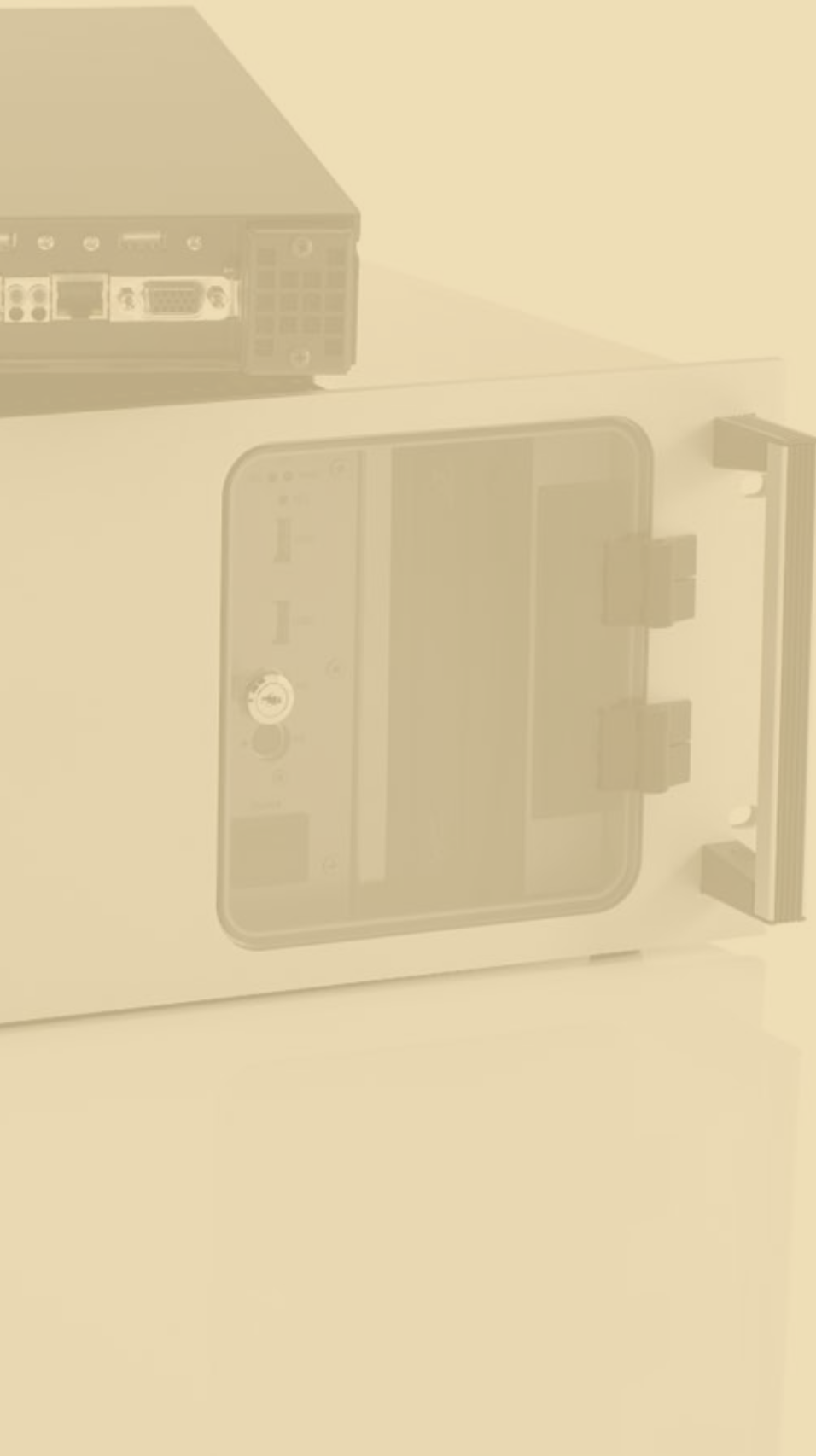
- ✓ SCHEDE FIELDBUS OPZIONALI
- ✓ TASTIERA E MODULI LATERALI OPZIONALI
- ✓ COMPATIBILITA' CON SISTEMI VESA 75/100, RITTAL CP-S, ROLEC TARAPLUS

System characteristics			
Display	Size Type Resolution Colors Pixel pitch Backlight Luminance Contrast Viewing angle MTTF	15" Color LCD TFT 1024 x 768 (XGA) 16M 0,297 x 0,297mm CCFL 2 lamps 400cd/m2 500:1 160° H, 140° V 50000h	
Touchscreen	Technology Light transmission MTBF Linearity deviation Interface	5 wires – analog - resistive 80% ±2% 35mln activations < 1 % Serial	
Motherboard	Model HW monitor Watch-dog	All-in-one, ASEM MB991/A Temperature monitor Time programmable	
CPU	Processor FSB Cache Chipset	Intel® ATOM Z530P 1.6GHz 533MHz 512KB L2 Intel® US15WP	
Graphic	Controller Memory	GMA500 integrated in Intel® US15WP 1-4-8MB shared	
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 1 x SODIMM module	
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No	
Optional (note 1)	Type UART Transfer rate Optoisolation	1 x RS-232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No / Yes	
Ethernet interfaces	Type Controller	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM - Intel 82574L	
USB interfaces	Type Transfer rate	2 x USB 2.0 (rear, TYPE-A, host port, protected), 2 x USB 2.0 (front, TYPE-A, host port, protected) Up to 480Mbit/s (high speed)	
Compact Flash slots	Type	1 x Type II (internal access – remove rear cover before)	
Mass storage interfaces	Parallel	1 x ATA/66 Master/Slave	
Expansion slots	Type	2 x MiniPCI	
Battery	Type Removable Lifetime	Coin (CR2032 3V) Yes 5 years	
Buttons, leds and keys	Reset button LEDs frontal LEDs rear	System / Watch-dog Power / HDD activity Power / HDD activity / Watch-dog / Alarms	
Side Modules Optional	Position Buttons and leds Labelling	Left, Right, Left&Right Predisposition 2 x 4 matrix, holes Ø22 Customizable	
Keyboard Module Optional	Layout Predisposition	Compact, 86 keys, US-international, anti-glare protection emergency stop button, hole Ø22	
Electrical characteristics			
Power supply	Type Input voltage Power consumption	Integrated on board, auto ranging 18-36 VDC 25W @ VPC15 15" ATOM Z530P 1.6GHz T/S 512MB RAM	
Mechanical characteristics			
Case	Type Material Color	For VESA 75-100 / RITTAL CP-S / ROLEC TARAPLUS arm mounting Steel painted RAL 7035 / 7024	
Front panel	Protection Construction Color	IP65 Aluminum alloy with polycarbonate foil RAL 7035	
Measurements mm	VPC Side module Keyboard	Dimensions (W x H x D) 400 x 335 x 60 150 x 335 x 60 400 x 180 x 37	Weight (Kg) 9,0 2,0 3,0
Enviromental characteristics			
Temperature	Operation Storage	0° ÷ +45°C -20° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)	
Notes			
1	RS-232/422/485 standard and optoisolated can be installed one alternative to the other		



