



# HT700 Family

New Panel PCs with Intel® Atom™ E6xx

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# HT700 - Highlights

- Featuring NEW ASEM STANDARDS (see page 3)
- Fanless Panel PC (operating temperature 0÷50°C)
- Motherboard with Intel® Atom™ Tunnel Creek (E640 / E680) processors
- Wide range of sizes with 16 mln colors LED backlight TFT LCD displays
  - 4:3 aspect ratio: 6,5", 8,4", 10,4", 12,1", 15"
  - 16:9 aspect ratio: 7" (15:9), 15,6", 18,5"
- Supports Win 32/64, Win CE and Linux operating systems
- Flexible I/O configurability and all common Fieldbuses available
- Ideal for HMI (Premium HMI) and Control (Codesys SoftPLC) applications
- Limited rear depth (66.6 mm)

**NEW ASEM  
STANDARDS**



# HT700 - NEW ASEM STANDARDS

- A unique CUT-OUT for each LCD size guaranteeing:
  - interchangeability among different families of Panel PCs and Monitors
  - future mechanical compatibility
- 3 front panel variants:
  - Aluminum
  - Aluminum True Flat
  - Stainless Steel True Flat
- Isolated Power Supply (input voltage 18÷32 VDC)
- Integrated UPS with external battery pack
  - rear of the system mounting
  - standalone wall mounting



