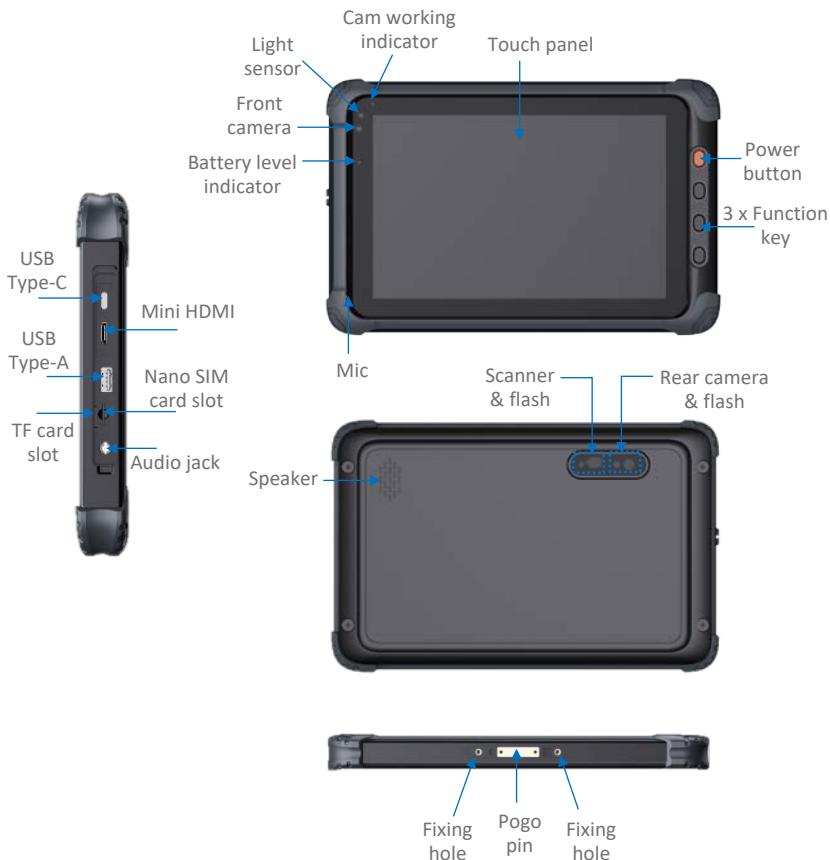# M10R1-RK35

10" Rugged Industrial Tablet

● Product Brief

Vantron M10R1-RK35 is a 10-inch high-performance rugged tablet, designed to handle demanding tasks with ease. It is powered by Rockchip RK3588S octa-core processor, combined with ARM Mali-G610 MP4 GPU and a TOPS NPU for industrial applications such as healthcare, plant walk-down, law enforcement patrol, and prison automation.

M10R1-RK35 features a resolution of 1920 x 1200 and a brightness of 600 nits to provide clear visuals even in bright sunlight or harsh lighting conditions. It is IP65 rated for water and dust resistance. Additionally, it has also been drop-tested from a height of 1.5m on all 6 sides, ensuring that it can withstand accidental drops and bumps without skipping a beat.

M10R1-RK35 features a pogo pin to allow users to connect additional accessories or peripherals with ease. It supports up to 60W PD charging, ensuring quick and efficient charging when needed.
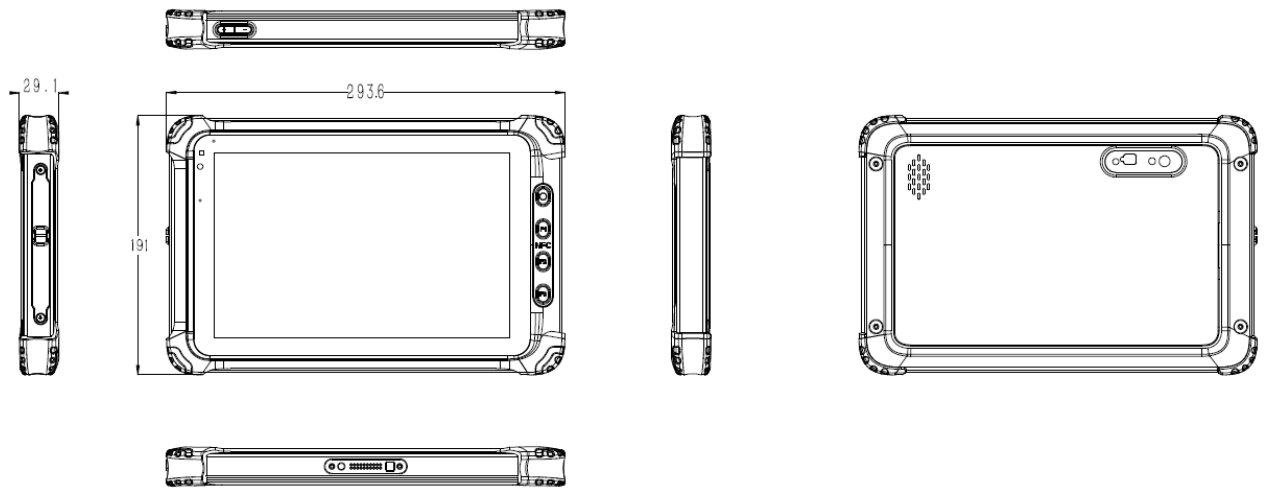