Rack PC

Soluzioni 4U a rack 19" con un'ampia scelta in termini di configurazioni, processori, motherboard e slot di espansione. I processori Intel Core 2 Quad garantiscono un'elevata potenza di calcolo ed elevate performance per applicazioni di data storage.



PRODUCT FAMILY SELECTOR

Rack PC

		PR4040	PR4044	MERCURY 901
	DIMENSIONS	4U	4U	4U
	PROCESSORS	P4	P C2D C2Q	CeIM PM
	MOTHERBOARD	ATX	ATX	Passive bus
	RAM	512MB 1GB 2GB	1GB 2GB 4GB	512MB 1GB 2GB
	SLOTS	ISA PCI AGP	PCI PCIe	PCI ISA PICMG
	POWER SUPPLY	220VAC RID	220VAC RID	220VAC
	O.S.	XP Pro	XP Pro	XP Pro
	PAGE	89	90	91

Alu: alluminio | Inox: acciaio inossidabile true flat | Plastic: plastica con polycarbonato | Desk: montaggio desktop | WALL: montaggio a parete | DIN RAIL: montaggio a guida DIN | VESA: VESA 75/100 compatibile | ROLEC: Taraplast compatibile | RITTAL: serie CP-S compatibile | PXA: Intel® PXA270 | LX800: Geode LX800 | ATOM: Intel®ATOM Z5XXP | Cel: Intel® Celeron | CeIM: Intel® Celeron M | P: Intel® Pentium | PM: Intel® Pentium M | P4: Intel® Pentium 4 | C2D: Intel® Core 2 Duo | C2Q: Intel® Core 2 Quad | MiniPCI: MiniPCI bus | PC/104Plus: PC/104Plus bus, PCI compatibile | PCI: PCI bus | PCIe: PCI Express bus | AGP: AGP bus | UPS: gruppo di continuità | RID: alimentatore ridondato | CE5: Microsoft® Windows CE 5.0 | CE6: Microsoft® Windows CE 6.0 | WEC7 con: Microsoft® Windows Embedded Compact 7 | WES: Microsoft® Windows Embedded Standard | XP Pro: Microsoft® Windows XP PRO Sp3 | W7: Microsoft® Windows Seven Professional FES 32/64bit | Res 4: touch screen resistivo 4 fili | Res 5: touch screen resistivo 5 fili | GFG: touch screen Glass Film Glass

Rack PC

PR4040

PR4040 è un PC industriale per montaggio a rack 19" (4U) con contenitore in acciaio nichelato e scheda madre in formato ATX con microprocessore Intel® Pentium 4 da 3GHz. Lo sportello frontale protegge il cruscotto che può contenere fino a 3 drive da 5.25" ed un vano da 3.5". Gli slot di espansione possono utilizzare schede ISA, PCI ed AGP.



System characteristics		
Motherboard	Model HW monitor Watch-dog	ATX format, IMBA-8650GR-R10 Temperature monitor Time programmable
CPU	Processor FSB Cache Socket Chipset	Intel® Pentium 4 3,0GHz 800MHz 1MB L2 Socket 478 uFC-BGA Intel® 865GV + ICH5
Graphic	Controller Memory	Intel Extreme Graphic 2 integrated in Intel® 865GV Shared – up to 16MB
System memory	Type Size Socket	DDR PC3200 512 MB, 1 GB, 2 GB 2 x DIMM module
Video interfaces	Type	1 x VGA (DB15F)
PS/2 interfaces	Type	1 x PS/2 Keyboard / Mouse
Serial interfaces	Type UART Transfer rate Optoisolation	6 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No
Parallel interfaces	Type Connection	1 x SPP, EPP, ECP bidirectional DB25M
Ethernet interfaces	Type Controller	1 x 10/100/1000Mbps (RJ45) Realtek 8110SC
USB interfaces	Type Transfer rate	6 x USB 2.0 (rear, TYPE-A, host port - 2 on front) Up to 480Mbps (high speed)
Compact Flash slots	Type	1 x Type II (internal access)
Mass storage interfaces	Type	2 x ATA/100 Master/Slave , 1 x FDD , 2 x SATA 1.5Gb/s
Expansion slots	Type	4 x PCI, 2 x ISA, 1 x AGP 8x4x
Electrical characteristics		
Power supply	Type Input voltage	AT/ATX 110÷230 VAC 400W autoranging
Mechanical characteristics		
Case	Type	4U 19" rack mount nickel steel chassis
Measurements	Dimensions (W x H x D) Weight	483 x 177.8 x 546 mm 13 Kg
Enviromental characteristics		
Temperature	Operation Storage	0° ÷ +40°C -20° ÷ +60°C
Humidity	Operation/Storage	80% (non-condensing)
Warranty & Approvals		
CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)

PR4044

PR4044 è un PC industriale per montaggio a rack 19" (4U) con contenitore in acciaio nichelato e adatto al funzionamento 24/7. La scheda madre in formato ATX può utilizzare microprocessori Intel® Pentium Dual Core, Core 2 Duo e Core 2 Quad fino a 3GHz. Il controller RAID integrato gestisce dischi in configurazione 0,1,10,5 e sono presenti slot di espansione PCI e PCIe.



