

## Industrial Automation - Products & Configurations

HT3500-TF/SL		POWER [W]
Basic configuration	LCD TFT 12,1" SVGA • Aluminum TrueFlat front panel • Touch-Screen • Intel® Celeron® dual core 3965U 2,20 GHz • 4GB RAM • Without possibility to add additional interfaces • 24V DC isolated power supply • UBIQUITY BASIC Win32/64 runtime • 12 months warranty	41

HT3500-TF/S0		POWER [W]
Basic configuration	LCD TFT 12,1" SVGA • Aluminum TrueFlat front panel • Touch-Screen • Intel® Celeron® dual core 3965U 2,20 GHz • 4GB RAM • With possibility to add additional interfaces • 24V DC isolated power supply • UBIQUITY BASIC Win32/64 runtime • 12 months warranty	41

HT3500-TF/S1		POWER [W]
Basic configuration	LCD TFT 12,1" SVGA • Aluminum TrueFlat front panel • Touch-Screen • Intel® Celeron® dual core 3965U 2,20 GHz • 4GB RAM • With possibility to add additional interfaces • 24V DC isolated power supply • 1 PCIe x4 slot • UBIQUITY BASIC Win32/64 runtime • 12 months warranty	47

	SL	S0	S1		POWER [W]
REMOTE ASSISTANCE	•	•	•	UBIQUITY BASIC Win32/64 runtime	↓
PROCESSOR	•	•	•	Intel® Celeron® 3965U • 2,20 GHz, 2MB smart cache • 2 cores, 2 threads • Soldered on-board	
	•	•	•	Intel® Core™ i3-7100U • 2,40 GHz, 3MB smart cache • 2 cores, 4 threads • Soldered on-board	+ 0
	•	•	•	Intel® Core™ i5-7300U • 2,60 GHz (3,50 GHz Turbo), 3MB smart cache • 2 cores, 4 threads • Soldered on-board	+ 13
	•	•	•	Intel® Core™ i7-7600U • 2,80 GHz (3,90 GHz Turbo), 4MB smart cache • 2 cores, 4 threads • Soldered on-board	+ 13
DISPLAY & TOUCH-SCREEN	•	•	•	12,1" LCD TFT 4:3 • SVGA, 800x600, 16M colors • LED backlight, 500 cd/m2 • Viewing angle L:R/U:L (typ.): 80°:80°/80°:60° Touch-screen • 5 wires resistive technology • Controller integrated on board	
	•	•	•	12,1" LCD TFT 4:3 • XGA, 1024x768, 16M colors • LED backlight, 600 cd/m2 • Viewing angle L:R/U:L (typ.): 89°:89°/89°:89° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 4
	•	•	•	12,1" W LCD TFT 16:10 • WXGA, 1280x800, 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 88°:88°/88°:88° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 1
	•	•	•	15" LCD TFT 4:3 • XGA, 1024x768, 16M colors • LED backlight, 500 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/85°:85° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 8
	•	•	•	15,6" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/80°:80° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 3
	•	•	•	15,6" W LCD TFT 16:9 • 1920x1080 (FHD), 16M colors • LED backlight, 400 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/85°:85° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 12
	•	•	•	17" LCD TFT 5:4 • SXGA, 1280x1024, 16M colors • LED backlight, 350 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/80°:80° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 17
	•	•	•	18,5" W LCD TFT 16:9 • 1366x768 (HD), 16M colors • LED backlight, 300 cd/m2 • Viewing angle L:R/U:L (typ.): 85°:85°/80°:80° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 13
	•	•	•	18,5" W LCD TFT 16:9 • 1920x1080 (FHD), 16M colors • LED backlight, 500 cd/m2 • Viewing L:R/U:L (typ.): 89°:89°/89°:89° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 24
	•	•	•	19" LCD TFT 5:4 • SXGA 1280x1024, 16M colors • LED backlight, 300 cd/m2 • Viewing angle L:R/U:L (typ.): 89°:89°/89°:89° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 28
	•	•	•	21,5" W LCD TFT 16:9 • 1920x1080 (FHD), 16M colors • LED backlight, 300 cd/m2 • Viewing angle L:R/U:L (typ.): 89°:89°/89°:89° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 23
	•	•	•	24" W LCD TFT 16:9 • 1920x1080 (FHD), 16M colors • LED backlight, 300 cd/m2 • Viewing angle L:R/U:L (typ.): 89°:89°/89°:89° Touch-screen • 5 wires resistive technology • Controller integrated on board	+ 27
RAM MEMORY	•	•	•	4 GB • 1 module SODIMM DDR4	
	•	•	•	8 GB • 1 module SODIMM DDR4	+ 1
	•	•	•	16 GB • 1 module SODIMM DDR4	+ 2
INTERNAL PSU > note 1	•	•	•	Without UPS (uninterruptible power supply)	
	•	•	•	With UPS (uninterruptible power supply) • integrated in power supply section • batteries kit not included	+ 1
ADDITIONAL INTERFACES	•	•	•	Without possibility to add additional interfaces, below described	
	•	•	•	With possibility to add additional interfaces, below described	
EXPANSION SLOTS	•	•	•	No expansion slots	
	•	•	•	1 x PCIe x4 (Generation 3) half size (106 x 175mm) • on riser card • expansion board with max consumption 5W	
	•	•	•	1 x PCI half size (106 x 175mm) • on riser card • expansion board with max consumption 5W	+ 0

