ASEM

HMI1200 BASIC
fanless

Industrial Automation - Products and Configurations

HMI1200 BASIC
Basic configuration > note 1

Basic configuration	LCD TFT 8.4" ▪ Touch-Screen 8.4" ▪ Intel Celeron M ULV 600MHz ▪ 1 GB RAM ▪ 2GB Compact Flash ▪ fanless ▪ Windows Embedded Standard 2009 MUI-A ▪ Premium HMI 3 BASIC Win32 runtime ▪ warranty 12 months

CPU	Intel Celeron M ULV ▪ 600MHz, 400MHz front side bus, 512KB cache ▪ socket 478 µFC-BGA	

DISPLAY & TOUCHSCREEN	LCD TFT 8.4" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V	
	Touch-Screen 8.4" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 10.4" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V	
	Touch-Screen 10.4" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 12.1" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V	
	Touch-Screen 12.1" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 15" ▪ XGA, 1024x768, 16M colors ▪ 4 lamps, 450 cd/m2 ▪ Viewing angle: 150° H, 135° V	
	Touch-Screen 15" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 17" ▪ SXGA, 1280X1024, 16M colors ▪ 4 lamps, 300 cd/m2 ▪ Viewing angle: 150° H, 150° V	
	Touch-Screen 17" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 19" ▪ SXGA, 1280x1024, 16M colors ▪ 2 lamps, 300 cd/m2 ▪ Viewing angle: 160° H, 160° V **> see note 4**	
	Touch-Screen 19" ▪ 5-wire resistive technology ▪ Controller integrated on-board	

RAM MEMORY	512 MB ▪ 1 SODIMM module DDR2 PC5300	

COMPACT FLASH	2GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA	
	4 GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA	
	8 GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA	

OPERATING SYSTEM	Microsoft Windows Embedded Standard 2009 MUI-A runtime (license with Microsoft olographic sticker)	

SOFTWARE	Premium HMI 3 BASIC Win32 runtime (license with ASEM sticker)	

WARRANTY	12 months on basic system and its variants	

OPTIONS

FIELDBUS	NETcore® X APCI for MPI ▪ Kit add-on PCI FANLESS **> see note 2**	
	NETcore® X APCI for PROFIBUS SLAVE ▪ Kit add-on PCI FANLESS **> see note 2**	
	NETcore® X APCI for CANopen SLAVE ▪ Kit add-on PCI FANLESS **> see note 2**	
	NETcore® X APCI for CANopen MASTER ▪ Kit add-on PCI FANLESS **> see note 2**	

COMMUNICATION PORTS	RS-232/422/485 serial port ▪ DB15 male connector **> see note 3**	
	RS-232/422/485 serial port ▪ RS-422/485 optoisolated ▪ DB15 male connector **> see note 2, 3**	

POWER SUPPLY	Uninterruptable power supply (UPS) ▪ 15 minutes backup time (min) ▪ equipped with batteries ▪ mounted on PC's rear box	
	Extension cable (length 1 m) for remote UPS installation	

WARRANTY EXTENSION	Warranty extension to 18 months on basic system and its variants	
	Warranty extension to 24 months on basic system and its variants	
	Warranty extension to 36 months on basic system and its variants	

NOTES

1: Price list doesn't include Premium HMI Studio 2011 development tool licence cost that has to be bought one shot fee at the first HMI system order. See pg.37

2: RS-232/422/485 standard and fieldbus cards can't be installed together

3: RS-232/422/485 standard and optoisolated can't be installed together

4: cULus certification is not available in configurations with 19" LCD TFT

HMI1200 PRO
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Industrial Automation - Products and Configurations

HMI1200 PRO
Basic configuration > note 1

Basic configuration	LCD TFT 8.4" ▪ Touch-Screen 8.4" ▪ Intel Celeron 373 M ULV 1GHz ▪ 1 GB RAM ▪ 2GB Compact Flash ▪ fanless ▪ Windows Embedded Standard 2009 MUI-A ▪ Premium HMI 3 PRO Win32 runtime ▪ warranty 12 months

