

## TPC150-EKT

### 15" All-in-one Panel PC



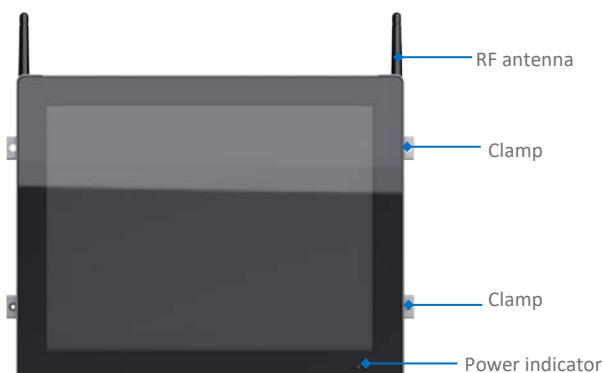
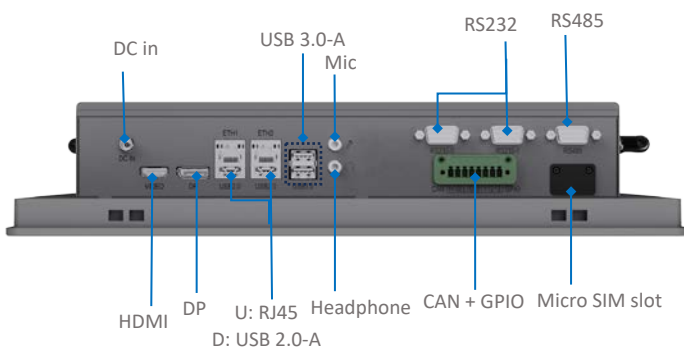
#### Product Brief

Vantron TPC150-EKT is a 15" panel mount all-in-one panel PC. It is powered by Intel® Elkhart Lake quad-core high-performance processor that offers rich interfaces such as RS232, RS485, GPIO, USB, and CAN, enabling seamless connection with diverse peripherals.

TPC150-EKT features a 10-point PCAP touchscreen monitor with an XGA native resolution and a 4:3 aspect ratio. It offers multiple connectivity options, including dual Ethernet, Wi-Fi, Bluetooth, and optional 4G LTE. The front panel is IP65 rated, making it ideal for industrial control applications such as retail, smart city, and healthcare when panel mounted with the provided clamps. In addition, the 75mm x 75mm VESA pattern provides it with flexibility for installation in various settings.

Vantron TPC series all-in-one panel PCs offer an overall solution that integrates the touchscreen monitor, display, processor, and software operating system, making them a first choice in IoT applications.

#### Exterior and Features

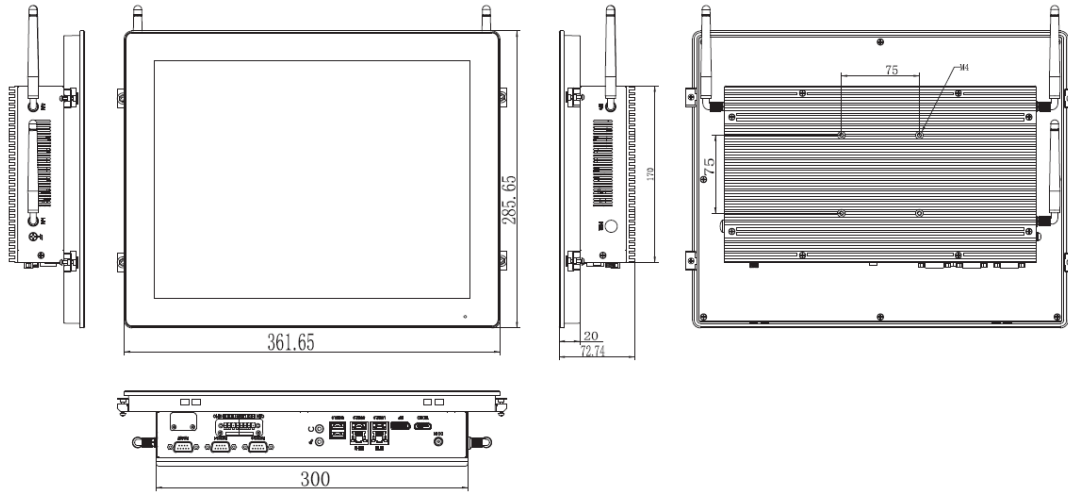


TPC150-EKT	
	Intel® Elkhart Lake high-performance processor
	15" XGA TFT LCD, 300 nits
	10-point PCAP touch screen, gloves compatible
	Windows 10 IoT, Ubuntu 20.04
	Ethernet, Wi-Fi, Bluetooth, optional 4G LTE
	Rich I/O: RS232, RS485, GPIO, USB, CAN
	Front panel IP65 rated
	Fanless design
	Panel mount, VESA mount

