

AirLive Industrial AIoT M2M 5G-NR Router with AC1200

Dual Sim-slot, Gigabit Ethernet, VPN, GPS

M2M-5G5AC

airlive®



5G NR 2.1Gbps 900Mbps	2x FF Sim Slot Backup	AC1200 Wireless	Wi-Fi/5G/GPS Antennas	VPN Support
1x Wan / 4x Lan GE AIOT RS485 USB2.0 TF Card Slot	5G/Wan Load Balance	Industrial Grade -30~+70°C	5G /GPS Signal LED Status	9~36V Dual Input

Overview

Industrial Grade 5G Router with AC 1200 Wireless and Gigabit Ethernet

The AirLive M2M-5G5AC 5G industrial Router is an easy-to-deploy, high performance 5G Sub-6 GHz Cellular router. It features a dedicated WAN port and dual-SIM 5G mobile broadband for maximum redundancy and flexibility for intense applications. It supports Powerful VPN tools and built-in hardware watchdog as well as advanced remote management combined with ease of use make the M2M-5G5AC series ideal for both large-scale and individual deployment.

5G | WAN Load Balance

Intelligent load balancing function distributes data streams according to the bandwidth proportion of each WAN port and 5G APN to raise the utilization rate of multi-line broadband allowing one device to satisfy various internet requirements.

5G | WAN Fail Over

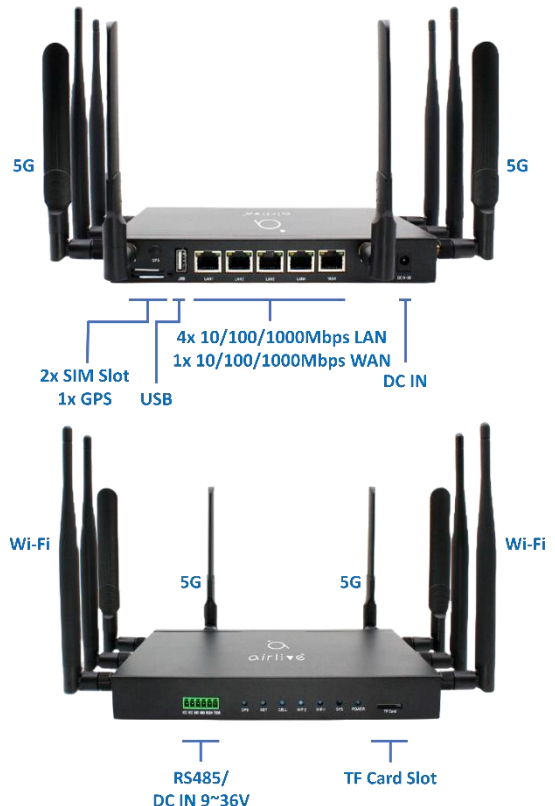
An LTE failover router ensures that a network remains online and operational in the event of an internet outage. This is accomplished by including a secondary redundant internet connection that a network automatically switches to should the primary internet connection fail.

5G Sub-6 GHz and Wi-Fi

Compliant with IEEE 802.11b/g/n/ac MIMO standard, the data rate up to 1200Mbps, more than 60 end users can access into it; With SIM card slot, build in Qualcomm X55 5G module, it supports 5G NR (NSA)/5G NR (SA)/LTE-FDD/LTE-TDD for worldwide use with 2.1Gbps/900Mbps uplink/downlink speed. Beside that, there is 1 WAN port which supports PPPoE/Static IP/Dynamic IP if no 4G connection.

Device Interface and Feature

- Support 5G NR (NSA)/5G NR (SA)/LTE-FDD/LTE=TDD/LAA/WCDMA Transmitting
- **Dual Sim Support (backup)**
- WAN port/ Dual APN Load balance/Fail over
- Industrial grade design, support use in high and cold temperature -30°C~70°C
- Support power supply from 9 V to 36 V, Vehicle / Industrial applications suitable
- Solid Full Metal enclosure, higher safety index, better corrosion resistance
- Support 1WAN+4LAN Giga port
- Built-in hardware watchdog to ensure stable operation of the system
- Support Dual Band 1200Mbps 802.11b/g/n/ac Wireless
- UART RS485 Serial Communication
- 1x TF card slot for storage, 1x USB 2.0 port
- Dual Power Input (DC adapter/Terminal Block)
- Antenna for 5G, Wi-Fi, and GPS (option)



Solid Compact Design for Easy Deployment

The AirLive Industrial Cellular Router M2M-5G5AC series features a compact, palm-sized design for effortless deployment and rapid operation. Supporting IEEE 802.11b/g/n/ac Wi-Fi, the M2M-5G5AC integrates 5G/GPS connectivity, an RS-485 serial port, and five Ethernet ports with TF card slot, making it an optimal choice for IoT applications.



Rugged Performance in Extreme Conditions

Engineered for reliability in mission-critical applications with its IP30 metal housing, the M2M-5G5AC series operates within a wide temperature range of -30°C to $+70^{\circ}\text{C}$ and supports a flexible power dual power input (DC Adapter/Terminal Block) from 9V to 36V. Rigorously tested for durability, it ensures stable performance even in harsh industrial environments. The Ethernet interface has a built-in 1.5KV electromagnetic isolation protection as well as for the SIM/UIM interface, it also has a built-in 1.5KV ESD protection.

Reliable Connectivity with Dual SIM, RS485, and TF Slot

Equipped with GPS Antenna for Precise Positioning

Built-in hardware watchdog

The AirLive Industrial Cellular Router M2M-5G5AC series is designed for seamless and uninterrupted communication in industrial applications. Featuring dual SIM slots for network communication redundancy, an RS485 serial port for reliable data transmission, and a TF slot for additional storage, this router ensures optimal performance in mission-critical environments.