Section	Description	
CPU	Intel Celeron 373 M ULV ▪ 1GHz, 400MHz front side bus, 512KB cache ▪ socket 478 µFC-BGA	↓
DISPLAY & TOUCHSCREEN	LCD TFT 8.4" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V	↓
	Touch-Screen 8.4" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 10.4" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V	
	Touch-Screen 10.4" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 12.1" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V	
	Touch-Screen 12.1" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 15" ▪ XGA, 1024x768, 16M colors ▪ 4 lamps, 450 cd/m2 ▪ Viewing angle: 150° H, 135° V	
	Touch-Screen 15" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 17" ▪ SXGA, 1280X1024, 16M colors ▪ 4 lamps, 300 cd/m2 ▪ Viewing angle: 150° H, 150° V	
	Touch-Screen 17" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
	LCD TFT 19" ▪ SXGA, 1280x1024, 16M colors ▪ 2 lamps, 300 cd/m2 ▪ Viewing angle: 160° H, 160° V	
	Touch-Screen 19" ▪ 5-wire resistive technology ▪ Controller integrated on-board	
RAM MEMORY	1 GB ▪ 1 SODIMM module DDR2 PC6400	↓
COMPACT FLASH	2GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA	↓
	4 GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA	
	8 GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA	
OPERATING SYSTEM	Microsoft Windows Embedded Standard 2009 MUI-A runtime (license with Microsoft olographic sticker)	↓
SOFTWARE	Premium HMI 3 PRO Win32 runtime (license with ASEM sticker)	↓
WARRANTY	12 months on basic system and its variants	

OPTIONS	
	↓

Section	Description	
FIELDBUS	NETcore® X APCI for MPI ▪ Kit add-on PCI FANLESS **> see note 2**	
	NETcore® X APCI for PROFIBUS SLAVE ▪ Kit add-on PCI FANLESS **> see note 2**	
	NETcore® X APCI for CANopen SLAVE ▪ Kit add-on PCI FANLESS **> see note 2**	
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COMMUNICATION PORTS	RS-232/422/485 serial port ▪ DB15 male connector **> see note 3**	
	RS-232/422/485 serial port ▪ RS-422/485 optoisolated ▪ DB15 male connector **> see note 2, 3**	
POWER SUPPLY	Uninterruptable power supply (UPS) ▪ 15 minutes backup time (min) ▪ equipped with batteries ▪ mounted on PC's rear box	
	Extension cable (length 1 m) for remote UPS installation	
WARRANTY EXTENSION	Warranty extension to 18 months on basic system and its variants	
	Warranty extension to 24 months on basic system and its variants	
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HMI1200 ADVANCED
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Industrial Automation - Products and Configurations

HMI1200 PRO
Basic configuration > note 1

Basic configuration	LCD TFT 8.4" ▪ Touch-Screen 8.4" ▪ Intel Celeron 373 M ULV 1GHz ▪ 12GB RAM ▪ 2GB Compact Flash ▪ fanless ▪ Windows Embedded Standard 2009 MUI-A ▪ Premium HMI 3 ADVANCED Win32 runtime ▪ warranty 12 months

CPU	Intel Celeron 373 M ULV ▪ 1GHz, 400MHz front side bus, 512KB cache ▪ socket 478 µFC-BGA

