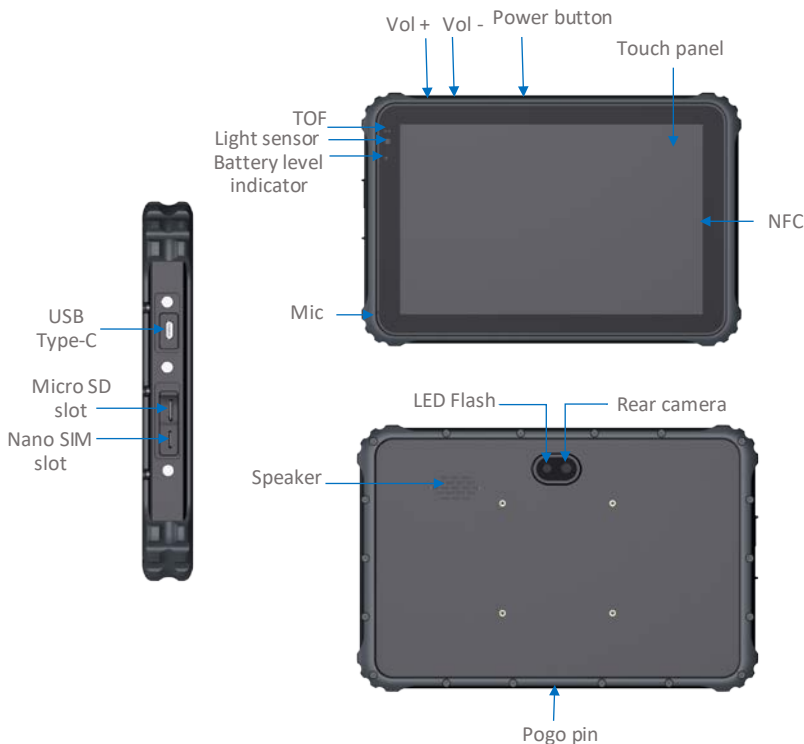# M10R1-RK35-L

10" Rugged Industrial Tablet

Product Brief

Vantron M10R1-RK35-L is a cost-optimized version of M10R1-RK35 rugged industrial tablet, with reduced peripherals and thinner profile. It is powered by Rockchip RK3588S low-power high-performance octa-core processor, combined with ARM Mali-G610 MP4 GPU for 3D/2D graphic acceleration and a 6 TOPS NPU for industrial applications such as healthcare, plant walk-down, prison automation, and more.

M10R1-RK35-L features a 10-inch 16:10 IPS TFT LCD, with a resolution up to 1920 x 1200 and a brightness of 400 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-L offers a pogo pin header to allow users to connect additional accessories or peripherals with ease. It supports up to 40W PD charging, ensuring quick and efficient charging when needed.
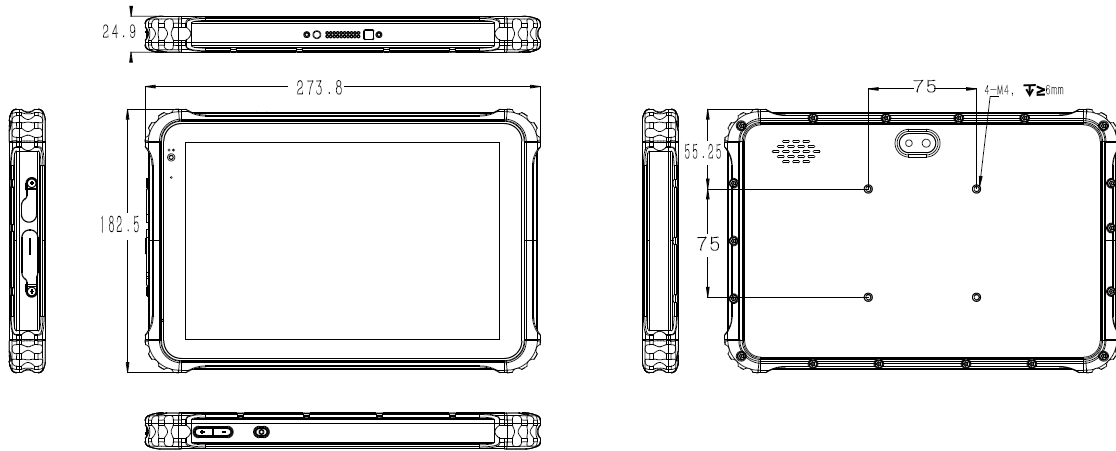
Exterior and Features

