

AR7000 Industrial Cellular Router Specification

Support 5G/4G/3G/2G/WiFi Wireless Router



AR7000 Industrial Cellular Router is a kind of terminal device that developed based on 5G/4G/3G/2G, WiFi, VPN technology. It adopts high-powered industrial 32-bits CPU and embedded real time operating system. It supports RS232 (or RS485), Ethernet and WiFi port that can conveniently and transparently connect one device to a cellular network, allowing you to connect to your existing serial, Ethernet and WiFi devices with only basic configuration.

It has been widely used on M2M fields, such as intelligent transportation, smart grid, postal services, industrial automation, telemetry, finance, POS, water supply, environment protection, post, weather, and so on.

Product advantages

- ✓ High-powered industrial 32 bits CPU
- ✓ High-powered industrial cellular module
- ✓ Wide Operating Temperature(-35~+75°C)
- ✓ Power range: DC 9~35V
- ✓ Support hardware and software WDT
- ✓ Support standard RS232(or RS485), Ethernet and WiFi port that can connect to serial, Ethernet and WiFi devices directly
- ✓ Support auto recovery mechanism, including online detect, auto redial when offline to make it always online
- ✓ Power port: reverse-voltage and over voltage protection
- ✓ Convenient configuration and maintenance interface
- ✓ Support TCP server
- ✓ WiFi support 802.11b/g/n. support AP, client.
- ✓ Support multi data centers and it can support 5 data centers at the same time
- ✓ Support local log storage.
- ✓ Support dual SIM/UIM card (optional)
- ✓ Support GPS positioning (optional)

Interface description

WAN: 1 10/100Mbps Ethernet ports(RJ45)
LAN: 4 10/100Mbps Ethernet ports(RJ45)
User serial: 1 RS232(or RS485) (RJ45)
Antenna: Standard SMA female interface, 50 ohm
SIM/UIM : Standard 3V/1.8V user card interface, 15KV ESD protection
Power : Standard 3-PIN power jack, reverse-voltage and over voltage protection
Reset Button: Press this key for 8 seconds to restore the module to its original factory default settings
Indicator light: "Signal strength", "PWR", "RUN", "SIM", "Online", "LAN1", "LAN2", "LAN3", "LAN4", "WAN", "WiFi", "GPS"(optional), "SIM2"(optional)
GPS parameters(optional)
Receiver type(GPS) : 72-channel GPS L1 (1575.42MHz) C/A code
Position: 2.5m
Max. Update Rate: 18Hz
Accuracy: 0.05m/s

Electrical parameters

Power supply range: DC9~35V (12V DC recommended)
Communication current 1(4G): <500mA@12V DC
Communication current 2(5G): <900mA @12V DC

Environmental parameters

Operating temperature: -35~+75°C(-31~+167°F)
Storage temperature: -40~+85°C(-40~+185°F)
Relative humidity: 95% (non-condensing)

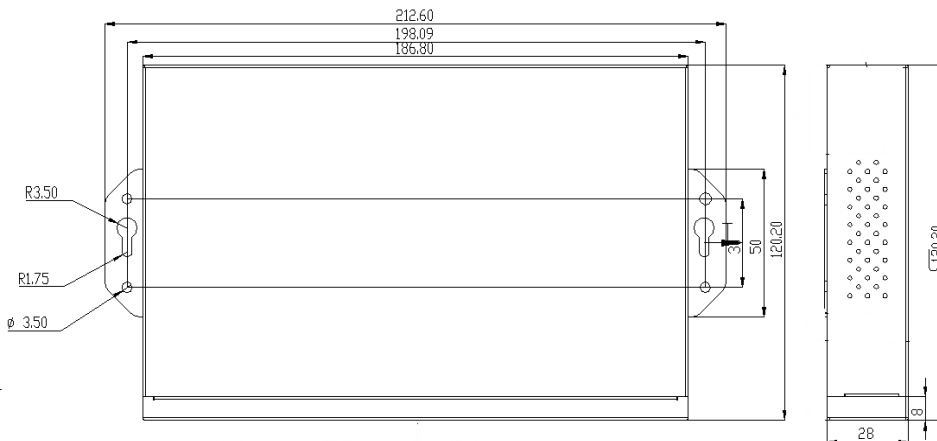
Mechanical parameters

Dimensions: 186.8x120.2x28mm (excluding accessories)
Weight: 580g (excluding accessories)

Supported frequency bands

5G NR SA/NSA:n1/2/3/5/7/8/12/20/28/41/66/71/77/78/79
TDD-LTE:B38/39/40/41
FDD-LTE:B1/2/3/4/5/7/8/13/17/20/25/28
WCDMA:850/900/1900/2100MHz
TD-SCDMA:1880-1920/2010-2025MHz(A/F)
CDMA2000 1x/ EVDO Rev. A:800/1900MHz
GSM/GPRS/EDGE:850/900/1800/1900MHz
CDMA:800/1900MHz

Dimension: (Unit: mm)



Applicable Models:

| Product Type | Model | Product Name |
|--------------|----------|--------------------------------------|
| Standard | AR7000-R | 5G Industrial Cellular ROUTER |
| | AR7000-L | 5G Redcap Industrial Cellular ROUTER |
| | AR7000-A | 4G Industrial Cellular ROUTER |
| | AR7000-F | 4G FDD Industrial Cellular ROUTER |
| | AR7000-H | 4G Cat1 Industrial Cellular ROUTER |

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| | AR7000-Q | 4G FDD/TDD Industrial Cellular ROUTER |
| Dual SIM | AR7000-RS | 5G Dual SIM Industrial Cellular ROUTER |
| | AR7000-LS | 5G Redcap Dual SIM Industrial Cellular ROUTER |
| | AR7000-AS | 4G Dual SIM Industrial Cellular ROUTER |
| | AR7000-FS | 4G FDD Dual SIM Industrial Cellular ROUTER |
| | AR7000-HS | 4G Cat1 Dual SIM Industrial Cellular ROUTER |
| | AR7000-QS | 4G FDD/TDD Dual SIM Industrial Cellular ROUTER |
| | GPS | AR7000-RP |
| AR7000-LP | | GPS+5G Redcap Industrial Cellular ROUTER |
| AR7000-AP | | GPS+4G Industrial Cellular ROUTER |
| AR7000-FP | | GPS+4G FDD Industrial Cellular ROUTER |
| AR7000-HP | | GPS+4G Cat1 Industrial Cellular ROUTER |
| AR7000-QP | | GPS+4G FDD/TDD Industrial Cellular ROUTER |
| GPS+Dual SIM | AR7000-RSP | GPS+5G Dual SIM Industrial Cellular ROUTER |
| | AR7000-LSP | GPS+5G Redcap Dual SIM Industrial Cellular ROUTER |
| | AR7000-ASP | GPS+4G Dual SIM Industrial Cellular ROUTER |
| | AR7000-FSP | GPS+4G FDD Dual SIM Industrial Cellular ROUTER |
| | AR7000-HSP | GPS+4G Cat1 Dual SIM Industrial Cellular ROUTER |
| | AR7000-QSP | GPS+4G FDD/TDD Dual SIM Industrial Cellular ROUTER |
| Commercial | AR7000-N | WiFi ROUTER |