System characteristics

Motherboard	Model HW monitor Watch-dog	ATX format, D2836-S Temperature monitor Time programmable			
CPU	Processor Frequency FSB Cache Socket Chipset	Intel® Pentium dual core E5300 2.6GHz 800MHz 2MB L2 Socket 775 LGA Intel® Q45 + ICH10D	Intel® Core 2 Duo E7400 2.8GHz 1066MHz 3MB L2 Socket 775 LGA Intel® Q45 + ICH10D	Intel® Core 2 Duo E8400 3.0GHz 1333MHz 6MB L2 Socket 775 LGA Intel® Q45 + ICH10D	Intel® Core 2 Quad Q9400 2.66GHz 1333MHz 6MB L2 Socket 775 LGA Intel® Q45 + ICH10D
Graphic	Controller Memory	GMA4500 integrated in Intel® Q45 Shared – up to 256MB			
System memory	Type Size Socket	DDR2 PC6400 1 GB, 2 GB, 4 GB 2 x DIMM module			
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536 QXGA)			
PS/2 interfaces	Type	1 x PS/2 Keyboard, 1 x PS/2 Mouse			
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M) 16550 compatible (FIFO 16 byte) 115Kbps max No			
Parallel interfaces	Type Connection	1 x SPR, EPP, ECP bidirectional DB25M			
Ethernet interfaces	Type Controller	2 x 10/100/1000Mbps (RJ45) Realtek RTL8111CP			
USB interfaces	Type Transfer rate	10 x USB 2.0 (rear, TYPE-A, host port - 2 on front), 1 x USB-dongle (internal, TYPE-A, host port) Up to 480Mbps (high speed)			
Audio interfaces	Type	Mic IN, Line IN, Line OUT (configurable)			
Mass storage interfaces	Type Raid	1 x FDD, 6 x SATA 2 3Gb/s 0, 1, 10, 5			
Expansion slots	Type	4 x PCI, 1 x PCIe x16, 1 x PCIe x8, 1 x PCIe x1			

Electrical characteristics

Power supply	Type Input voltage	AT/ATX 110÷230 VAC 400W autoranging 90÷265 VAC 2 x 500W autoranging, redundant
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Mechanical characteristics

Case	Type	4U 19" rack mount nickel steel chassis
Measurements	Dimensions (W x H x D) Weight	483 x 177.8 x 546 mm 13 Kg

Environmental characteristics

Temperature	Operation Storage 24/7	0° ÷ +40°C -20° ÷ +60°C Yes
Humidity	Operation/Storage	80% (non-condensing)

Warranty & Approvals

CE	Emission Immunity Safety	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)

MERCURY901

MERCURY 901 è un PC industriale per montaggio a rack 19" (4U) con telaio in acciaio nichelato e frontale in alluminio. Si distingue per il ridotto ingombro in profondità. Basato su architettura a bus passivo, utilizza processori Intel® Celeron / Pentium III ed è disponibile con backplanes sia ISA, sia PCI a 12 o 14 slot.



4U



CelM



512MB

1GB

2GB



PCI

ISA

PICMG



220VAC



XP Pro

System characteristics

Motherboard	Model HW monitor Watch-dog	Passive bus, ASEM MB901 Temperature monitor Time programmable		
CPU	Processor FSB Cache Socket Chipset	Intel® Celeron M 370 1,5GHz 400MHz 1MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Pentium M 740 1,73GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M	Intel® Pentium M 760 2GHz 533MHz 2MB L2 Socket 478 uFC-BGA Intel® 915GME + ICH6M
Graphic	Controller Memory	GMA900 integrated in Intel® 915GME Shared - 64MB÷128MB system selectable		
System memory	Type Size Socket	DDR2 PC5300 512 MB, 1 GB, 2 GB 2 x SODIMM module		
Video interfaces	Type	1 x VGA (DB15F - max resolution 2048x1536 QXGA), front access		
Serial interfaces	Type UART Transfer rate Optoisolation	1 x RS232 (DB9M), 1 x RS232 (DB25M), 2 x RS232/422/485 (DB15M) 16550 compatible (FIFO 16 byte) 115Kbps max No		
Parallel interfaces	Type Connection	1 x SP, EPP, ECP bidirectional DB25M		
Ethernet interfaces	Type Controller	2 x 10/100Mbps (RJ45) Intel 82551QM - Intel 82562EZ	1 x 10/100Mbps (RJ45), 1 x 10/100/1000Mbps (RJ45) Intel 82551QM - Intel 82574L	
USB interfaces	Type Transfer rate	4 x USB 2.0 (rear, TYPE-A, host port, 2 on front) Up to 480Mbps (high speed)		
Compact Flash slots	Type	1 x Type II (internal access)		
Mass storage interfaces	Type	1 x ATA/100 Master/Slave, 1 x FDD, 2 x SATA 1 1,5Gb/s		
Expansion slots	Type	4 x PCI, 8 x ISA, 2 x PICMG 1.0	7 x PCI, 5 x ISA, 2 x PICMG 1.0	

Electrical characteristics

Power supply	Type Input voltage	AT/ATX 110÷230 VAC 300W autoranging
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Mechanical characteristics

Case	Type	4U 19" rack mount nickel steel chassis
Measurements	Dimensions (W x H x D) Weight	483 x 177.8 x 469 mm 15 Kg

Enviromental characteristics

Temperature	Operation Storage	0° ÷ +45°C -20° ÷ +60°C
Humidity	Operation/Storage	80% (non-condensing)

CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker
	Immunity Safety	Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety
Warranty	Management Standard Extended	By ASEM headquarters 12 months 18 / 24 / 36 months (optional)



Monitor



Monitor industriali con LCD da 8,4" a 19", anche touchscreen, per installazioni a pannello, VESA o per montaggio a rack. Disponibili con frontale in alluminio o acciaio INOX e con remotazione integrata dei segnali video e USB.