**NEW ASEM  
STANDARDS**



# HT700 - Features

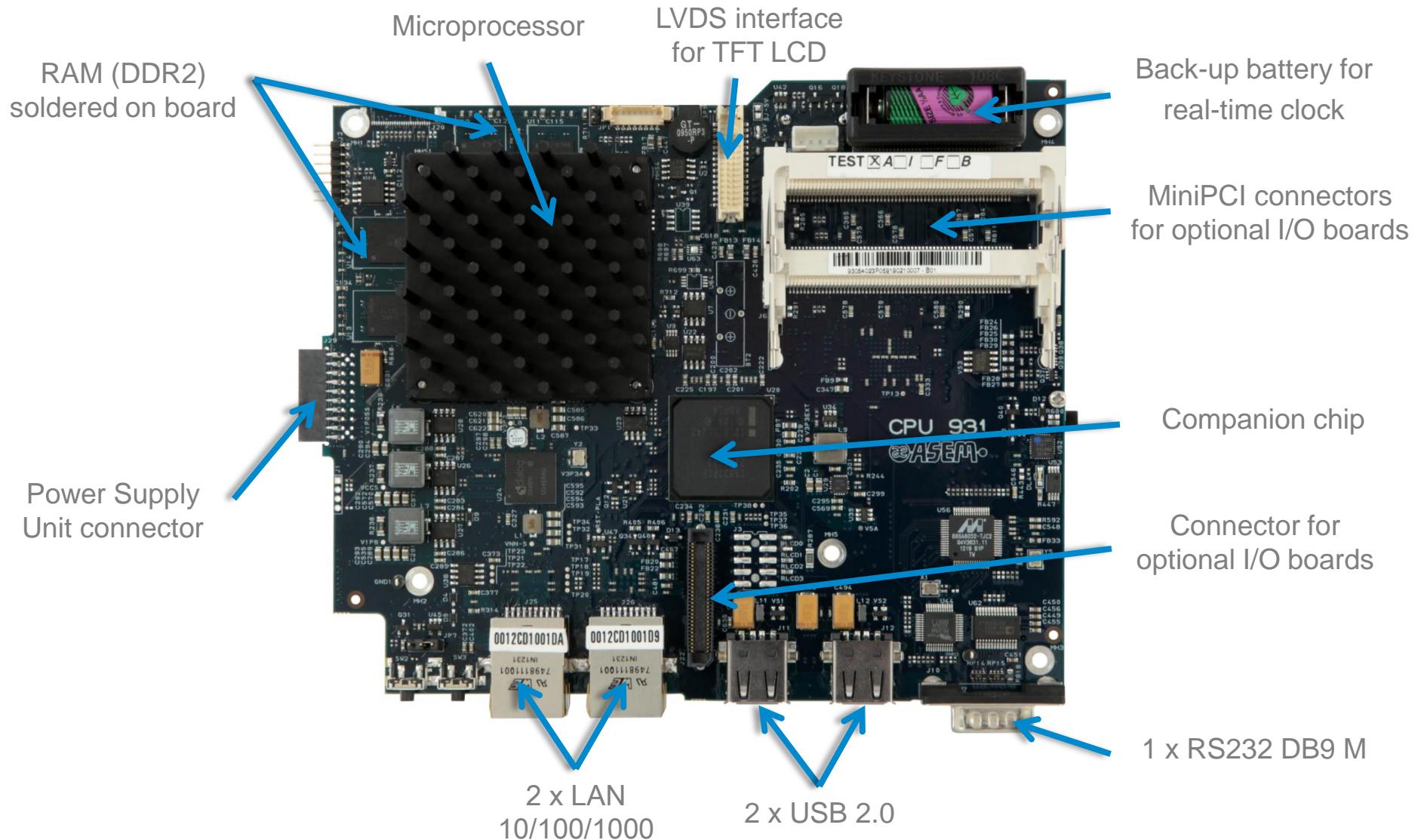


NEW ASEM  
STANDARDS

<b>LED backlight TFT LCD</b>	4:3 aspect ratio: 6.5" / 8.4" / 10.4" / 12.1" / 15.0" 16:9 aspect ratio: 7.0" (15:9) / 15.6" / 18.5"
<b>TOUCH-SCREEN</b>	Resistive 5 wires
<b>FRONT PANEL</b>	Alu / True Flat Alu / True Flat INOX
<b>MICROPROCESSOR</b>	Intel® Atom™ Tunnel Creek E640 1,0GHz (soldered) Intel® Atom™ Tunnel Creek E680 1,6GHz (soldered)
<b>RAM</b>	1GB / 2GB soldered on board
<b>MASS STORAGE</b>	- Compact Flash (external access) - SSD SATA Half Slim (only for systems with 6.5" and 7" LCDs) - SSD / HDD 2,5" SATA (for systems with 8,4" and wider LCDs)
<b>LAN</b>	2 x LAN 10/100/1000 (with Jumbo frames and Wake on LAN functionalities)
<b>USB</b>	2 x USB 2.0 (rear)   1 x USB 2.0 (front, IP65 protection)
<b>SERIAL</b>	1 x RS232 (DB9 M)
<b>PSU</b>	Input voltage 24VDC / UPS (optional)
<b>O.S. COMPATIBILITY</b>	Win CE / Win 32/64 / Linux
<b>CERTIFICATION</b>	CE, cULus (pending)
<b>ADD-ON BOARDS (optional)</b>	- 1 x RS232/422/485 (DB15 M) + 1 x USB 2.0 <b>or</b> - 1 x RS232/422/485 optoisolated (DB15 M) + 1 x USB 2.0
<b>EXPANSION SLOTS</b>	2 x MiniPCI
<b>MiniPCI ADD-ON BOARDS (optional)</b>	- FieldBus cards NETcore® X - 8 D-IN + 8 D-OUT

