VK3200
fanless

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Industrial Automation - Products & Configurations

VK3200-TF BASIC SYSTEM		POWER [W]
Basic configuration	LCD TFT 15,6" (HD) ▪ Touch-Screen ▪ Aluminum TrueFlat front panel ▪ Intel® Celeron dual core 3765U 1,9Ghz ▪ 4GB RAM ▪ fanless ▪ 24V DC isolated power supply ▪ Top arm mounting attachment predisposition with IP65 adapter plate ▪ Rear closing cover for connectors access without hole ▪ With Button Area without commands and internal terminals ▪ UBIQUITY BASIC Win32/64 runtime ▪ 12 months warranty	43

		POWER [W]
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): 80°:80°/80°:80° Touch-Screen ▪ 5 wires resistive technology ▪ Controller integrated on board	
	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	+ 10
	18,5" W LCD TFT 16:9 ▪ 1366x768 (HD), 16M colors ▪ LED backlight, 300 cd/m2 ▪ Viewing angle L:R/U:L (typ): 75°:75°/70°:70° Touch-Screen ▪ 5 wires resistive technology ▪ Controller integrated on board	+ 11
	18,5" 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	+ 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 ▪ 5 wires resistive technology ▪ Controller integrated on board	+ 21

VK3200-TFM BASIC SYSTEM		POWER [W]
Basic configuration	LCD TFT 15,6" (HD) ▪ Touch-Screen Multitouch ▪ Aluminum and glass TrueFlat front panel ▪ Intel® Celeron dual core 3765U 1,9Ghz ▪ 4GB RAM ▪ fanless ▪ UBIQUITY BASIC Win32/64 runtime ▪ 24V DC isolated power supply ▪ Top arm mounting attachment predisposition with IP65 adapter plate ▪ Rear closing cover for connectors access without hole ▪ With Button Area without commands and internal terminals ▪ 12 months warranty	43

		POWER [W]
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): 80°:80°/80°:80° Touch-Screen P-CAP projected capacitive multitouch	
	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 multitouch	+ 10
	18,5" W LCD TFT 16:9 ▪ 1366x768 (HD), 16M colors ▪ LED backlight, 300 cd/m2 ▪ Viewing angle L:R/U:L (typ): 75°:75°/70°:70° Touch-Screen P-CAP projected capacitive multitouch	+ 11
	18,5" 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 multitouch	+ 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 multitouch	+ 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 multitouch	+ 25

COMMON VARIANTS		POWER [W]
REMOTE ASSISTANCE	ASEM UBIQUITY BASIC Win32/64 runtime	-
PROCESSOR	Intel® Celeron 3765U 1,9Ghz, 2 cores – 2 threads – 2MB smart cache	
	Intel® Core™ i3-5010U 2,1Ghz, 2 cores – 4 threads – 3MB smart cache	+ 1
	Intel® Core™ i5-5350U 1,8Ghz (2,9GHz Turbo), 2 cores – 4 threads – 3MB smart cache	+ 3
	Intel® Core™ i7-5650U 2,2Ghz (3,1GHz Turbo), 2 cores – 4 threads – 4MB smart cache	+ 4
RAM MEMORY	2 GB ▪ 1 module SODIMM DDR3-1600	+ 0
	4 GB ▪ 1 module SODIMM DDR3-1600	
	8 GB ▪ 1 module SODIMM DDR3-1600	+ 2
	16 GB ▪ 1 module SODIMM DDR3-1600	+ 4
MECHANICAL PREDISPOSITION	Top arm mounting attachment predisposition	
	Bottom arm mounting attachment predisposition	-
	VESA 75/100 attachment predisposition	-
MECHANICAL ADAPTER PLATES > note 2	IP65 mechanical adapter plate for custom system	-
	IP65 mechanical adapter plate for RITTAL system CP 40 serie 90x71 support	-
	IP65 mechanical adapter plate for tilting adaptor +100°/-60° RITTAL system CP 40 serie 120x65 support	-
	IP65 mechanical adapter plate for HASEKE system ULT KUPPLUNG 48 serie	-
	IP65 mechanical adapter plate for ROLEC system TARAPLUS serie	-
REAR COVER	Rear closing cover for connectors access without hole ▪ IP65 protection grade	
	Rear closing cover for connectors access with Ø 19mm hole and IP65 rubber cap for the possible USB devices cabling at customer own charge (for keyboard and mouse)	-
BUTTON AREA	Button Area without commands and internal terminals	-
	Customized Button Area with interfaces, signal indicators, pushbuttons, emergency stop pushbutton and selector switches kit	-

OPTIONS		POWER [W]
SSD mSATA	SSD on mSATA connector onboard, SATA	2
CFAST	CFast SATA	1
COMMUNICATION PORTS	1 x RS232/422/485 serial port (DB15M) **> note 3**	1
	1 x RS232/422/485 optoisolated serial port (DB15M) **> note 3**	1
FIELDBUS	1 x NETcore X module for MB1291 motherboard **> note 4**	3
WIRELESS MODULES	WiFi module, IEEE 802.11a/b/g/n, 2,4GHz - 5 GHz **> note 4**	2
MECHANICAL ACCESSORIES	Side handles, perimetral handles and keyboard tray	-
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: For the customized Button Area commands list, see pg.236/Hard-wired, pg.239/Fieldbus versions.
The button area is delivered assembled and internally cabled.

