

Andino X1 LoRaWan – Datasheet

	Raspberry 4:	Raspberry CM4 with Andino CM4 Adapter	
SoC	Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz	Broadcom BCM2837B0, Cortex-A53 (ARMv8) 64-bit SoC @ 1.4GHz	
RAM	4GB LPDDR4-3200 SDRAM	4GB LPDDR2 SDRAM	
Flash	None	32GB eMMC Flash	
PCIe	None	Interla PCIe X1 Port. Can be used for M.2 SSD via Adapter	
WiFi	2.4 GHz and 5.0 GHz IEEE 802.11ac wireless	None	
Bluetooth	Bluetooth 5.0, BLE	None	
Ethernet	Gigabit Ethernet	Gigabit Ethernet over USB 2.0 (max. throughput 300 Mbps)	
Connectivity	2 USB 3.0 ports; 2 USB 2.0 ports. Raspberry Pi standard 40 pin GPIO header 2 × micro-HDMI ports (up to 4kp60) Micro-SD card slot (accessible from outside Andino housing)	2 USB 2.0 ports external 1USB 2.0 port internal Full-size HDMI Extended 40-pin GPIO header	
Delivery	Andino IO, RaspberryPi 4, Breadboard, DIN rail Housing	Andino IO, CM4, Breadboard, DIN rail Housing	
all variants			
Power Supply	Wide range DC input 9-24V, Out: 5V, 2.6A	Microcontroller type	Atmel Atmega 328P (programming over Micro-USB)
I/O's	2 galvanic Isolation Inputs (isolated up to 5kV) 2 Relay Outputs (max. 24V, 1 A)	RTC	Integrated, battery-buffered Real Time Clock, DS3231 Dallas Semiconductors Accuracy: ± 2ppm between 0 °C and +40 °C
EMC	DIN EN 61000-6-2/3	Abmessungen (H x B x T)	115 mm X 108 mm x 60 mm
Gehäusevariante	Hutschienegehäuse (Kunststoff)		

See all Information about Andino X1 under [Andino X1 - Overview & Datasheet.pdf](#) | [Andino X1 - Industrial Raspberry Pi PC](#) | [Andino](#)

EMC -Report <https://andino.systems/andino-x1/emc/ANDINO-X1-EMC-Report.pdf>

ROHS – Report <https://andino.systems/andino-x1/emc/ROHS-X1.pdf>

REACH-Report <https://andino.systems/andino-x1/emc/REACH-Clear%20Systems.pdf>

	LoRa RN2483 Microchip
Power supply	2.1V – 3.6V (3.3V typical)
Frequenz bands	863.000 MHz to 870.000 MHz 433.050 MHz to 434.790 MHz
Max. Over-the-Air Data Rate	300 kbps with FSK modulation 10937 bps with LoRa Technology modulation
Modulation Method	FSK, GFSK and LoRa Technology modulation
Operation Range	Up to 15 km coverage at suburban Up to 5 km coverage at urban area
Temperature (operating)	-40°C to +85°C
Temperature (storage)	-40°C to +115°C
Humidity	10% ~ 90% non-condensing
Interface	UART

See all Information about RN2483 under <https://www.microchip.com/en-us/product/RN2483>