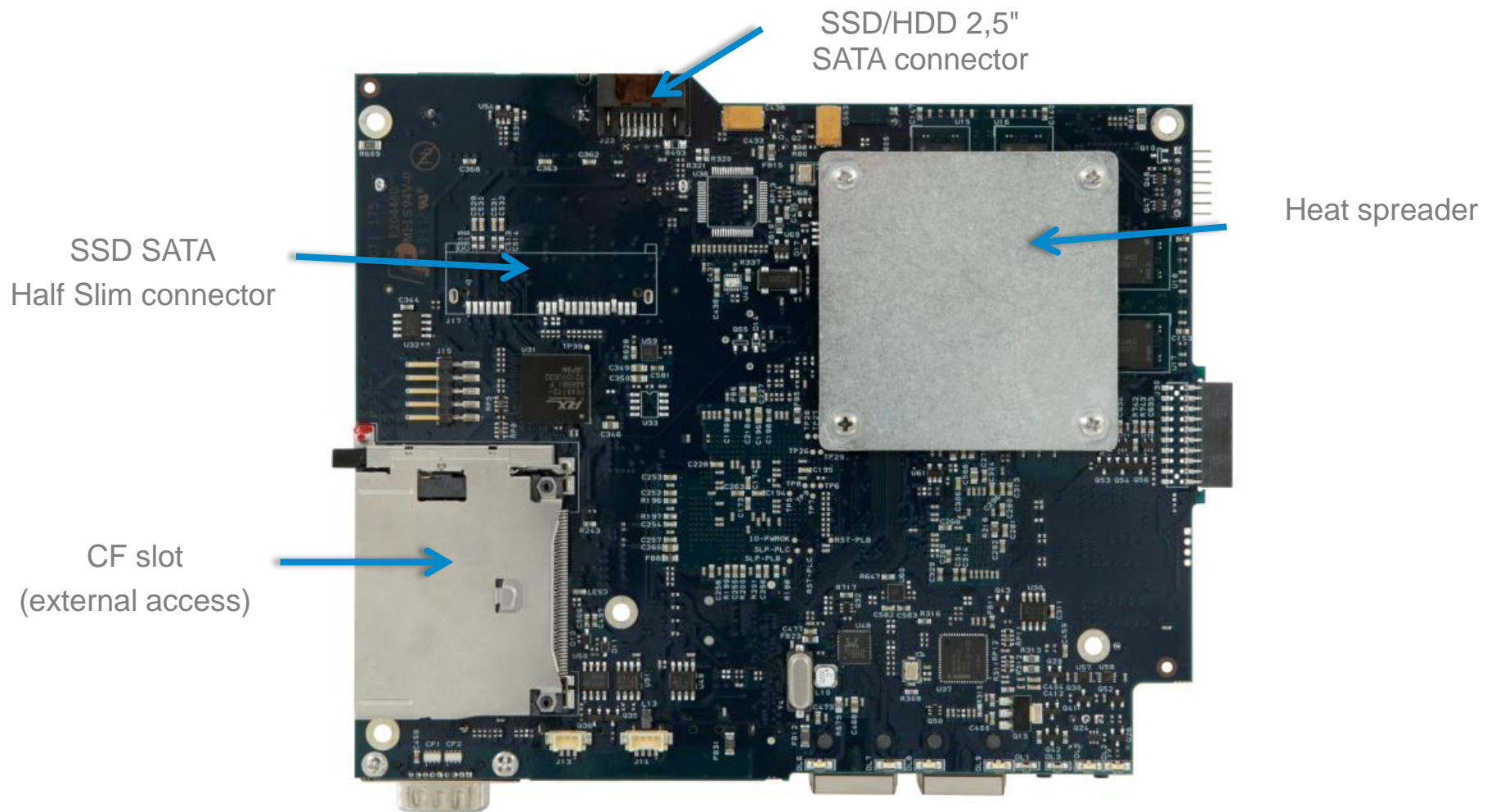


# HT700 - MB931 top





# HT700 - MB931 bottom



# HT700 - Embedded Industrial Design



Compact flash (external access)



Integrated UPS with battery pack  
(rear of the system mounting)





## PRODUCTS &amp; CONFIGURATIONS - Industrial Automation

## HT700 BASIC SYSTEM WITH 6,5" LCD

Basic configuration	LCD TFT 6,5" • Touch-Screen 6,5" • Intel® Atom™ E640 1,00 GHz • 1GB RAM • Alluminium front panel • fanless • isolated power supply	
CPU	Intel® Atom™ E640 • 1,00 GHz, 512KB L2 cache • Intel® Hyper-Threading • Soldered on-board	
DISPLAY	LCD TFT 6,5" • VGA, 640x480, 16M colors • backlight LED, 800 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/70°:70° LCD TFT 7"W • WVGa, 800x480, 16M colors • backlight LED, 400 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/80°:80°	
TOUCH-SCREEN	No Touch-Screen	GFG option --> note 1
	Touch-Screen da 6,5" • Resistive technology, 5 fili • Controller integrated on board	no
	Touch-Screen da 7"W • Resistive technology, 5 fili • Controller integrated on board	no

