

Industrial Automation - Products & Configurations

QT3500-TFM/SL			POWER [W]
Basic configuration	LCD TFT 15,6" W HD • Aluminum and glass TrueFlat front panel • Touch-Screen Multitouch • 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		43

QT3500-TFM/S0			POWER [W]
Basic configuration	LCD TFT 15,6" W HD • Aluminum and glass TrueFlat front panel • Touch-Screen Multitouch • 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		43

QT3500-TFM/S1			POWER [W]
Basic configuration	LCD TFT 15,6" W HD • Aluminum and glass TrueFlat front panel • Touch-Screen Multitouch • Intel® Celeron® dual core 3965U 2,20 GHz • 4GB RAM • With possibility to add additional interfaces • 24V DC isolated power supply • 1 PCI slot x4 • UBIQUITY BASIC Win32/64 runtime • 12 months warranty		49

SL	S0	S1		
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	•	•	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 • P-CAP projected capacitive touchscreen	
	•	•	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 • P-CAP projected capacitive touchscreen	+ 10
	•	•	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 • P-CAP projected capacitive touchscreen	+ 11
	•	•	18,5" W LCD TFT 16:9 • 1920x1080 (FHD), 16M colors • LED backlight, 500 cd/m2 • Viewing angle L:R/U:L (typ): 89°:89°/89°:89° Touch-Screen • P-CAP projected capacitive touchscreen	+ 22
	•	•	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 • P-CAP projected capacitive touchscreen	+ 21
	•	•	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 • P-CAP projected capacitive touchscreen	+ 25
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 > note 2	-
	•	•	•	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 and tempered glass TrueFlat
Touchscreen	Projective capacitive multitouch
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
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

Diagram showing the front view of the device with dimensions A, B, C, D, E1, E2, and a dashed line indicating the front panel cut out.

SIDE VIEW - S0

Diagram showing the side view of the device with dimensions J, F, G, H, and an optional battery pack.

LCD TFT	A	B	C	D	E	SL	F	S0	S1	G	H	J	Weight (kg)
15,6"W	395,2	245	388,5	238	3,5/3,5	44,5	59,5	59,5	90,5	25	6	41,8	tbd
18,5"W	461	282	453	274	4/4	44,5	59,5	59,5	90,5	25	6	41,8	tbd
21,5"W	527,7	319	520	312	4/4	44,5	59,5	59,5	90,5	25	6	41,8	tbd
24"W	584,1	352	577	344	4/4	44,5	59,5	59,5	90,5	25	6	41,8	tbd

CONNECTORS VIEW

Diagram showing the connectors view of the device with labels for ATX power button, Add-On pos.A, Expansion slot (S1), Add-On pos.B, UPS Battery pack, Power supply, COM1, 4 x USB 3.0, 3 x Gigabit LAN, and DP++.