DISPLAY & TOUCHSCREEN	LCD TFT 8.4" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V
	Touch-Screen 8.4" ▪ 5-wire resistive technology ▪ Controller integrated on-board
	LCD TFT 10.4" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V
	Touch-Screen 10.4" ▪ 5-wire resistive technology ▪ Controller integrated on-board
	LCD TFT 12.1" ▪ SVGA, 800x600, 256K colors ▪ 2 lamps, 400 cd/m2 ▪ Viewing angle: 120° H, 100° V
	Touch-Screen 12.1" ▪ 5-wire resistive technology ▪ Controller integrated on-board
	LCD TFT 15" ▪ XGA, 1024x768, 16M colors ▪ 4 lamps, 450 cd/m2 ▪ Viewing angle: 150° H, 135° V
	Touch-Screen 15" ▪ 5-wire resistive technology ▪ Controller integrated on-board
	LCD TFT 17" ▪ SXGA, 1280X1024, 16M colors ▪ 4 lamps, 300 cd/m2 ▪ Viewing angle: 150° H, 150° V
	Touch-Screen 17" ▪ 5-wire resistive technology ▪ Controller integrated on-board
	LCD TFT 19" ▪ SXGA, 1280x1024, 16M colors ▪ 2 lamps, 300 cd/m2 ▪ Viewing angle: 160° H, 160° V
	Touch-Screen 19" ▪ 5-wire resistive technology ▪ Controller integrated on-board

RAM MEMORY	2 GB ▪ 1 SODIMM module DDR2 PC6400

COMPACT FLASH	2GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA
	4 GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA
	8 GB ▪ Single-Level Cell flash tecnology (SLC) ▪ UltraDMA

OPERATING SYSTEM	Microsoft Windows Embedded Standard 2009 MUI-A runtime (license with Microsoft olographic sticker)

SOFTWARE	Premium HMI 3 ADVANCED Win32 runtime (license with ASEM sticker)

WARRANTY	12 months on basic system and its variants

OPTIONS

FIELDBUS	NETcore® X APCI for MPI ▪ Kit add-on PCI FANLESS **> see note 2**
	NETcore® X APCI for PROFIBUS SLAVE ▪ Kit add-on PCI FANLESS **> see note 2**
	NETcore® X APCI for CANopen SLAVE ▪ Kit add-on PCI FANLESS **> see note 2**
	NETcore® X APCI for CANopen MASTER ▪ Kit add-on PCI FANLESS **> see note 2**

COMMUNICATION PORTS	RS-232/422/485 serial port ▪ DB15 male connector **> see note 3**
	RS-232/422/485 serial port ▪ RS-422/485 optoisolated ▪ DB15 male connector **> see note 2, 3**

POWER SUPPLY	Uninterruptable power supply (UPS) ▪ 15 minutes backup time (min) ▪ equipped with batteries ▪ mounted on PC's rear box
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WARRANTY EXTENSION	Warranty extension to 18 months on basic system and its variants
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Industrial Automation - Products and Configurations

PHMI3 - runtime differences	BASIC	PRO	ADVANCED
I/O Bytes (Tags)	2.048	2.048	4.096
Alarms	2.048	2.048	2.048
Data Loggers	Only 2 and not on Database	Unlimited also on Database	Unlimited also on Database
Multi-Drivers	Max 2	Max 2	Max 4
SMS/E-mails	☐	☐	■
Web Server	☐	☐	Max 2 client connected
VBA Multithreading	Max 2 script	Script unlimited	Script unlimited
ActiveX- OCX	☐	■	■
CFR21 part 11	☐	■	■
Power Templates	☐	■	■
Networking RAS	☐	■	■

