

M05R1 5" Rugged Industrial Tablet



Product Brief

Vantron M05R1 rugged industrial tablet is a personal digital assistant (PDA), powered by MediaTek octa-core high-performance processor, delivering exceptional processing power and rapid system responsiveness. It features a 5-inch HD IPS display with a multi-touch PCAP touch screen, ensuring optimal visibility even under direct sunlight for improved outdoor usability.

Built with an ergonomics design, M05R1 is lightweight and slim to mitigate hand fatigue during extended usage. It is IP65-rated and 1.5m drop tested, ensuring reliable performance in harsh environments. M05R1 integrates a high-precision 1D/2D barcode scanner, enabling rapid scanning upon a press of the side buttons for quick data capture. It supports LTE CAT 4, Wi-Fi, and Bluetooth connectivity for seamless wireless communication. Additionally, the device includes GNSS and NFC functionalities for advanced location tracking and secure data exchange.

Designed to meet the rigorous demands of both commercial and industrial environments, M05R1 offers a comprehensive suite of features that enhance the efficiency, accuracy, and reliability of workflows, ensuring enterprise-level productivity and operational effectiveness.

Exterior and Features



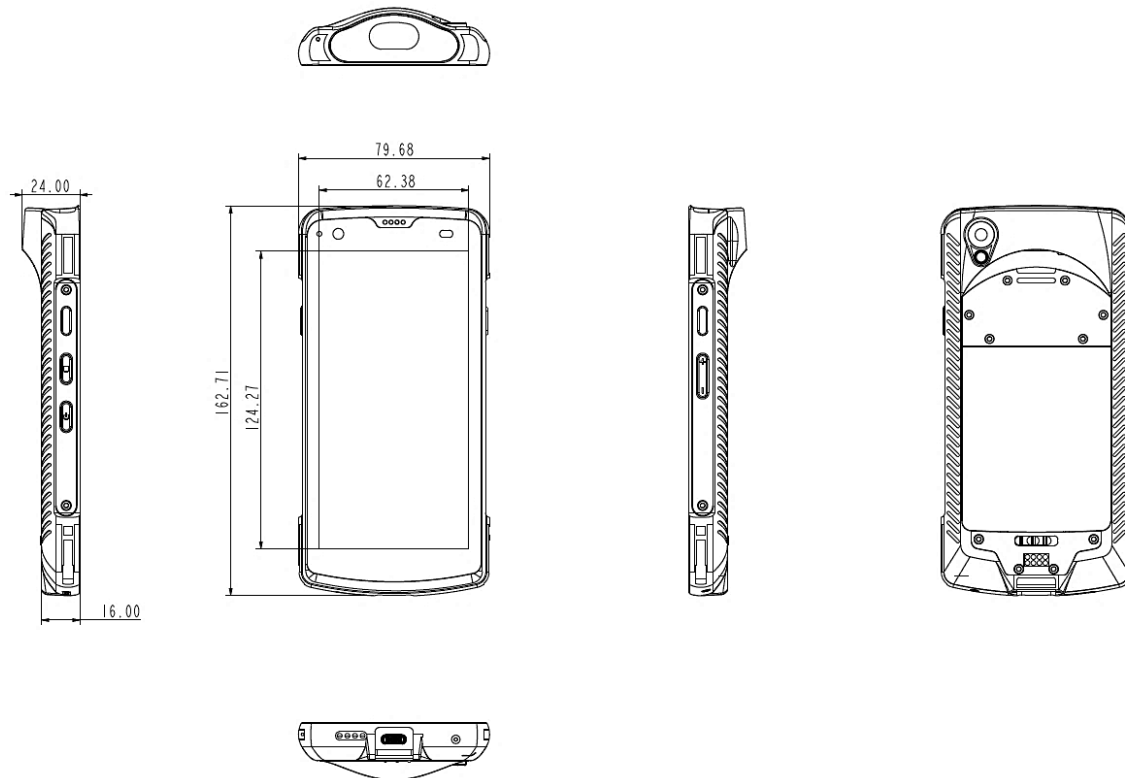
- ❖ MediaTek octa-core high-performance processor
- ❖ Large storage capacity for faster responsiveness
- ❖ 5" HD IPS display, 400 nits, OCA bonding
- ❖ Integrated high-precision 1D/2D barcode scanner
- ❖ Fast roaming dual band WLAN, BT 5.0, LTE CAT 4, NFC for seamless communication
- ❖ IP65-rated, 1.5m drop tested
- ❖ Pogo pin for user expansion
- ❖ USB Type-C for OTG, charging, and audio