## HT700 BASIC SYSTEM WITH 8,4" LCD

Basic configuration	LCD TFT 8,4" • Touch-Screen 8,4" • Intel® Atom™ E640 1,00 GHz • 1GB RAM • Alluminium front panel • fanless • isolated power supply	
CPU	Intel® Atom™ E640 • 1,00 GHz, 512KB L2 cache • Intel® Hyper-Threading • Soldered on-board Intel® Atom™ E680 • 1,60 GHz, 512KB L2 cache • Intel® Hyper-Threading • Soldered on-board	
DISPLAY	LCD TFT 8,4" • SVGA, 800x600, 16M colors • backlight LED, 450 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° LCD TFT 10,4" • SVGA, 800x600, 16M colors • backlight LED, 400 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° LCD TFT 12,1" • SVGA, 800x600, 16M colors • backlight LED, 500 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° LCD TFT 12,1" • XGA, 1024x768, 16M colors • backlight LED, 600 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70° LCD TFT 15" • XGA, 1024x768, 16M colors • backlight LED, 450 cd/m2 • Viewing angle: L:R/U:L (typ.): 80°:80°/70°:70° LCD TFT 15,6" • WXGA(HD), 1366x768, 16M colors • backlight LED, 300 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° LCD TFT 18,5" • WXGA(HD), 1366x768, 16M colors • backlight LED, 300 cd/m2 • Viewing angle L+R/U+L (typ): 170°/160°	
TOUCH-SCREEN	No Touch-Screen	GFG option --> note 1
	Touch-Screen da 8,4" • Resistive technology, 5 fili • Controller integrated on board	no
	Touch-Screen da 10,4" • Resistive technology, 5 fili • Controller integrated on board	no
	Touch-Screen da 12,1" • Resistive technology, 5 fili • Controller integrated on board	yes
	Touch-Screen da 15" • Resistive technology, 5 fili • Controller integrated on board	yes
	Touch-Screen da 15,6"W • Resistive technology, 5 fili • Controller integrated on board	no
	Touch-Screen da 18,5"W • Resistive technology, 5 fili • Controller integrated on board	no
RAM MEMORY	1 GB • DDR2-800 • Soldered on board 2 GB • DDR2-800 • Soldered on-board • ONLY WITH PROCESSOR Intel® Atom™ E680 1,6GHz > note 2	

## COMMON VARIANTS

INTERNAL PSU	Without UPS (uninterruptible power supply) With UPS (uninterruptible power supply) • integrated in power supply section • batteries kit not included
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## OPTIONS ONLY FOR 6,5" and 7"W LCD SYSTEMS

SSD HALFSLIM	SSD HalfSlim SATA installation kit (SSD HalfSlim not included) SSD HalfSlim SATA 2, 3Gb/s (Solid State Disk), MLC
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## OPTIONS ONLY FOR 8,4" or GREATER LCD SYSTEMS

SSD	SSD 2,5" SATA installation kit (SSD not included) SSD 2,5" SATA 2, 3Gb/s (Solid State Disk), SLC/MLC
HDD	HDD 2,5" SATA installation kit (HDD not included) • with shock absorber HDD 320GB 2,5" • SATA 2, 3Gb/s • 5400rpm, 8 MB buffer HDD 500GB 2,5" • SATA 2, 3Gb/s • 5400rpm, 8 MB buffer

## COMMON OPTIONS

COMPACT FLASH	Compact Flash UDMA (SLC)
COMMUNICATION PORT > note 3	1 x RS232/422/485 serial port (DB15M) • 1 x USB 2.0 port 1 x RS232/422/485 optoisolated serial port (DB15M) • 1 x USB 2.0 port
POWER SUPPLY	External DIN-guide power supply • Input Voltage 230VAC • Output Voltage 24VDC • Nominal power 60W Batteries kit for rear systems mounting • cables included Batteries kit for detached mounting (wall mount) • 100cm cable included
FIELD BUS	Modulo fieldbus NETCore® X MiniAPCI
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

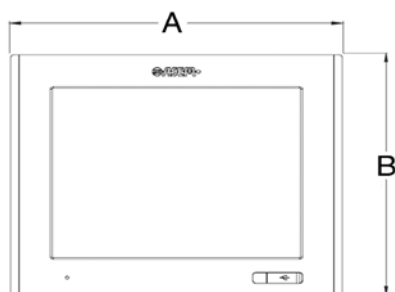
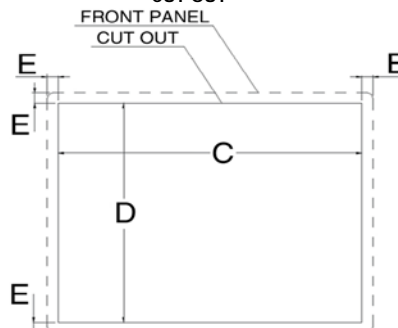
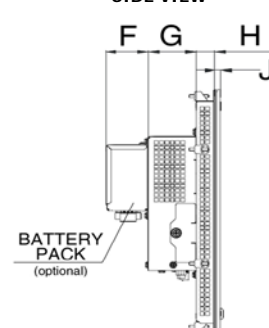
- 1: Glass Film Glass (GFG) touchscreen option: see pg.147 for the differences with standard touchscreen configuration
- 2: On demand, accordingly to the quantities requested, can be ordered configurations with 2GB RAM and Intel Atom E640 (1,00 GHz) processor • delivery time is about 3 months due to motherboard production with specific components soldered.
- 3: Options are one alternative to other