PRODUCT FAMILY SELECTOR

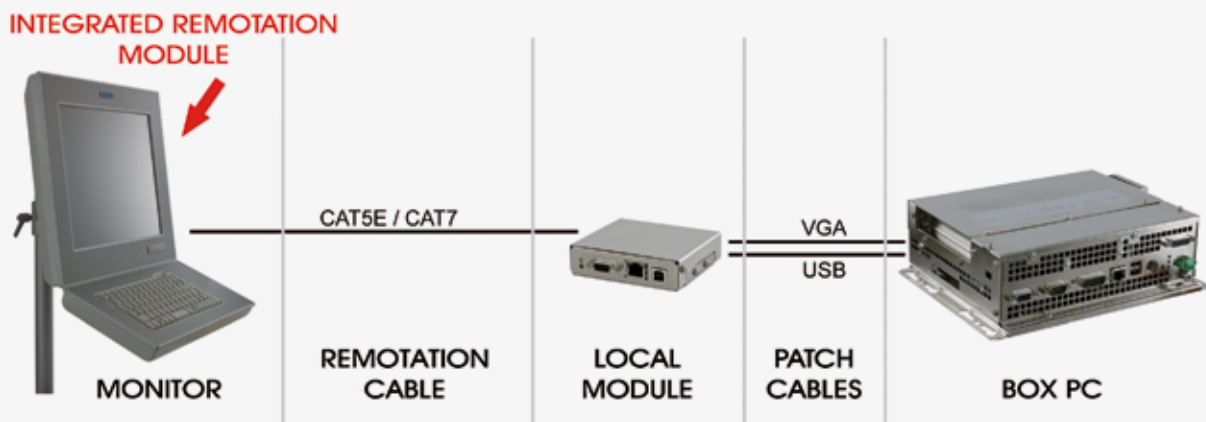
Monitor

		MH	MT	MV	MA	MP	MR
	LCD	10,4" 12,1" 15" 15,6" 18,5" 19" 21,5"	8,4" 12" 15" 17" 19"	15"	12" 15" 17" 19"	12" 15" 17"	12" 15"
	INSTALLATION	Panel	Panel	VESA	Panel	Panel	Panel
	FRONT PANEL	Alu Alu TF INOX	Alu INOX	Alu	Alu	Plastic	Alu
	VIDEO INPUT	VGA DVI	VGA DVI	VGA	VGA DVI	VGA DVI	VGA DVI
	REMOTATION		Yes	Yes	No	No	No
	POWER SUPPLY	24VDC	24VDC 220VAC	24VDC	24VDC 220VAC	24VDC 220VAC	24VDC 220VAC
	PAGE	96	98	100	102	102	102

Alu: alluminio | Inox: acciaio inossidabile true flat | Plastic: plastica con policarbonato | Desk: montaggio desktop | WALL: montaggio a parete | DIN RAIL: montaggio a guida DIN | VESA: VESA 75/100 compatibile | ROLEC: Taraplus compatibile | RITTAL: serie CP-S compatibile | PXA: Intel® PXA270 | LX800: Geode LX800 | ATOM: Intel®ATOM Z5XXP | Cel: Intel® Celeron | CelM: Intel® Celeron M | P: Intel® Pentium | PM: Intel® Pentium M | P4: Intel® Pentium 4 | C2D: Intel® Core 2 Duo | C2Q: Intel® Core 2 Quad | MiniPCI: MiniPCI bus | PC/104Plus: PC/104Plus bus, PCI compatibile | PCI: PCI bus | PCIe: PCI Express bus | AGP: AGP bus | UPS: gruppo di continuità | RID: alimentatore ridondato | CE5: Microsoft® Windows CE 5.0 | CE6: Microsoft® Windows CE 6.0 | WEC7 con: Microsoft® Windows Embedded Compact 7 | WES: Microsoft® Windows Embedded Standard | XP Pro: Microsoft® Windows XP PRO Sp3 | W7: Microsoft® Windows Seven Professional FES 32/64bit | Res 4: touch screen resistivo 4 fili | Res 5: touch screen resistivo 5 fili | GFG: touch screen Glass Film Glass

Remotazione ASEM

Il sistema di remotazione sviluppato da ASEM è basato sulla serializzazione dei segnali video e USB. I segnali sono resi più robusti e trasmessi in modo differenziale attraverso un cavo Ethernet. Il kit di remotazione è composto da un modulo di trasmissione locale, posizionato vicino al PC, e da un modulo di ricezione remoto integrato nei monitor ASEM. Questa tecnologia permette di trasmettere segnali ad alta qualità fino a distanze di 40mt usando l'auto-equalizzazione per compensare perdite e ritardi introdotti dal sistema di remotazione.



Standard USB e remotazione

Lo standard USB permette il collegamento di 127 dispositivi attraverso una struttura ad albero ottenuta per mezzo di HUB USB. La comunicazione USB ha timing ristretti che devono essere rispettati. Ogni dispositivo HUB introduce un ritardo nella propagazione dei segnali che crea un limite di 5 HUB connessi consecutivamente. La remotazione è un processo complesso che introduce anch'esso un ritardo nella trasmissione dei segnali ed è del tutto equivalente alla connessione del numero massimo di HUB consentiti dallo standard USB. Per questi motivi configurazioni con HUB USB esterni non sono ammesse.