2: The systems with VESA 75/100 attachment predisposition do NOT need the adapter plates

3: Options signed by note 3 cannot be installed together

4: Options signed by note 4 cannot be installed together

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TECHNICAL SPECIFICATIONS

Case	Installation	For VESA 75/100 or pole or suspension arm mounting systems compatible with RITTAL (CP 40) / ROLEC (TARAPLUS) / HASEKE (ULT KUPPLUNG 48)
	material	Aluminum alloy EN AB46400 anti-scratchable painted
	color	RAL 9006
Overall dimensions & weight		See details on the related section
Front panel	LCD TF	Aluminum TrueFlat ▪ Polycarbonate Pantone Black C color
	LCD TFM	Aluminum and tempered glass TrueFlat ▪ Black color
	Button Area	Aluminum TrueFlat ▪ Polycarbonate Pantone Cool Grey 4C color
Touchscreen	TF	5 wires resistive technology ▪ overlaminated with OCA (Optical Clear Adhesive) ▪ on board controller
	TFM	Projective capacitive multitouch
Protection grade		Full IP65
Power supply		24VDC isolated ▪ Input voltage: 18÷32V DC
Motherboard	Type	"All-In-One" type ▪ ASEM 1291
	RTC / CMOS	Replaceable C2032 battery with external access
	Watch-dog	Time programmable
Intel platform	Processor	Intel® Celeron™ and fifth generation Intel® Core™ processors ▪ Broadwell ULT dual core 15W
	Chipset	Intel® Broadwell PCH-LP chipset (Platform Controller Hub - Low Power) ▪ Included into processor's chip
Operating System	O.S. certified by ASEM	Microsoft Windows 10 IoT Enterprise 2019 64bit ▪ Microsoft Windows 10 IoT Enterprise 2016 64bit ▪ Microsoft Windows 8.1 Industry Pro 32/64bit ▪ Windows 7 Pro/Ultimate 32/64bit ▪ Windows Embedded Standard 7P 32/64 bit. Only for VK3200-TF also Windows Embedded Standard 7E 32/64 bit Other operating systems, such as VxWorks, QNX, etc., have not been certified by ASEM but they are reasonably supported by the Intel platform after verification of compatibility
Software	Remote assistance	ASEM UBIQUITY BASIC Win32/64 runtime license with ASEM sticker
Video controller		Intel® HD Graphics integrated into Intel® Celeron™ microprocessor ▪ 850MHz ▪ LVDS 8bit/color digital interface Intel® HD Graphics 5500 integrated into Intel® Core™ i3 microprocessor ▪ 900MHz ▪ LVDS 8bit/color digital interface Intel® HD Graphics 6000 integrated into Intel® Core™ i5, i7 microprocessors ▪ 1GHz ▪ LVDS 8bit/color digital interface
Video memory		Dynamic Video Memory Technology ▪ Memory quantity is automatically selected by operating system
System memory		DDR3-1066 type ▪ 1 SODIMM module ▪ min 2GB ▪ max 8GB
Mass storage controller		1 x mSATA SATA III 6Gb/s ▪ Integrated on board
CFast slot		1 x slot CFast (bootable) external access (remove rear panel before), SATA II 3Gb/s
Rear external access interfaces		2 x USB 3.0 (Type A, protected, IP65)
Rear internal access interfaces		3 x Ethernet 10/100/1000 Mbps (RJ45 - 2 x Intel® I210-AT, 1 x Intel® I218-LM) ▪ 2 x USB 2.0 (Type A)
Environmental specifications		Operating temperature: 0° ÷ +50°C ▪ Storage temperature: -20° ÷ +60°C ▪ Humidity: 80% (non-condensing)
Approvals		CE (EN 55022, EN 61000-3-2/3, EN 55024, EN 60950-1) ▪ UL 61010
Standard warranty		12 months ▪ Warranty management by ASEM headquarters

DIMENSIONS (mm)

FRONT VIEW

SIDE VIEW Bottom mounting

SIDE VIEW Top mounting

SIDE VIEW VESA mounting

Front access

BUTTON AREA

REAR VIEW - arm mounting

45.5
20

REAR VIEW - VESA 75/100 mounting

Access area to buttons area terminal blocks

113.5   290

A/2   A/2

LCD	A	B	C	D	E	F	G	WEIGHT (kg)
15,6"	433	320	240	13,5	30	54	178	8,0
18,5"	503	358	276	14,5	36	91,5	216	10,0
21,5"	582	403	314	18	40	134	261	12,0
24"	640	439	347	19,4	40	175	297	14,0

FIXING PLATE HOLES - arm mounting

58
46
57   Ø 43   46   58
57

CONNECTORS VIEW

POWER PLUG   CFast   2 x USB 3.0   Battery

EARTH   1 x COM optional   2 x USB 2.0   3 x LAN