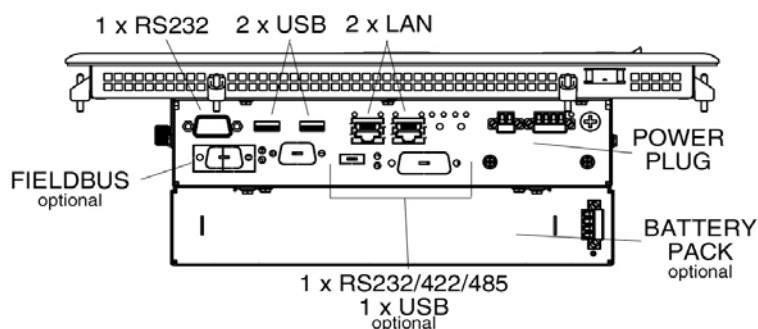


TECHNICAL SPECIFICATIONS	
Case	Panel mount
Overall dimensions & weight	See details on below related section
Front panel	Full aluminium • ASEM logo on sticker
Touchscreen	Resistive 5 wires • on board controller
Frontal protection	IP65
Power supply	Integrated on board • isolated • autoranging
Input voltage	18÷32 VDC
Motherboard	"All-In-One" type • ASEM 931
Watch dog	Time programmable
Video controller	Integrated in Intel® Atom™ microprocessor • 320MHz (E640) / 400MHz (E680)
Video RAM (dedicated)	Dynamic Video Memory Technology max 512MB • selectable from system setup
System memory	1 GB / 2GB DDR2-800 • Soldered on board
Mass storage interfaces	1 x SATA II • 3Gb/s integrated on board
Compact Flash Slots	1 x Slot Compact Flash Type I integrated on board with external access
Bus expansions slots	2 x MiniPCI
Frontal access interfaces	1 x USB 2.0
Rear access interfaces	2 x Ethernet 10/100/1000 Mbps (RJ45), PHY: Realtek® RTL8211E + MAC: Integrated into Intel® EG20T, Intel® 82574L • 2 x USB 2.0 (Type A)
Rear access serial interfaces	1 x RS-232, (DB9M)
Environmental specifications	Operating temperature: 0 ÷ +50°C without HDD, 0 ÷ +45°C with HDD • Storage temperature: -20 ÷ +60°C • Humidity: 80% (non-condensing)
Standard warranty	12 months • warranty management by ASEM headquarters

### DIMENSIONS (mm)

**FRONT VIEW**

**CUT OUT**

**SIDE VIEW**


LCD TFT	A	B	C	D	E	F	G	H	J	Weight (kg)
6,5"	200	175	192	167	4	-	50,4	19	5	tbd
7" W	215	167	207	159	4	-	50,4	19	5	tbd
8,4"	250	210	230	190	10	41,8	47,6	19	5	tbd
10,4"	300	245	280	225	10	41,8	47,6	19	5	tbd
12,1"	335	270	315	250	10	41,8	47,6	19	5	tbd
15"	390	315	370	295	10	41,8	47,6	19	6	tbd
15,6"	430	275	410	255	10	41,8	47,6	19	6	tbd
18,5"	500	320	480	300	10	41,8	47,6	21	6	tbd

**CONNECTORS VIEW**




# HT700-TF

fanless

## PRODUCTS & CONFIGURATIONS - Industrial Automation

HT700-TF BASIC SYSTEM WITH 6,5" LCD	
Basic configuration	LCD TFT 6,5" • Touch-Screen 6,5" • Intel® Atom™ E640 1,00 GHz • 1GB RAM • TrueFlat aluminium front panel • fanless • isolated power supply
CPU	Intel® Atom™ E640 • 1,00 GHz, 512KB L2 cache • Intel® Hyper-Threading • Soldered on-board
DISPLAY	LCD TFT 6,5" • VGA, 640x480, 16M colors • backlight LED, 800 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/70°:70° Touch-Screen da 6,5" • Resistive technology, 5 fili • Controller integrated on board LCD TFT 7" • WVG, 800x480, 16M colors • backlight LED, 400 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/80°:80° Touch-Screen da 7" • Resistive technology, 5 fili • Controller integrated on board