MHXX [new]

MHxx è la nuova famiglia di monitor per montaggio a pannello che permette il montaggio di tre diverse finiture per i frontali, alluminio, alluminio True Flat e INOX True Flat, e l'adozione del cut-out ASEM. Disponibile con LCD display da 10,4", 12,1", 15", 17" e 19" in formato 4:3 e da 15,6", 18,5" e 21,5" in formato wide, dispongono di una porta USB frontale e 2 porte USB posteriori con HUB integrato



ASEM [CUTOUT]



Frontale INOX TrueFlat

FEATURES PLUS

- ✓ DISPLAY LCD DA 10,4" A 21,5"W
- ✓ FORMATI 4:3 E WIDE
- ✓ ASEM CUT-OUT
- ✓ FRONTALI CON 3 FINITURE DIFFERENTI

System characteristics									
Display	Size	10.4"	12.1"	15.0"	15.6"	17"	18.5"	19"	21,5"
	Type	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT	TBD	Color LCD TFT	TBD	TBD
	Resolution	800x600 (SVGA)	800x600 (SVGA)	1024x768 (XGA)	1366x768 (WXGA)		1366x768 (WXGA)		
	Colors	16.2M	16.2M	16.2M	16.7M		16.7M		
	Pixel pitch	0,264x0,264mm	0,3075x0,3075mm	0,297x0,297mm	0,252x0,252mm		0,300x0,300mm		
	Backlight	LED	LED	LED	LED		LED		
	Luminance	400cd/m²	450cd/m²	400cd/m²	300cd/m²		300cd/m²		
	Contrast	700:1	800:1	800:1	500:1		1000:1		
	Viewing angle	160° H, 140° V	160° H, 160° V	160° H, 145° V	190° H, 160° V		170° H, 160° V		
MTTF	50000h	50000h	50000h	50000h		50000h			
Video Inputs	Type	1 x VGA (DB15F), 1 x DVI-D single link (optional)							
Touchscreen	Technology	5 wires – analog - resistive							
	Optional Light transmission	80% ±2%							
	Lifetime	35mln activations							
	Linearity deviation	< 1 %							
	Interface	USB, Serial (optional)							
Serial interfaces	Type	1 x RS232 (DB9M) for touchscreen							
	Optional UART	16550 compatible (FIFO 16 byte)							
	Transfer rate	115kbps max							
	Optoisolation	No							
USB interfaces	Type	2 x USB 2.0 (rear, TYPE-A, host port, protected), 1 x USB 2.0 (front, TYPE-A, host port, protected), 1 x USB 2.0 (rear, TYPE-B, client port (rear, TYPE-B, client port – HUB/touchscreen input)							
	Transfer rate	Up to 480Mbit/s (high speed)							
Buttons, leds and keys	LEDs	Power							
	OSD	Yes, by 3 buttons on rear							
Electrical characteristics									
Power supply	Type	AT, Integrated on board							
	Input voltage	18÷36 VDC, 110÷230VAC							
	Power consumption	TBD							
Mechanical characteristics									
Case	Type	Panel mount							
	Material	Steel, zinc galvanization							
Front panel (note 1)	Protection	IP65		IP65			IP66K		
	Construction	Full aluminum alloy		Aluminium True Flat with polyester foil			Stainless Steel True Flat with polyester foil		
	Color	-		PANTONE Cool Gray 4C			RAL 7035		
Measurements mm		Aluminium (W x H x D)		Aluminium TF (W x H x D)		Stainless Steel (W x H x D)		Cutout (W x H)	Weight (Kg)
	10.4"	300 x 245 x 67		300 x 245 x 67		280 x 225		280 x 225	TBD
	12,1"	335 x 270 x 67		335 x 270 x 67		315 x 250		315 x 250	
	15"	390 x 315 x 67		390 x 315 x 67		370 x 295		370 x 295	
	15.6"	TBD		TBD		TBD		TBD	
	17"	TBD		TBD		TBD		TBD	
	18.5"	500 x 320 x 69		500 x 320 x 69		480 x 300		480 x 300	
	19"	TBD		TBD		TBD		TBD	
	21,5"	TBD		TBD		TBD		TBD	
Environmental characteristics									
Temperature	Operation	0° ÷ +45°C							
	Storage	-20° ÷ +60°C							
Humidity	Operation/Storage	80% (non-condensing)							
Warranty & Approvals									
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker							
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics							
	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety							
Warranty	Management	By ASEM headquarters							
	Standard	12 months							
	Extended	18 / 24 / 36 months (optional)							
Notes									

MTXX

MTXX è la prima famiglia di monitor industriali da pannello con remotazione integrata delle interfacce video e USB fino a 40mt.

Disponibile con LCD display da 8.4", 12.1", 15, 17" e 19", con touchscreen resistivo opzionale, la famiglia MT utilizza lo stesso pannello frontale della famiglia OT, sia in alluminio che in acciaio INOX. I monitor MT dispongono di 1 porta USB frontale e 3 porte USB posteriori con HUB integrato.



