

AR7088H Industrial Cellular Router Specification

Support 5G/4G Industrial Cellular Router



AR7088H 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, supports RS232 and RS485, Ethernet and WIFI port that can conveniently and transparently connect one device to a cellular network, allowing 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 and 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 VPN client(PPTP, L2TP, IPSEC and GRE).
- ✓ 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/LAN: 1 10/100Mbps Ethernet ports(RJ45)

LAN: 2 10/100Mbps Ethernet ports(RJ45)

User serial: 1 RS232 and 1 RS485 (5 PIN industrial terminal, 3.5mm pitch)

Antenna: Standard SMA female interface, 50 ohm

SIM/UIM : Standard 3V/1.8V user card interface, 15KV ESD protection

Power : 2 PIN industrial terminal, 3.81mm pitch, 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: "PWR"、 "SIG"、 "NET"、 "APP"、 "Link"(RJ45)

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

Environmental parameters

Operating temperature: -35~+75°C(-31~+167°F)

Storage temperature: -40~+85°C(-40~+185°F)

Relative humidity: 95% (non-condensing)

Electrical parameters

Power supply range: DC9~35V
(12VDC recommended)

Communication current 1(4G):
<500mA@12VDC

Communication current 2(5G):
<900mA @12VDC

Mechanical parameters

Dimensions: 107x98x24mm
(excluding accessories)

Weight: 350g (excluding accessories)

Supported frequency bands(optional)

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

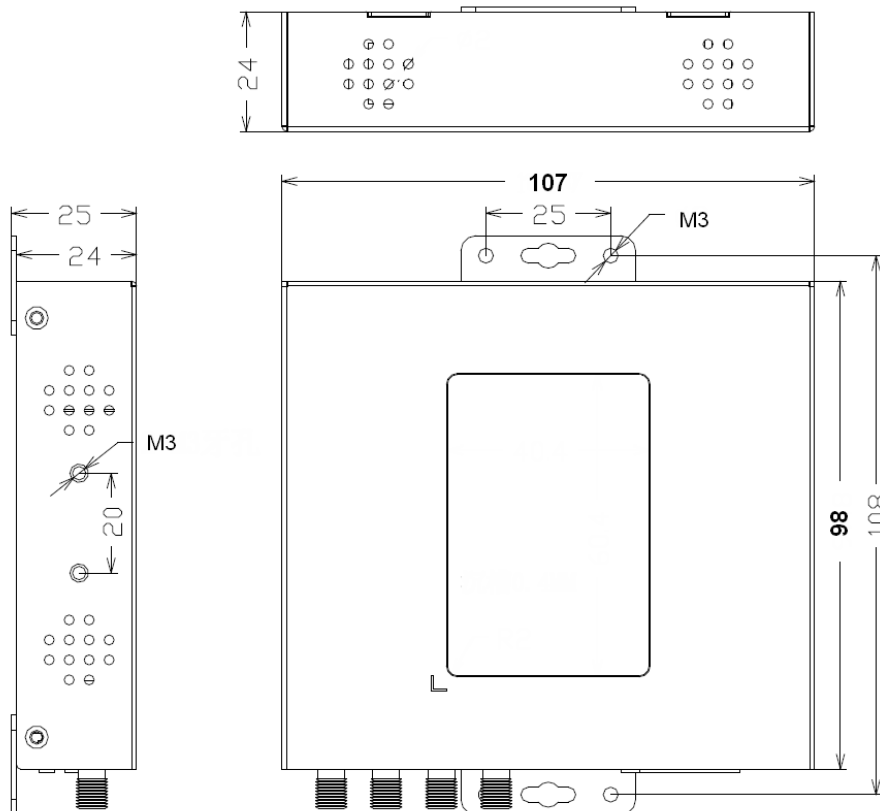
TD-SCDMA:1880-1920/2010-2025MHz(A/F)

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	AR7088H-RSTD	5G Industrial Cellular Router
	AR7088H-LSTD	5G Redcap Industrial Cellular Router
	AR7088H-ASTD	4G Industrial Cellular Router(4G only)
	AR7088H-FSTD	4G FDD Industrial Cellular Router
	AR7088H-QSTD	4G FDD/TDD Industrial Cellular Router
	AR7088H-HSTD	4G Cat1 Industrial Cellular Router
Enhanced	AR7088H-R	5G Industrial Cellular WiFi Router
	AR7088H-L	5G Redcap Industrial Cellular WiFi Router
	AR7088H-A	4G Industrial Cellular WiFi Router(4G only)
	AR7088H-F	4G FDD Industrial Cellular WiFi Router
	AR7088H-Q	4G FDD/TDD Industrial Cellular WiFi Router
	AR7088H-H	4G Cat1 Industrial Cellular WiFi Router
Dual SIM+ Enhanced	AR7088H-RS	5G Dual SIM Industrial Cellular WiFi Router
	AR7088H-LS	5G Redcap Dual SIM Industrial Cellular WiFi Router
	AR7088H-AS	4G Dual SIM Industrial Cellular WiFi Router(4G only)
	AR7088H-FS	4G FDD Dual SIM Industrial Cellular WiFi Router
	AR7088H-QS	4G FDD/TDD Dual SIM Industrial Cellular WiFi Router
	AR7088H-HS	4G Cat1 Dual SIM Industrial Cellular WiFi Router
GPS+ Enhanced	AR7088H-RP	GPS+5G Industrial Cellular WiFi Router
	AR7088H-LP	GPS+5G Redcap Industrial Cellular WiFi Router
	AR7088H-AP	GPS+4G Industrial Cellular WiFi Router(4G only)
	AR7088H-FP	GPS+4G FDD Industrial Cellular WiFi Router
	AR7088H-QP	GPS+4G FDD/TDD Industrial Cellular WiFi Router
	AR7088H-HP	GPS+4G Cat1 Industrial Cellular WiFi Router
GPS+Dual SIM +Enhanced	AR7088H-RSP	GPS+5G Dual SIM Industrial Cellular WiFi Router
	AR7088H-LSP	GPS+5G Redcap Dual SIM Industrial Cellular WiFi Router
	AR7088H-ASP	GPS+4G Dual SIM Industrial Cellular WiFi Router(4G only)
	AR7088H-FSP	GPS+4G FDD Dual SIM Industrial Cellular WiFi Router
	AR7088H-QSP	GPS+4G FDD/TDD Dual SIM Industrial Cellular WiFi Router
	AR7088H-HSP	GPS+4G Cat1 Dual SIM Industrial Cellular WiFi Router
WiFi Router	AR7088H-N	WiFi Router