HT700-TF BASIC SYSTEM WITH 8,4" LCD	
Basic configuration	LCD TFT 6,5" • Touch-Screen 6,5" • Intel® Atom™ E640 1,00 GHz • 1GB RAM • TrueFlat aluminium front panel • fanless • isolated power supply
CPU	Intel® Atom™ E640 • 1,00 GHz, 512KB L2 cache • Intel® Hyper-Threading • Soldered on-board Intel® Atom™ E680 • 1,60 GHz, 512KB L2 cache • Intel® Hyper-Threading • Soldered on-board
DISPLAY	LCD TFT 8,4" • SVGA, 800x600, 16M colors • backlight LED, 450 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° Touch-Screen da 8,4" • Resistive technology, 5 fili • Controller integrated on board LCD TFT 10,4" • SVGA, 800x600, 16M colors • backlight LED, 400 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° Touch-Screen da 10,4" • Resistive technology, 5 fili • Controller integrated on board LCD TFT 12,1" • SVGA, 800x600, 16M colors • backlight LED, 500 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° Touch-Screen da 12,1" • Resistive technology, 5 fili • Controller integrated on board LCD TFT 12,1" • XGA, 1024x768, 16M colors • backlight LED, 600 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/70°:70° Touch-Screen da 12,1" • Resistive technology, 5 fili • Controller integrated on board LCD TFT 15" • XGA, 1024x768, 16M colors • backlight LED, 450 cd/m2 • Viewing angle: L:R/U:L (typ.): 80°:80°/70°:70° Touch-Screen da 15" • Resistive technology, 5 fili • Controller integrated on board LCD TFT 15,6" • WXGA(HD), 1366x768, 16M colors • backlight LED, 300 cd/m2 • Viewing angle L:R/U:L (typ): 80°:80°/60°:80° Touch-Screen da 15,6" • Resistive technology, 5 fili • Controller integrated on board
RAM MEMORY	1 GB • DDR2-800 • Soldered on board 2 GB • DDR2-800 • Soldered on-board • ONLY WITH PROCESSOR Intel® Atom™ E680 1,6GHz > note 1

COMMON VARIANTS	
INTERNAL PSU	Without UPS (uninterruptible power supply) With UPS (uninterruptible power supply) • integrated in power supply section • batteries kit not included

OPTIONS ONLY FOR 6,5" and 7"W LCD SYSTEMS	
SSD HALFSLIM	SSD HalfSlim SATA installation kit (SSD HalfSlim not included) SSD HalfSlim SATA 2, 3Gb/s (Solid State Disk), MLC

OPTIONS ONLY FOR 8,4" or GREATER LCD SYSTEMS	
SSD	SSD 2,5" SATA installation kit (SSD not included) SSD 2,5" SATA 2, 3Gb/s (Solid State Disk), SLC/MLC
HDD	HDD 2,5" SATA installation kit (HDD not included) • with shock absorber HDD 320GB 2,5" • SATA 2, 3Gb/s • 5400rpm, 8 MB buffer HDD 500GB 2,5" • SATA 2, 3Gb/s • 5400rpm, 8 MB buffer

COMMON OPTIONS	
COMPACT FLASH	Compact Flash UDMA (SLC)
COMMUNICATION PORT > note 2	1 x RS232/422/485 serial port (DB15M) • 1 x USB 2.0 port 1 x RS232/422/485 optoisolated serial port (DB15M) • 1 x USB 2.0 port
POWER SUPPLY	External DIN-guide power supply • Input Voltage 230VAC • Output Voltage 24VDC • Nominal power 60W Batteries kit for rear systems mounting • cables included Batteries kit for detached mounting (wall mount) • 100cm cable included
FIELD BUS	Modulo fieldbus NETcore® X MiniAPCI
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:	On demand, accordingly to the quantities requested, can be ordered configurations with 2GB RAM and Intel Atom E640 (1,00 GHz) processor • delivery time is about 3 months due to motherboard production with specific components soldered.
2:	Options are one alternative to other