M05R1 5" Rugged Industrial Tablet Datasheet

M05R1			
System	CPU	MediaTek MT8768, Quad-core Arm Cortex-A53, 2.0 GHz + Quad-core Arm Cortex-A53, 1.5 GHz	
	GPU	IMG GE8320 @650MHz	
	Memory	4GB LPDDR4	
	Storage	64GB eMMC V5.1	
Communication	Wi-Fi & Bluetooth	Wi-Fi 802.11 a/b/g/n/ac + BT 5.0	
	Cellular	LTE CAT 4	LTE-FDD: B2/B4/B5/B12/B13/B25/B26
	NFC	13.56MHz, Compatible with ISO15693, ISO14443 Type A/B, Mifare, Felica	
	GNSS	GPS + BeiDou + GLONASS + Galileo, A-GPS supported	
Media	Display	5" 18:9 IPS panel	
		Contrast Ratio: 1000:1	Resolution: 720 x 1440
		Brightness: 400 nits	Color depth: 16.7M
		Viewing angle: Horizontal: ±89° or 178° / Vertical: ±89° or 178°	
	TP	5-point PCAP touchscreen, anti-fingerprint	
		Surface hardness: 7H	Cover lens: IK03 rated
		Light transmittance ratio: > 85%	Finishing process: Chemical tempering
	Camera	Front camera: 5MP, fixed focus	
		Rear camera: 13MP, auto focus, with flash	
	Audio	1 x 8Ω/1W speaker	1 x Audio output via USB Type-C
		2 x Noise-reducing Mic	1 x Receiver
I/O	USB	1 x USB 2.0 Type-C (OTG, audio, charging)	
	Barcode scanner	1D/2D code scan	
		DPI: Horizontal: 640 pixels/width, Vertical: 480 pixels/height	
	Pogo pin	2 x 4 pin, supporting 1 x I ² C, 2 x Scan button, 1 x GPIO, 1 x Charging via a docking station	
Sensor	Sensor support	1 x Nano SIM slot	
		Gyroscope, 3-Axis e-compass/magnetometer, 3-Axis accelerometer (free fall), Ambient light sensor, Proximity sensor (SAR)	
System Control	Button	1 x Power button	1 x Function button
		2 x Scanner button	1 x Volume + / - button
	LED indicator	1 x Battery level indicator	
Power	Input	USB Type-C power input (5V/2A DC, 9V/2A DC, 12V/2A DC, PD supported)	
	Battery	4000mAh/3.8V, Removable, 10-hour working time*	
Software	OS	Android 11	
	Device management	BlueSphere MDM (Optional)	
Mechanical Performance	Material	Polycarbonate, TPU	
	Casing color	Black	
	Dimensions	162.71mm x 79.68mm x 24.00mm	
	Installation	Handheld	
	Protection	IP65	
Environmental Condition	Environmental test	MIL-STD-810H, 1.5m drop tested	
	Temperature	Operating: -10°C ~+50°C	Storage: -20°C ~+70°C
	Humidity	10%-90% RH (Non-condensing)	
	Certification	FCC, CE	ESD (Contact: ±4KV, Air: ±8KV)

* Source: Test with 1080p video play at 50% volume and 200 nits brightness.

Product Outlines



Ordering Information

Ordering No.	Memory + Storage	Description
M05R1	4GB + 64GB	IPS display, LTE CAT 4, Wi-Fi, Bluetooth, NFC, barcode scan, pogo pin, front & rear cameras

Packing list	
M05R1 rugged industrial tablet	1
5V/2A Power adapter	1
USB cable	1

Since its establishment in 2002 by two Silicon Valley entrepreneurs, Vantron Technology has been at the forefront of the connected IoT devices and IoT platform solutions. Today, Vantron boasts a global customer base that includes several Fortune 500 companies. Its product lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud device management platform.

Vantron's intelligent display systems are comprised of industrial tablets, touchscreen monitors, and all-in-one panel PCs that deliver enhanced device performance and exceptional human-machine interactive experience. The industrial tablets are powered by industry-leading brands such as Rockchip, NXP, MediaTek, and Intel. The touchscreen monitors offer flexible installation options to cater to various application scenarios. The all-in-one panel PCs offer an overall solution that integrates the touchscreen monitor, display, processor, and operating system. Moreover, the displays are built to excel in harsh environments thanks to advanced features like waterproofing, dustproofing, and shatter resistance.