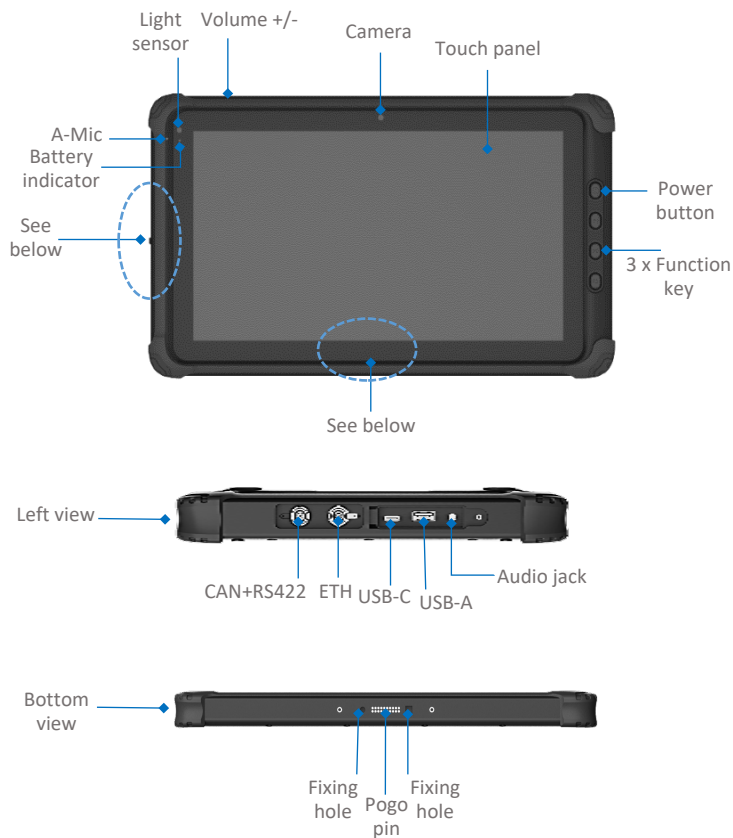# M13R1 13.3" Rugged Industrial Tablet

Product Brief

Vantron M13R1 features a 13.3-inch full HD LCD with a reinforced, IP65-rated waterproof design specifically tailored for industrial uses. The device is powered by Rockchip RK3568J multimedia processor to support 4K 60fps H.265/H.264/VP9 decoder, 1080P 60fps H.265/H.264 encoder, and 8M ISP with HDR, delivering exceptional visual experiences for users.

The tablet comes with a range of connectivity options including USB Type-A, USB type-C, CAN/RS422, and Ethernet. Such interfaces enable seamless communication with industrial devices for efficient data exchange, monitoring, and control.

M13R1 offers an ideal solution for industries such as plant walk-down, logistics, utilities, and automotive where reliable and durable technology is essential for efficient operations in challenging environments.

Exterior and Features

M13R1
Automotive-grade chip
IPS panel, Resolution: 1920 x 1080, Brightness: 450 nits
Gigabit Ethernet/Wi-Fi/Bluetooth supported
5000mAh Battery
IP65-rated
Pogo pin for flexible expansion
USB-A & USB-C (charge, OTG, PD supported)

M13R1 13.3" Rugged Industrial Tablet Datasheet

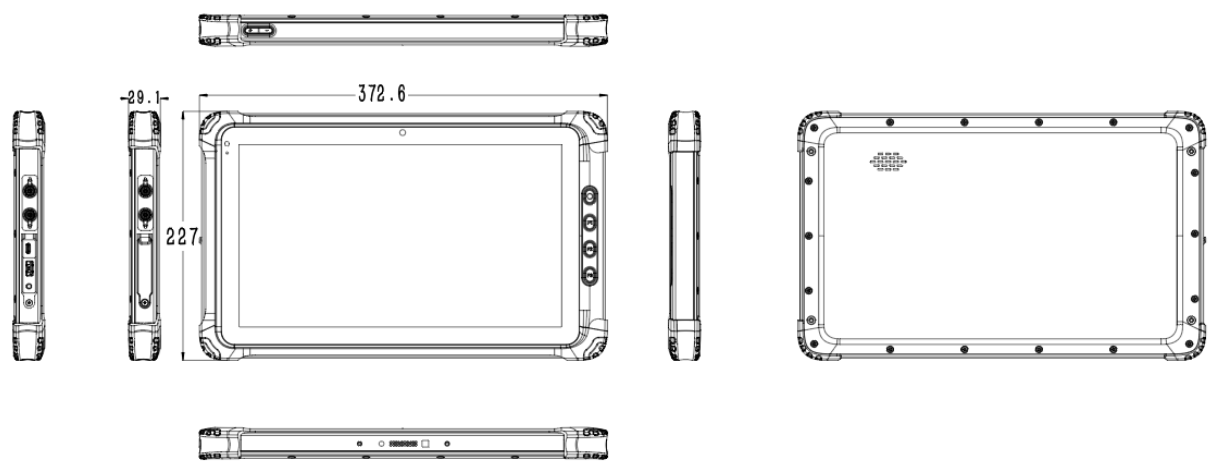| M13R1			
System	CPU	RK3568J, Quad-core Cortex-A55 processor, 1.8GHz	
	GPU	Mail-G52-2EE	
	Memory	4GB LPDDR4-1866	
	Storage	128GB eMMC 5.1	
		SATA SSD expansion supported	
Communication	Ethernet	1 x M8, 10/100/1000Mbps	
	Wi-Fi & Bluetooth	Wi-Fi 802.11 a/b/g/n/ac + BT 5.0	
Media	Display	13.3" 16:9 IPS LCD	
		Resolution	1920 x 1080
		Brightness	450 nits
		Color depth	16.7M (8-bit)
		Viewing angle	Full view
	TP	10-point G + G PCAP touchscreen	
		Surface hardness: 6H	
		Finishing process: Toughening	
	Camera	Front camera	8MP, auto focus
	Audio	1 x 1w speaker	
		1 x 3.5mm combo audio jack, debugging supported	
		1 x A-Mic	
I/Os	USB	1 x USB 3.0 Type-A	1 x USB 2.0 Type-C (OTG, power input, PD charge)
	CAN	1 x CAN (M8)	1 x CAN (Pogo pin)
	Serial port	1 x RS422 (M8)	1 x RS422 (Pogo pin)
	Pogo pin	2 x 10 pin (1 x RS422, 1 x CAN, 1 x USB 2.0, 12V DC input, 10/100Mbps Ethernet)	
	RTC	Supported	
Sensor	G-Sensor	1 x G-sensor	
	Light sensor	1 x Light sensor	
System Control	Button	1 x Power button	3 x Function button
	LED indicator	1 x LED indicator for device charge/user defined	
Software	OS	Debian 10, Android 11	
Power	Input	USB Type-C (5V/9V/12V PD supported)	
	Battery	5000mAh/7.4V lithium battery	
Mechanical	Casing color	Black	
	Dimensions	372.6 mm x 227mm x 29.1mm	
	Weight	1500g	
Performance Standard	IP rating	IP65	
	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	Operating: 10%~90% RH (Non-condensing)	
		Storage: 5%~95% RH (Non-condensing)	
	Certification	FCC (FCC Part 15 Class B) ESD (Contact: ±4KV, Air: ±8KV)	

Product Outlines

Ordering Information

Ordering No.	Memory	Storage	IP Rating	Ethernet	Wi-Fi & BT
M13R1	4GB	128GB	IP65	Yes	Yes

Optional accessories	
12V/2A Power adapter	1
USB cable	1

Packing list	
M13R1 Industrial tablet	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 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.