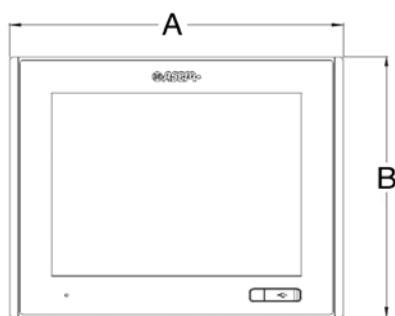
# HT700-TF

fanless

TECHNICAL SPECIFICATIONS	
Case	Panel mount
Overall dimensions & weight	See details on below related section
Front panel	Aluminium TrueFlat • Polycarbonate Pantone Cool Grey 4C color • ASEM logo on serigraphy
Touchscreen	Resistive 5 wires • overlaminated with OCA (Optical Clear Adhesive) • on board controller
Frontal protection	IP65
Power supply	Integrated on board • isolated • autoranging
Input voltage	18÷32 VDC
Motherboard	"All-In-One" type • ASEM 931
Watch dog	Time programmable
Video controller	Integrated in Intel® Atom™ microprocessor • 320MHz (E640) / 400MHz (E680)
Video RAM (dedicated)	Dynamic Video Memory Technology max 512MB • selectable from system setup
System memory	1 GB / 2GB DDR2-800 • Soldered on board
Mass storage interfaces	1 x SATA II • 3Gb/s integrated on board
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Bus expansions slots	2 x MiniPCI
Frontal access interfaces	1 x USB 2.0
Rear access interfaces	2 x Ethernet 10/100/1000 Mbps (RJ45), PHY: Realtek® RTL8211E + MAC: Integrated into Intel® EG20T, Intel® 82574L • 2 x USB 2.0 (Type A)
Rear access serial interfaces	1 x RS-232, (DB9M)
Environmental specifications	Operating temperature: 0 ÷ +50°C without HDD, 0 ÷ +45°C with HDD • Storage temperature: -20 ÷ +60°C • Humidity: 80% (non-condensing)
Standard warranty	12 months • warranty management by ASEM headquarters

## DIMENSIONS (mm)

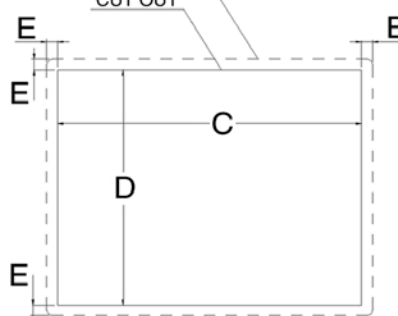
FRONT VIEW



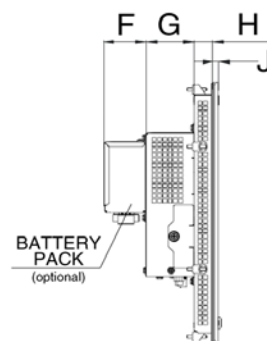
CUT OUT

FRONT PANEL

CUT OUT

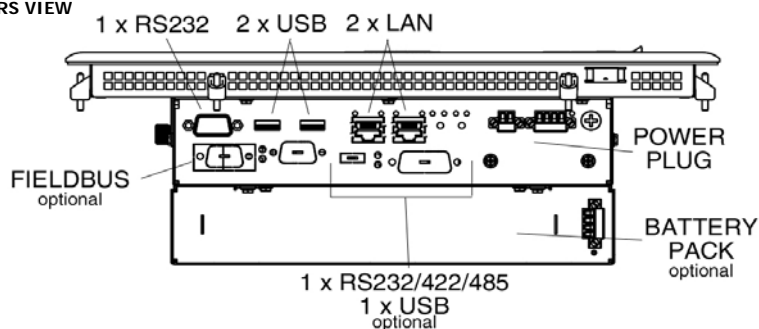


SIDE VIEW



LCD TFT	A	B	C	D	E	F	G	H	J	Weight (kg)
6,5"	200	175	192	167	4	-	50,4	19	5	tbd
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8,4"	250	210	230	190	10	41,8	47,6	19	5	tbd
10,4"	300	245	280	225	10	41,8	47,6	19	5	tbd
12,1"	335	270	315	250	10	41,8	47,6	19	5	tbd
15"	390	315	370	295	10	41,8	47,6	19	6	tbd
15,6"	430	275	410	255	10	41,8	47,6	19	6	tbd

CONNECTORS VIEW





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