**TPC150-EKT 15" All-in-one Panel PC Datasheet**

TPC150-EKT				
<b>System</b>	CPU	Intel® Atom®x6425E Processor, 4C4T, 2.0GHz (base), 3.0GHz (turbo), 12W TDP Intel® Celeron®J6412 Processor, 4C4T, 2.0GHz (base), 2.6GHz (turbo), 10W TDP		
	Memory	1 x DDR4 SO-DIMM, 3200MT/s, up to 16 GB (Default: 8GB)		
	Storage	128GB eMMC 5.1 Optional: Up to 1TB SATA SSD (M.2 B-Key 2242, multiplexed with 4G LTE)		
<b>Communication</b>	Ethernet	2 x RJ45, 10/100/1000Mbps		
	Wi-Fi & BT	Wi-Fi 802.11 a/b/g/n/ac + BT 5.0		
	4G LTE	Optional, CAT 4 (M.2 B-Key 2230, multiplexed with SATA SSD)		
<b>Media</b>	Display	15-inch TFT LCD	Contrast ratio: 800:1	
		Resolution: 1024 x 768 @60Hz	Aspect ratio: 4:3	
		Brightness: 300 nits (typical)	Viewing angle: 80/80/85/85 (U/D/L/R)	
	Extended display	1 x HDMI 2.0b, up to 4K @60Hz	1 x DP 1.4, up to 4K @60Hz	
	TP	10-point PCAP touch screen	Surface hardness: 6H	
		Surface treatment: Anti-fingerprint (AF)	Cover lens: IK07 rated	
		Optional: Anti-glare (AG)	Light transmittance ratio: > 85%	
Audio	1 x 3.5mm Microphone jack	1 x 3.5mm 3-pole headphone jack		
<b>I/O</b>	USB	2 x USB 2.0 Type-A	2 x USB 3.0 Type-A	
	Serial port	2 x RS232, DB9	1 x RS232/485/422, DB9	
	CAN	Atom® x6425E: 1 x CAN Celeron®J6412: Optional 1 x CAN		
	GPIO	4 x GPIO (3.3V)		
	Antenna	RF0: Wi-Fi & Bluetooth antenna	RF1, RF2: 4G LTE antenna	
	SIM slot	1 x Micro SIM slot		
<b>Miscellaneous</b>	RTC	Supported		
	WDT	Supported		
	Security	Discrete TPM2.0		
<b>System control</b>	Button	1 x Power button		
	LED indicator	1 x Power indicator (Green: Normal operation; Red: Standby)		
<b>Software</b>	OS	Windows 10 IoT	Ubuntu 20.04	
	Display orientation	Landscape mode by default (Portrait mode supported)		
<b>Power</b>	Input	12V~36V DC	1 x Power jack	
	Consumption	Typical: 21W	Max.: 31W	
<b>Mechanical</b>	Dimensions	361.65mm x 285.65mm x 72.74mm		
	Installation	VESA mount (75mm x 75mm, M4 x 6mm)	Panel mount	
	Weight	4.2kg		
	IP rating	Front panel IP65		
	Heat dissipation	Fanless		
<b>Environment condition</b>	Temperature	Operating: -20°C ~ +60°C	Storage: -30°C ~ +80°C	
	Humidity	10%-85% RH (Non-condensing)		
	Certification	FCC, CE	ESD: ±4KV (Contact); ±8KV (Air)	
<b>Reliability</b>	MTBF	50,000 hours		
	Warranty	2 years		

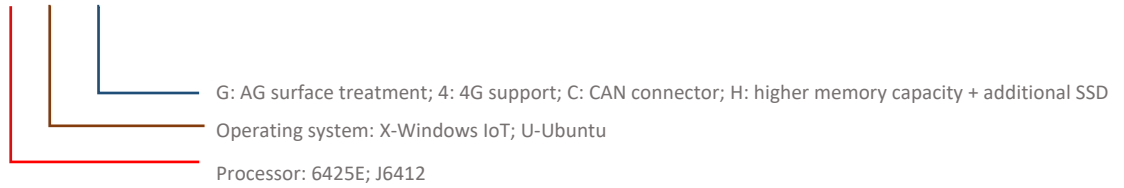
## Product Outlines



## Ordering Information

### Nomenclature

#### TPC150-EKT-P-OS-Add-on features



Example Ordering No.	Memory	Storage	Add-on	Operating System	Processor
TPC150-EKT-6425E-X	8GB	128GB	/	Windows 10 IoT	Intel® Atom® x6425E processor
TPC150-EKT-6425E-X4	8GB	128GB	4G LTE	Windows 10 IoT	
TPC150-EKT-6425E-UGH	16GB	128GB	512GB SSD, AG treatment	Ubuntu 20.04	
TPC150-EKT-J6412-X	8GB	128GB	/	Windows 10 IoT	Intel® Celeron® J6412 processor
TPC150-EKT-J6412-X4	8GB	128GB	4G LTE	Windows 10 IoT	
TPC150-EKT-J6412-UC	8GB	128GB	CAN connector	Ubuntu 20.04	
TPC150-EKT-J6412-UGH	16GB	128GB	512GB SSD, AG treatment	Ubuntu 20.04	

Packing list				
TPC150-EKT all-in-one panel PC	1		GPIO mating connector	1
Wi-Fi & BT antenna	1		Mounting clamp	4
CAN mating connector for x6425E processor	1		/	/
Optional accessories				
19V 3.42A DC power adapter	1		AC power cable (US)	1
4G LTE antenna for 4G version	2		CAN mating connector for J6412 with CAN version	1

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