● Exterior and Features

M10R1-RK35	
🔲	Automotive-grade chip
📷	Front & rear cameras, built-in barcode scanner
🔲	IPS panel, 1920 x 1200, 600 nits
🔋	6000mAh Battery, lasting for 8 hours
◇	IP65, 1.5m drop test on 6 sides
⬭	Pogo pin for flexible expansion
⇄	USB Type-C, data transmission & 60W PD supported

Labels (front/side/rear views): Light sensor, Cam working indicator, Touch panel, Front camera, Battery level indicator, Power button, 3 x Function key, USB Type-C, Mini HDMI, USB Type-A, Nano SIM card slot, TF card slot, Audio jack, Mic, Scanner & flash, Rear camera & flash, Speaker, Fixing hole, Pogo pin, Fixing hole

M10R1-RK35 10" Rugged Industrial Tablet Datasheet

M10R1-RK35			
System	CPU	Rockchip RK3588S Quad-core ARM Cortex-A76 MPCore processor + Quad-core ARM Cortex-A55 MPCore processor, Max. 2.4GHz	
	GPU	ARM Mali-G610 MP4, Max. 1GHz	
	NPU	6 TOPs	
	Memory	4GB LPDDR4	
	Storage	64GB eMMC V5.1	1 x M.2 M-Key (2242) SATA/NVMe for SSD
Communication	Wi-Fi & Bluetooth	Wi-Fi 802.11 a/b/g/n/ac/ax + BT 5.1	
	Cellular	2G/3G/4G, LTE CAT 4	
	GNSS	GPS + BeiDou + GLONASS + Galileo, AGPS supported	
	NFC	Supported	
Media	Display	10" 16:10 IPS panel	
		Resolution	1920 x 1200
		Brightness	600 nits
		Contrast ratio	1000:1
		Viewing angle	Horizontal: ±85° or 170° / Vertical: ±85° or 170°
	TP	10-point G + G PCAP touchscreen	
		Finishing process: Toughening	Surface hardness: 6H
	Camera	Front camera	5MP, fixed focus, with a working indicator
		Rear camera	8MP, auto focus, with a flash
	Audio	1 x 4Ω/2w speaker	1 x Mic
		1 x 3.5mm combo audio jack	
I/Os	USB	1 x USB 2.0 Type-A	1 x USB 3.0 Type-C
	Built-in barcode scanner	Bar width	> 8Mil
		Pixel	> 640 x 480
	Extended display	1 x Mini HDMI	
	Pogo pin	2 x 20 pin, supporting CAN J1939, USB 3.0, 100Mbs Ethernet RJ45, Audio Jack, RS232/RS485 Combo, TJA1100HN 100Base-T1 PHY	
	SIM card slot	1 x Nano SIM slot	
	TF slot	1 x TF slot (up to 128GB)	
	Security	1 x TPM 2.0 (Optional)	
Sensor	Light sensor	1 x Light sensor	
	Gyro-sensor	1 x Gyro-sensor	
	G-Sensor	1 x G-sensor	
System Control	Button	1 x Power button	3 x Function button
		1 x Volume +/- button	
	LED indicator	1 x Battery level indicator	1 x Camera working indicator
Software	OS	Android 13, Linux, Yocto +QT	
Power	Input	USB Type-C power input, 5V/3A, 9V/3A, 12V/3A, 20V/3A, 60W PD supported	
	Battery	6000mAh/7.6V, 8 hours working time[*]	
Mechanical	Material	PC, ABS	
	Dimensions	293.6mm x 191mm x 29.1mm	
	Net weight	850g	
Performance Standard	IP rating	IP65	
	Drop test	MIL-STD-810H, drop from 1.5m onto concrete surfaces on 6 sides	
	Vibration	MIL-STD-810H: Method 516.8, Procedure I	Operating: 20G, Idle: 40G
	Thermal shock	MIL-STD-810H: Method 503.7	Operating: -20°C ~+60°C, Idle: -30°C ~+70°C
	Solar radiation	MIL-STD-810H: Method 505.7	
	Liquid pollution	MIL-STD-810H: Method 504.3	
Environment Condition	Temperature	Operating: -20°C ~+60°C	Storage: -30°C ~+70°C
	Humidity	20%~80% RH (Non-condensing)	
	Certification	MIL-STD-810H	FCC (FCC Part 15 Class B)
		ISED, 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	Features
M10R1-RK35	4GB	64GB	USB-A, USB-C, Mini HDMI, barcode scanner, Android 13, Linux, Yocto +QT

Packing list	
M10R1-RK35 Industrial tablet	1
Type-C power adapter	1
USB cable	1
Qualified certificate	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.