OPTIONS				POWER [W]	
TPM	SL	S0	S1		
	•	•	•	TPM - Trusted Platform Module	0
SSD M.2	•	•	•	SSD M.2 NVMe PCIe dissipation kit > <b>note 2</b>	-
	•	•	•	SSD on M.2 onboard connector, NVMe PCIe x2	4
	•	•	•	SSD M.2 2242onboard connector • SATA	2
	•	•	•		
SSD/HDD 2,5"	•	•	•	SSD/HDD 2,5" SATA installation kit (SSD/HDD not included)	-
	•	•	•	SSD 2,5", SATA	5
	•	•	•	HDD 2,5" SATA	6
	•	•	•		
CFAST	•	•	•	CFast SATA	1
ADDITIONAL INTERFACES Pos. A > note 3		•	•	1 x RS232/422/485 (DB15M) • 1 x USB 2.0	1
		•	•	1 x RS232/422/485 (DB15M) isolated • 1 x USB 2.0	1
		•	•	2 x RS232 (DB9M)	2
		•	•	2 x USB 2.0	0
ADDITIONAL INTERFACES Pos. B > note 4		•	•	1 x Ethernet 10/100/1000Mbps, Intel® I210	1
		•	•	WiFi Module, IEEE 802.11a/b/g/n, 2,4GHz-5GHz • Modem 4G-GLOBAL	7
		•	•	NETCore® X card fieldbus module • "26 pin" connector	3
		•	•	1 x additional video output DVI-D	0
		•	•	1 x additional video output RVL - Remote Video Link • Remotation up to 100m of DVI-D and USB 2.0 signals • without cables	3
POWER SUPPLY		•	•	Kit for ATX mode power supply functionality including on board button, internal cable and connector for remote command	0
UPS BATTERY KIT	•	•	•	Batteries kit for rear systems mounting • cable included	15
	•	•	•	Batteries kit for detached mounting (wall mount)	15
WARRANTY EXTENSION	•	•	•	Warranty extension to 18 month	-
	•	•	•	Warranty extension to 24 months	-
	•	•	•	Warranty extension to 36 months	-
	•	•	•		

### NOTES

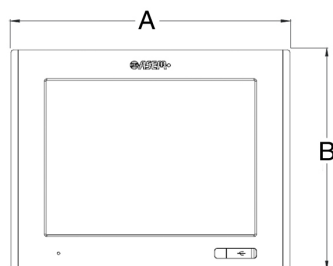
The power consumption of the configuration takes into consideration the maximum absorbed power of every component and does not include the consumption of the devices connected to the USB ports.

- 1: UPS functionalities are ensured with Microsoft Win32/64bits operating systems only
- 2: The dissipation kit is essential in all configurations that include M.2 2280 NVMe PCIe SSDs.
- 3: Options signed by note 3 cannot be installed together.
- 4: Options signed by note 4 cannot be installed together.