The AirLive Industrial Cellular Router M2M-5G5AC series comes equipped with a high-performance GPS antenna, ensuring accurate positioning and reliable tracking. Designed for industrial and IoT applications, it enhances location-based services, asset monitoring, and fleet management.

Built-in hardware watchdog to ensure stable operation of the system. And prevent the downtime.

Combined with dual SIM slots, RS485, and a TF slot, this router delivers seamless connectivity and robust performance in demanding environments.

Various Applications

The M2M-5G5AC is designed for transportation such as bus and fleet management. The M2M series including serial port, it is designed for ATM, Kiosk, vending machine. The M2M-5G5AC is very small but features 2 sim slot of failover, it is perfect for Office secondary Internet or digital signage operation.

Various Applications



Model AirLive M2M-5G5AC

Hardware

- **Device Interface:**
CPU: MTK7621A
FLASH: FLASH 128M
RAM: DDR2 1GByte
LAN: 4*1000MBase-T LAN
WAN: 1*1000MBase-T WAN/LAN
Wi-Fi Antenna Connector: 4
5G Antenna Connector: 4
TF Storage: 1x
USB: 1x
UART: 1x RS485
GPS Connector: 1x
SIM Slot: 2x (backup)
Power Input: 12V/1.5A (built-in power reverse protection). Dual Power Input DC Adapter and Terminal Block, Power Range: DC 9~36V
RESET Button: 1x
LED Light: 1x Power, 1 x SYS System Status Indicator, 4 x LAN Ethernet Status indicator, 1 x WAN Ethernet Status Indicator, 2 x Wi-Fi Status Indicator, 1 x NET Internet Indicator, 1x CELL Status Indicator 1 x GPS Status Indicator
- **Wireless Speed: 802.11AC:** Max 1200 Mbps
- **Wireless Frequency:** 2.4Ghz: 2.4GHz ~ 2.484GHz, 5GHz: 5.150GHz~5.850GHz
- **Wireless TX Power:** 2.4G: ≤22dbm, 5.8G: ≤17dbm

Software Specifications

- **Main Features**
WAN: Static IP, DHCP, PPPoE
 Support Links Redundancy, and WAN-WWAN Failsafe Link detection, Heartbeat detection, and auto reconnection
Wi-Fi: Client, AP, Router Mode
 Support WPA/WPA2 Encryption, MAC Filter and others
VPN Support VPN Client PPTP / L2TP
Management: SYSLOG / HTTP / TR069/Other Functions, Support Local or Remote Firmware Upgrade, Import / Export configuration file.
Traffic: Support APN/VPDN/IPV6/NTP/ VLAN, MAC Address Clone/Multiple DHCP Server, DHCP Client, DHCP and MAC Address Binding, DDNS, Firewall, DMZ, Statistics and others. Support Multiple Serial Pass-through Method, UDP Client, TCP Client, Server

5G Technical

- **5G Sub 6 NR Module Model:** Qualcomm X55
Country: Global
Band:
 5G NR (NSA): n41/n77/n78/n79
 5G NR (SA): n1/n2/n3/n5/n7/n8/n12/n20/n25/n28/n38/n40/n41/n48*/n66/n71/ n77/n78/n79
 LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71

Band:

LTE-TDD: B34/B38/B39/B40/B41/B42/B43/B48
 LAA: B46
 WCDMA: B1/B2/B3/B4/B5/B6/B8/B19

Mode: 5G NR (NSA), 5G NR (SA), LTE-FDD, LTE-TDD, LAA, WCDMA

5G Data Rates

5G SA Sub-6: Max. 2.1Gbps (DL) / Max. 900Mbps (UL)
5G NSA Sub-6: Max. 2.5Gbps (DL) / Max. 600/650Mbps (UL)
LTE-FDD: Max. 1Gbps (DL) / Max. 200Mbps (UL)
WCDMA: Max. 42Mbps (DL) / Max. 5.76Mbps (UL)

*600 Mbps is the typical value; while 650 Mbps is the theoretical data rate when the UL 256QAM of both LTE and 5G NR are enabled (LTE UL 256QAM in EN-DC is disabled by default and has not been deployed by operators.).

Terminal Block

- **VCC:** 2x DC Input V+
- **GND:** 1x DC Input V-
- **GND:** RS232
- **RXD/A:** Default protocol is RS485 A+
- **TXD/B:** Default protocol is RS485 B-

Power

- **Power Input:** DC 12V/1.5A or 1A, Power Range DC 9~36V
- **Power Usages Max:** 4.2W (Idle), Max 10W (Full)

Environment

- **Operating Temperature:** -30°C to +70°C
- **Storage Temperature:** -40°C to +85°C
- **Humidity:** 95%, non-condensing

Standard package of Router

- **Product size:**
20.0 x 14.1 x 2.8 cm(L*W*H) (excluding antennas)
- **Package size:**
29.5 x 26.5 x 4.50 cm(L*W*H)
- **Package Weight:**
N.W: 0.92kg; G.W: 1.42kg
- **Package content:**
1 x M2M-5G5AC, 1 x Power adapter, 2 x 2.4GHz Wi-Fi Antenna, 2x 5GHz Wi-Fi Antenna, 4x 5G Antenna, 1x GPS Antenna (optional), 1x Network cable, 1x mounting bracket.

Standard carton package

- **Quantity:** 10pcs / 1 carton
- **Dimensions**
46.5 x 30.5 x 28.5cm (L*W*H)
- **Weight**
15kg(G.W)

Ordering Information

- **Model:**
AirLive M2M-5G5AC
- **Name:**
AirLive Industrial Grade AIoT M2M 5G NR Router with AC 1200, Dual SIM-slot

* Specification will be changed without prior notice

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