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

Res 5

Panel

Alu Inox

VGA DVI

Yes

24VDC 220VAC



Foto 1: Frontale INOX TrueFlat

Foto 2: Kit remotazione con modulo ricevitore integrato

FEATURES PLUS

- ✓ REMOTAZIONE INTEGRATA DEI SEGNALE USB E VIDEO FINO A 40MT OPZIONALE
- ✓ 1 PORTA USB FRONTALE E 3 PORTE POSTERIORI
- ✓ TOUCHSCREEN RESISTIVO CON INTERFACCIA SERIALE O USB
- ✓ STESSO PANNELLO FRONTALE DELLA FAMIGLIA OT
- ✓ PANNELLO INOX TRUEFLAT OPZIONALE

System characteristics					
Display	Size	8,4"	15"	17"	19"
	Type	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT
	Resolution	800 x 600 (SVGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
	Colors	256K	16M	16M	16M
	Pixel pitch	0,213 x 0,213mm	0,297 x 0,297mm	0,264 x 0,264mm	0,294 x 0,294mm
	Backlight	Sidelight LEDs	CCFL 4 lamps	CCFL 4 lamps	CCFL 2 lamps
	Luminance	400cd/m2	450cd/m2	300cd/m2	300cd/m2
	Contrast	400:1	400:1	1000:1	1000:1
	Viewing angle	120° H, 100° V	160° H, 140° V	160° H, 160° V	160° H, 160° V
	MTTF	70.000h	50000h	50000h	-
Video inputs	Type	1 x VGA (DB15F) , 1 x DVI-D single link			
Touchscreen	Technology	5 wires – analog – resistive			
	Light transmission	80% ±2%			
	Lifetime	35mln activations			
	Linearity deviation	< 1 %			
USB interfaces	Type	2 x USB 2.0 (rear, TYPE-A, host port), 1 x USB 2.0 (front, TYPE-A, host port, protected), 1 x USB 2.0 (rear, TYPE-B, client port - HUB/touchscreen input)			
	Transfer rate	Up to 480Mbit/s (high speed)			
Buttons and leds	LEDs	Power			
	OSD	Yes, by 3 buttons on the back			
Remotation optional	Type	Serialization of video and USB signals			
	Max length	15m, 20m. 30m, 40m			
	Cables type	CAT 5E, CAT7			
Electrical characteristics					
Power supply	Input voltage	18÷32 VDC, 110÷240 VAC			
Mechanical characteristics					
Case	Type	Panel mount			
	Material	Steel, nickel treatment			
Front panel (note 1)	Protection	IP65		IP66K	
	Construction	Aluminum alloy with polycarbonate foil		Stainless Steel True Flat with polyester foil	
	Color	RAL 7035		RAL 7035	
Measurements mm		Aluminium (W x H x D)	Stainless Steel (W x H x D)	Cutout (W x H)	Weight (Kg)
	8,4"	250 x 210 x 103	-	230 x 190	3,1
	12,1"	335 x 270 x 103	335 x 270 x 103	315 x 250	4,6
	15"	390 x 315 x 103	398 x 315 x 103	370 x 295	5,3
	17"	455 x 355 x 103	455 x 355 x 103	435 x 335	6,7
	19"	490 x 388 x 103	-	470 x 368	7,3
Enviromental characteristics					
Temperature	Operation	0° ÷ +45°C			
	Storage	-20° ÷ +60°C			
Humidity	Operation/Storage	80% (non-condensing)			
Warranty & Approvals					
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics			
		Conforms to EN 61000-3-2 – Limits for harmonic current emissions			
		Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker			
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics			
	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety			
Warranty	Management	By ASEM headquarters			
	Standard	12 months			
	Extended	18 / 24 / 36 months (optional)			
Notes					
1	With stainless steel front panel, touchscreen is mandatory and have no USB port on the front				

MV15

MV15 è il monitor industriale per montaggio VESA che si distingue per la remotazione integrata delle interfacce VGA e USB, per il ridotto spessore, per la varietà di configurazioni disponibili e per il design curato. Disponibile con display LCD da 15" e touchscreen resistivo a cinque fili, MV15 può essere ordinato con una tastiera e con moduli laterali funzionalmente ed esteticamente integrati.



Foto 1: Kit remotazione con modulo ricevitore integrato

Foto 2: 2 porte USB frontali

Foto 3: Sistema di montaggio semplice

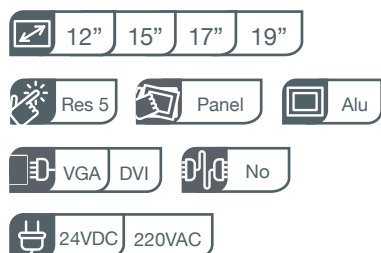
FEATURES PLUS

- ✓ REMOTAZIONE INTEGRATA DEI SEGNALE USB E VIDEO FINO A 40MT OPZIONALE
- ✓ MODULI LATERALI CON PREDISPOSIZIONE PER LAMPADE E PULSANTI OPZIONALE
- ✓ MODULO TASTIERA OPZIONALE
- ✓ COMPATIBILITA' CON SISTEMI VESA 75/100, RITTAL CP-S, ROLEC TARAPLUS

System characteristics			
Display	Size	15”	
	Type	Color LCD TFT	
	Resolution	1024 x 768 (XGA)	
	Colors	16M	
	Pixel pitch	0,297 x 0,297mm	
	Backlight	CCFL 4 lamps	
	Luminance	400cd/m2	
	Contrast	400:1	
	Viewing angle	150° H, 135° V	
MTTF	35.000h		
Video inputs	Type	1 x VGA (DB15F)	
Touchscreen	Technology	5 wires – analog – resistive	
	Light transmission	80% ±2%	
	Lifetime	35mln activations	
	Linearity deviation	< 1 %	
USB interfaces	Type	2 x USB 2.0 (rear, TYPE-A, host port), 2 x USB 2.0 (front, TYPE-A, host port, protected), 1 x USB 2.0 (rear, TYPE-B, client port - HUB input)	
	Transfer rate	Up to 480Mbps (high speed)	
Buttons and leds	LEDs	Power/Status	
	OSD	Yes, by 3 buttons on the back	
Remotation optional note 1	Type	Serializaion of video and USB signals	
	Max length	15m, 20m. 30m, 40m	
Side Modules optional	Cables type	CAT 5E, CAT7	
	Position	Left, Right, Left&Right	
Keyboard Module optional	Buttons and leds	Predisposition 2 x 4 matrix, holes Ø22	
	Labeling	Customizable	
Keyboard Module optional	Layout	Compact, 86 keys, US-international, anti-glare protection	
	Predisposition	emergency stop button, hole Ø22	
Electrical characteristics			
Power supply	Input voltage	24 VDC	
Mechanical characteristics			
Case	Type	For VESA 75-100 / RITTAL CP-S / ROLEC TARAPLUS arm mounting	
	Material	Steel painted	
Front panels monitor and modules	Color	RAL 9006 / 7024	
	Protection	IP65 frontal	
Measurements	Construction	Aluminum alloy with polycarbonate foil	
	Color	Pantone 429C	
Measurements	Monitor	Dimensions (W x H x D) - mm	Weight - Kg
	Side modules	400 x 335 x 50	8,0
	Keyboard	150 x 335 x 50	2,0
		400 x 180 x 37	3,0
Enviromental characteristics			
Temperature	Operation	0° ÷ +45°C	
	Storage	-0° ÷ +60°C	
Humidity	Operation/Storage	80% (non-condensing)	
Warranty & Approvals			
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker	
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics Conforms to EN 60950-1 – Information technology equipment – Safety	
Warranty	Safety		
	Management	By ASEM headquarters	
	Standard	12 months	
	Extended	18 / 24 / 36 months (optional)	
	Notes		
1	Granted USB 1.1 using remotation, no external USB HUB admitted		