Vol + Vol - Power button
Touch panel

TOF
Light sensor
Battery level indicator

NFC

USB Type-C

Mic

Micro SD slot

Nano SIM slot

LED Flash

Rear camera

Speaker

Pogo pin

M10R1-RK35-L

💾	4GB LPDDR4 + 64GB eMMC V5.1
📷	8MP rear camera with LED flash
📱	IPS panel, 1920 x 1200, 400 nits
🗘	NFC at 13.5MHz
◇	IP65, 1.5m drop test on 6 sides
▱	Pogo pin for flexible expansion
⇃	USB Type-C, support data, DisplayPort, PD charge, etc.

M10R1-RK35-L 10" Rugged Industrial Tablet Datasheet

		M10R1-RK35-L	
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	
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, A-GPS supported	
	NFC	Supported, 13.5MHz	
Media	Display	10" 16:10 IPS TFT LCD	
		Resolution	1920 x 1200
		Color depth	16.7M
		Brightness	400 nits
		Contrast ratio	1000:1
		Viewing angle	Horizontal: 85° / Vertical: 85°
	TP	10-point G + G PCAP touch screen	
		Finishing process: Toughening	Surface hardness: 6H
		Rear camera	8MP, auto focus, with LED flash
	Audio	1 x 8Ω/2w speaker	1 x Mic
I/Os	USB	1 x USB 3.0 Type-C, support data transfer, DisplayPort, PD charging, debugging	
	Pogo pin	2 x 10 pin, support 2 x USB 3.0, 100Mbps Ethernet RJ45, 3.5mm Combo audio Jack, 12V DC power input, 5V DC power output	
	SIM card slot	1 x Nano SIM slot	
	SD slot	1 x Micro SD slot (class 4 & class 10 supported, up to 128GB)	
	RTC	Supported	
	Watchdog timer	Supported	
System Control	Sensor	1 x Light sensor	1 x Gyro-sensor
		1 x G-sensor	1 x Geomagnetic sensor
		1 x TOF sensor	
	Button	1 x Volume+ button	1 x Volume- button
		1 x Power button	
	LED indicator	1 x Battery level indicator (Red: Low power; Amber: Charging; Green: Charged)	
Software	OS	Android 13, Linux Yocto + QT	
Power	Input	USB Type-C power input, 5V/2A, 9V/2A, 12V/2A, 20V/2A, 40W PD charging supported	
	Battery	5000mAh/7.4V	
Mechanical	Material	PC, ABS	
	Dimensions	273.8.6mm x 182.5mm x 24.9mm	
	Installation	VESA (75mm x 75mm)	
	Net weight	973g	
Performance Standard	IP rating	IP65	
	Drop testing	Drop from 1.5m onto concrete surfaces on 6 sides	
	MIL-STD-810H	Vibration, thermal shock, solar radiation, liquid pollution	
	Battery testing	UN38.3 MSDS Sea/Freight, IEC62133	
Environment Condition	Temperature	Operating: 0°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)

Product Outlines

Ordering Information

Ordering No.	Memory	Storage	Features
M10R1-RK35-L	4GB	64GB	USB-C, NFC, GNSS, Cellular, Wi-Fi, BT, Android 13, Linux Yocto +QT

Packing list	
M10R1-RK35-L Industrial tablet	1
USB power adapter	1
USB Type-C 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 Global 500 companies. Its product lines cover edge intelligent hardware, IoT communication devices, industrial displays and BlueSphere cloud platforms.

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.