For Premium HMI 3 main characteristics, see pg.37

HMI1200
Technical Specifications

| TECHNICAL SPECIFICATIONS	
Case	Panel mount
Overall dimensions & weight	See details on related section
Front Panel	Alluminium / polycarbonate color Pantone 429C
Frontal protection	IP65
Operating System	Microsoft Windows Embedded Standard 2009 MUI-A ▪ license with Microsoft olographic sticker
Software	Premium HMI 3 Win32/64 BASIC / PRO / ADVANCED runtime ▪ license with ASEM sticker
Power supply	18÷36 VDC ▪ integrated on board ▪ autoranging
Motherboard	"All-In-One" type ▪ ASEM 951
Watchdog	Time programmable
Chipset	Intel® 915GME + ICH6M
Graohic accelerator	Intel® GMA900 (Integrated on-chip Intel® 915GME)
Video controller	Integrated on-chip Intel® 915GME with standard analog VGA interface (external) and digital LVDS interface for LCD TFT (internal) Simul scan
Video RAM (dedicated)	64/128 MB selectable in system setup
RAM memory sockets	1 x SODIMM module
RAM memory	DDR2 type ▪ PC6400
Minimum system memory	1 GB
Maximum system memory	2 GB
Mass storage interfaces	1 x ATA/100 (Master e Slave), 1 x SATA 1 1,5Gb/s integrated on board
On-board options predisposition	Serial (also optoisolated) interfaces, as foreseen at options section
Compact Flash Slots	1 x Compact Flash Type II slot integrated on board, external access, 1 x Compact Flash Type I slot integrated on board, internal access
Bus expansions slots	1 x PCI for MPI/PROFIBUS cards
Frontal access interfaces	1 x USB 2.0 ▪ 4 customizable function keys
Rear access interfaces	2 x Ethernet 10/100 Mbps, (RJ45) ▪ 1 x Keyboard/Mouse PS/2 connector▪ 4 x USB 2.0 ▪ 1 x analog VGA (DB15-F, 2048x1536 QXGA)
Rear access serial interfaces	1 x RS-232 (DB9-M)
Environmental specifications	Operating temperature: 0 ÷ +50°C, 0 ÷ +45°C with 17" or 19" ▪ Storage temperature: -20 ÷ +60°C ▪ Humidity: 80% (non-condensing)
Standard warranty	12 months ▪ warranty management by ASEM headquarters

OVERALL DIMENSIONS (mm)

FRONT VIEW
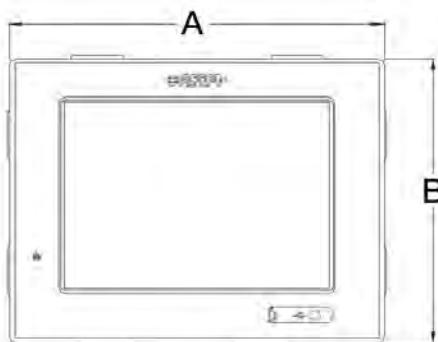
CUT OUT
FRONT PANEL
CUT OUT
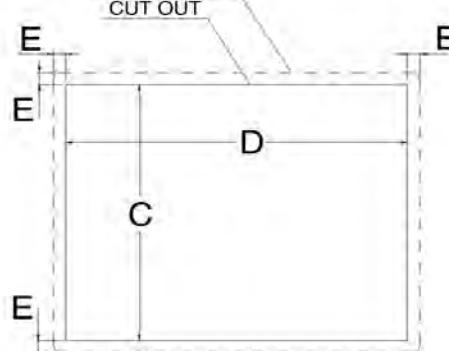
SIDE VIEW
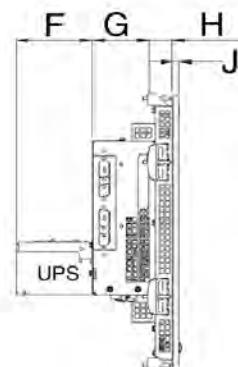
LCD TFT	A	B	C	D	E	F	G	H	J	Weight (kg)
8,4"	250	210	190	230	10	64	67,5	19	6	3,1
10.4"	300	245	225	280	10	64	67,5	19	6	4,0
12,1"	335	270	250	315	10	64	67,5	19	6	4,6
15"	390	315	295	370	10	64	67,5	19	6	5,3
17"	455	355	335	435	10	64	67,5	22,8	6	6,7
19"	490	388	368	470	10	64	67,5	28,8	6	7,4

VISTA CONNETTORI

1 x VGA   1 x PS2   1 x RS232/422/485

1 x RS232   1 x LAN   1 x LAN   UPS Plug   Power
              2 x USB   2 x USB   (optional) Plug