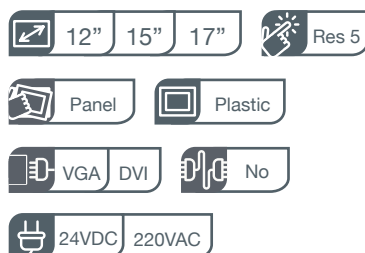
MAXX

MAXX sono monitor industriali per montaggio a pannello con cornice in alluminio e grado di protezione IP65. Sono disponibili display da 12.1", 15", 17" e 19". Il touchscreen con interfaccia USB o seriale è opzionale.



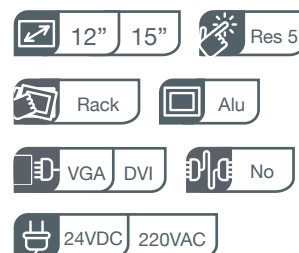
MPXX

MPXX sono monitor industriali per montaggio a pannello con cornice in plastica e grado di protezione IP65. Sono disponibili display da 12.1", 15" e 17". Il touchscreen con interfaccia USB o seriale è opzionale.



MRXX

MRXX sono monitor industriali per montaggio a rack 19" con frontale in alluminio e grado di protezione IP65. Sono disponibili display da 12.1" e 15". Il touchscreen con interfaccia USB o seriale è opzionale.



System characteristics					
Display	Model	MA, MP, MR	MA, MP, MR	MA, MP	MA
	Size	12,1"	15"	17"	19"
	Type	Color LCD TFT	Color LCD TFT	Color LCD TFT	Color LCD TFT
	Resolution	800 x 600 (SVGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1280 x 1024 (SXGA)
	Colors	256K	16M	16M	16M
	Pixel pitch	0,307 x 0,307mm	0,297 x 0,297mm	0,264 x 0,264mm	0,294 x 0,294mm
	Backlight	CCFL 2 lamps	CCFL 4 lamps	CCFL 2 lamps	CCFL 2 lamps
	Luminance	400cd/m2	400cd/m2	300cd/m2	300cd/m2
	Contrast	500:1	400:1	1000:1	1000:1
	Viewing angle	120° H, 100° V	160° H, 140° V	160° H, 160° V	160° H, 160° V
	MTBF	60.000h	50.000h	50.000h	-
Video inputs	Type	1 x VGA (DB15F)		1 x DVI-D	
	Cable length	2m		1,8m	
Touchscreen	Technology	5 wires – analog – resistive			
	Light transmission	80% ±2%			
	Lifetime	35mIn activations			
	Linearity deviation	< 1 %			
	Interface	Serial (1,8m cable) / USB (2m cable)			
Serial interfaces	Type	1 x RS232 (DB9M) input for touchscreen			
Buttons and leds	LEDs	Power			
	OSD	Yes, by 3 buttons on the back			
Electrical characteristics					
Power supply optional	Input voltage	90÷265 VAC 36W autoranging 18÷36 VDC 36 W autoranging			
Mechanical characteristics - MA Model					
Case	Type	Panel mount			
	Material	Steel, electro zinc treatment			
Front panel	Protection	IP65			
	Construction	Aluminum alloy			
Measurements mm	12,1"	Dimensions (W x H x D)	Cutout (W x H)	Weight - Kg	
	15"	345 x 267 x 65	323 x 245	4,5	
	17"	421 x 337 x 71	397 x 315	5,8	
	19"	455 x 355 x 71	435 x 335	7,6	
		496 x 388 x 71	475 x 368	9,3	
Mechanical characteristics - MP Model					
Case	Type	Panel mount			
	Material	Steel, electro zinc treatment			
Front panel	Protection	IP65			
	Construction	Plastic with polycarbonate foil			
	Color	Grey / PANTONE 428C			
Measurements mm	12,1"	Dimensions (W x H x D)	Cutout (W x H)	Weight (Kg)	
	15"	360 x 275 x 71	335 x 247	3,0	
	17"	430 x 315 x 71	397 x 285	3,7	
		430 x 380 x 73	395 x 350	5,0	
Mechanical characteristics - MR Model					
Case	Type	19" Rack mount			
	Material	Steel, nickel treatment			
Front panel	Protection	IP65			
	Construction	Aluminum alloy			
Measurements mm	12,1"	Dimensions (W x H x D)		Weight (Kg)	
	15"	483 x 266 x 77		5,5	
		483 x 355 x 77		6,8	
Enviromental characteristics					
Temperature	Operation	0° ÷ +50°C			
	Storage	-0° ÷ +60°C			
Humidity	Operation/Storage	80% (non-condensing)			
Warranty & Approvals					
CE	Emission	Conforms to EN 55022 Information technology equipment – Radio disturbance characteristics Conforms to EN 61000-3-2 – Limits for harmonic current emissions Conforms to EN 61000-3-3 – Limits of voltage fluctuation and flicker			
	Immunity	Conforms to EN 55024 Information technology equipment – Immunity characteristics			
	Safety	Conforms to EN 60950-1 – Information technology equipment – Safety			
Warranty	Management	By ASEM headquarters			
	Standard	12 months			
	Extended	18 / 24 / 36 months (optional)			