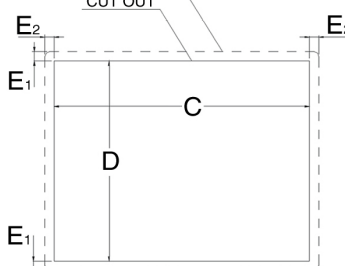
TECHNICAL SPECIFICATIONS	
Case	Panel mount
Overall dimensions & weight	See details on the related section
Front panel	Aluminum TrueFlat • Polycarbonate Pantone Cool Grey 4C color • ASEM logo serigraph printed
Touchscreen	5 wires resistive technology • on board controller
Frontal protection	IP65
Power supply	24 V DC Isolated • Input voltage: 18÷32V DC • ATX mode push button (optional)
UPS (optional)	12V DC UPS (Uninterruptible Power Supply) battery backup system
	Batteries module (optional): Pb, 12V/8A max, 2500mAh • Charge time 3h@25°C • Discharge time 5'@ 8A and 25°C • Lifetime 10years@25°C
Motherboard	Type "All-In-One" ASEM 1352
	Watch dog Time programmable
Intel platform	Processor Intel® Celeron® and seventh generation Intel® Core™ processors • Kaby Lake ULT dual core 15W
	Chipset Intel® Kaby Lake U PCH (Platform Controller Hub) • Included into processor's chip
O.S. certified by ASEM	Microsoft Windows 10 IoT Enterprise 2019 64bit • Microsoft Windows 10 IoT Enterprise 2016 64bit
Software	Remote assistance UBIQUITY BASIC Win32/64 runtime license with ASEM sticker
Video controller	Intel® HD Graphics 610 integrated into Intel® Celeron® microprocessor • 900MHz
	Intel® HD Graphics 620 integrated into Intel® Core™ microprocessor • 1,00GHz / 1,10GHz / 1,15GHz
Video memory	Dynamic Video Memory Technology • Memory quantity is automatically selected by operating system
System memory	DDR4-2133 type • 1 SODIMM module • min 4GB • max 16GB
Mass storage controller	SL 1 x SSD M.2 2242/2280 NVMe PCIe x2 / SATA III integrated on board
	S0, S1 1 x SSD M.2 2242/2280 NVMe PCIe x2 / SATA III integrated on board • 1 x SSD/HDD 2,5" SATA III, 6Gb/s on installation kit
TPM	2x10 (2,54) pin-strip connector for optional TPM module
Cfast slot	1 x slot Cfast (bootable) SATA III, 6Gb/s external access
Expansion slot	on riser card (S1) 1 x PCI or 1 x PCIe x4 • half size (106 x 175mm) boards with 5W max consumption • alternative to each other
Frontal access interfaces	1 x USB 2.0 (Type A, IP65)
Rear access interfaces	3 x Ethernet 10/100/1000 Mbps (RJ45 - 2 x Intel® I210, 1 x Intel® I219-LM) • 4 x USB 3.0 (Type A) • DP++ video output
Rear access serial interfaces	1 x RS-232 (DB9M)
Environmental specifications	Operating temperature: 0° ÷ +50°C, 0°C ÷ +45°C with 24x7 HDD, +5°C ÷ +45°C with standard HDD Storage temperature: -10° ÷ +60°C • Humidity: 80% (non-condensing)
Approvals	CE (EN61326-1, EN61010-1, EN61010-2-201) • cULus LISTED (UL61010) pending
Standard warranty	12 months • Warranty management by ASEM headquarters

## OVERALL DIMENSIONS (mm)

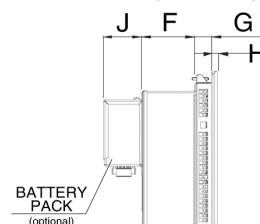
FRONT VIEW



FRONT PANEL CUT OUT



SIDE VIEW - S0



LCD TFT	A	B	C	D	E	SL	S0	S1	G	H	J	Weight (kg)
12,1"	335	270	315	250	10	44,5	59,5	90,5	19	5	41,8	tbd
12,1" W	331	234	313	218	9	44,5	59,5	90,5	21	5	41,8	tbd
15"	390	315	370	295	10	44,5	59,5	90,5	19	6	41,8	tbd
15,6"	430	275	410	255	10	44,5	59,5	90,5	19	6	41,8	tbd
17"	455	355	435	335	10	44,5	59,5	90,5	21	6	41,8	tbd
18,5"	500	320	480	300	10	44,5	59,5	90,5	21	6	41,8	tbd
19"	490	388	470	368	10	44,5	59,5	90,5	23	6	41,8	tbd
21,5"	579	367	559	347	10	44,5	59,5	90,5	23	6	41,8	tbd
24"	640	402	620	382	10	44,5	59,5	90,5	21	8	41,8	tbd

## CONNECTORS VIEW