Light

Le soluzioni custom-light

Le soluzioni custom-light prevedono vari livelli di personalizzazione di prodotti standard a catalogo:

custom-light estetici, quali ad esempio:

- eliminazione o sostituzione dell'etichetta con marchio ASEM con una che riporta marchio e/o logotipo del cliente;
- personalizzazione della pellicola frontale con serigrafia di marchi e/o logotipi del cliente;

custom-light meccanici, quali ad esempio:

- personalizzazione della forma e/o spessore del pannello frontale;
- personalizzazione del layout di tastiera sul pannello frontale;

custom-light elettronici, quali ad esempio:

- realizzazione di un diverso backplane;
- aggiunta di interfacce di comunicazione e/o modifica alla configurazione standard.

Le personalizzazioni descritte non implicano modifiche strutturali ai prodotti standard e soddisfano esigenze tipiche degli OEMs e System Integrators che desiderano offrire al mercato le proprie soluzioni con una rappresentazione omogenea del marchio.

Le soluzioni custom-light possono essere realizzate in tempi relativamente brevi e per volumi non elevati.

Le soluzioni custom full

Le soluzioni custom-full prevedono la realizzazione di nuove piattaforme e sistemi integrati su specifiche del cliente. A riguardo si precisa che normalmente ASEM non cede la proprietà intellettuale dei progetti custom, in quanto la realizzazione degli stessi è esclusivamente finalizzata alla successiva produzione di serie.

Le soluzioni custom-full prevedono le seguenti attività di sviluppo:

custom-full meccanici, quali ad esempio:

- realizzazione di una nuova soluzione meccanica, anche con particolari in plastica, che preveda l'utilizzo di motherboards e/o schede elettroniche esistenti;

custom-full elettronici, quali ad esempio:

- sviluppo di nuove motherboards e/o schede elettroniche;

custom-full completi, quali ad esempio:

- sviluppo di un nuovo sistema o soluzione che preveda la progettazione di componenti meccanici, plastici e schede elettroniche.

L'attività di custom-full prevede normalmente una successiva produzione, anche dilazionata nel tempo, di una quantità complessivamente non inferiore al migliaio di pezzi.



Supporto e Servizi

Filosofia customer oriented

La filosofia customer oriented di ASEM si evidenzia con attenzione e cura costante delle necessità del cliente, grazie ad un completo e qualificato servizio di pre e post vendita. Tutti i processi interni sono rivolti alla massima soddisfazione del cliente, che rappresenta il centro di tutta l'attività aziendale, per garantire un eccellente livello qualitativo dei prodotti e una flessibilità operativa in grado di rispondere tempestivamente alle mutevoli richieste del mercato.

ASEM assicura la qualità di prodotto e di processo adottando in modo sistematico e rigoroso il proprio sistema di gestione aziendale per la qualità conforme alla normativa UNI EN ISO 9001:2000 (VISION).

Il sistema qualità, introdotto nel 1999, è certificato da Moody International Certification e viene costantemente aggiornato per migliorare l'efficacia ed efficienza dell'operatività aziendale.



Customer care

Il servizio di customer care è costituito da un team di specialisti tecnici in grado di rispondere con immediatezza e chiarezza alle esigenze del cliente, non solo telefonicamente e via internet, ma anche attraverso visite on-site e corsi di aggiornamento tecnico.

Per ottimizzare il processo di assistenza e di eventuale riparazione dei sistemi e ridurre al minimo i tempi di risposta, ASEM propone alcuni efficaci servizi:

- SERVIZIO "HELP DESK PHONE"

Si accede componendo il numero unico 0432-967250, operativo dal lunedì al venerdì dalle 9:00 alle 12:30 e dalle 14:00 alle 17:30. Un tecnico qualificato presta un primo e tempestivo servizio di assistenza o avvia la procedura di rientro del prodotto (Return Material Authorization). In base alle necessità e al tipo di supporto richiesto, la chiamata potrà essere indirizzata allo specialista ASEM più opportuno.

- SERVIZIO "HELP DESK ONLINE"

Consente di accedere al customer care ASEM direttamente online attraverso il sito aziendale www.asem.it.

Questo strumento semplice ed immediato permette di richiedere autonomamente il servizio di assistenza tecnica e l'RMA, per l'eventuale servizio di riparazione, monitorando in tempo reale lo stato della richiesta.

Oltre a questi servizi, è possibile inviare qualsiasi richiesta di supporto hardware, firmware e software all'indirizzo e-mail suptec@asem.it.

Supporto

ASEM assiste i clienti con una completa attività di consulenza hardware e software per gli applicativi Premium HMI® e CoDeSys. Viene offerto, inoltre, un puntuale ed efficace servizio di assistenza firmware con la creazione di "immagini" ad hoc del sistema operativo. Il vantaggio è quello di ridurre lo spazio di memoria necessario per l'installazione dei sistemi operativi (Microsoft Windows® CE, Windows® XP e Windows® XP Embedded, Windows® 7, Windows® 7 Embedded, applicativi Linux e OS real time), mantenendo solo i componenti essenziali per il corretto funzionamento degli industrial PC e l'integrabilità con i principali applicativi esterni. Il plus esclusivo del servizio ASEM consiste nell'integrare, su specifiche necessità del cliente, anche componenti proprietarie.





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