

AD7028V Industrial Cellular Router Specification

Support 5G/4G/3G/2G Industrial Grade Cellular Router



AD7028V Industrial Cellular Router is a kind of cellular terminal device that developed based on 5G/4G/3G/2G connectivity, VPN client, among other features. It adopts high-powered industrial 32 bits CPU and embedded real time operating system. It supports 2 separate RS232 (or 1 RS232 and 1 RS485) and 1 LAN port that can conveniently and transparently connect one device to a cellular network. It is support wide power range 9-60V DC. With a compact and robust design, it includes the necessary accessories for Mount kit or DIN rail.

It has been widely used on M2M fields, such as intelligent transportation, smart grid, 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 9~60V
- ✓ Support hardware and software WDT
- ✓ Support auto recovery mechanism, including online detect, auto redial when offline to make it always online
- ✓ Power port: reverse-voltage and over voltage protection
- ✓ large serial port data cache(10MB) ,ensure the data is not lost
- ✓ Support standard two RS232(or 1 RS232 and 1 RS485) and Ethernet ports that can connect to serial devices directly
- ✓ Convenient configuration and maintenance interface
- ✓ Support TCP server
- ✓ Support multi data centers and it can support 5 data centers at the same time
- ✓ Support local log storage.
- ✓ Support hardware encryption/decryption (optional)
- ✓ Support dual SIM/UIM card (optional)

- ✓ Support GPS/Beidou dual-mode positioning (optional)

Interface description

User serial: 2 RS232 (or 1 RS232&1 RS485)

-- Form: 8PIN 3.81MM pitch industrial terminal

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

Antenna: Standard SMA female interface, 50 ohm

SIM/UIM : Standard clamshell card holder interface

Power : Built-in power reverse phase protection and overcurrent, overvoltage protection

--Form: 8PIN 3.81MM pitch industrial terminal

Reset Button: Press this key for 8 seconds to restore the module to its original factory default settings

Indicator light: With "POWER", "MODULE", "SIM" and "STATUS" indicator. And a RUN indicator on the motherboard

GPS/BeiDou parameters(optional)

Receiver type(GPS) : 72-channel GPS L1 (1575.42MHz) C/A code

Receiver type(BeiDou): 72-channel Beidou B1I

Position: 2.5m

Max. Update Rate: 18Hz

Accuracy: 0.05m/s

Electrical parameters

Power supply range: DC9~60V (12VDC recommended)

Communication current 1(4G): 175mA@12VDC

Communication current 2(5G): 220mA @12VDC

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

Shell Material: ABS

Dimensions: 108.43x85x40.7mm (excluding accessories)

Weight: 126g (excluding accessories)

Installation: Mount Kit or DIN Rail35mm (optional)

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

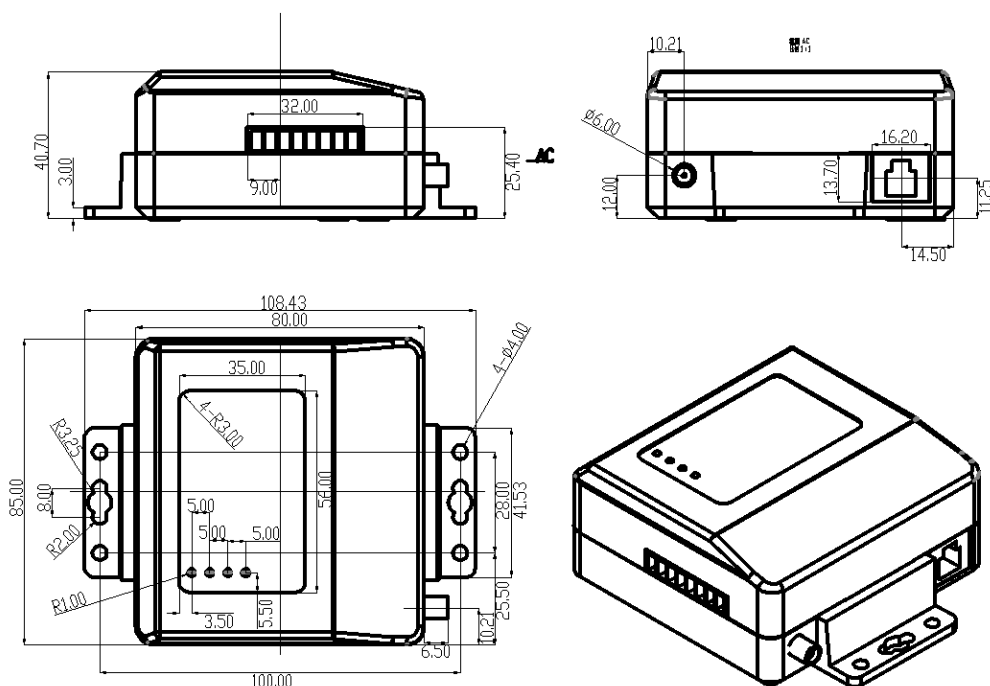
TD-SCDMA:1880-1920/2010-2025MHz(A/F)

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	AD7028V-R	5G Industrial Cellular Router
	AD7028V-A	4G Industrial Cellular Router
	AD7028V-F	4G FDD Industrial Cellular Router
	AD7028V-Q	4G FDD/TDD Industrial Cellular Router
	AD7028V-H	4G Cat1 Industrial Cellular Router
Dual SIM	AD7028V-RS	5G Dual SIM Industrial Cellular Router
	AD7028V-AS	4G Dual SIM Industrial Cellular Router
	AD7028V-FS	4G FDD Dual SIM Industrial Cellular Router
	AD7028V-QS	4G FDD/TDD Dual SIM Industrial Cellular Router
	AD7028V-HS	4G Cat1 Dual SIM Industrial Cellular Router
GPS	AD7028V-RP	GPS+5G Industrial Cellular Router
	AD7028V-AP	GPS+4G Industrial Cellular Router
	AD7028V-FP	GPS+4G FDD Industrial Cellular Router
	AD7028V-QP	GPS+4G FDD/TDD Industrial Cellular Router
	AD7028V-HP	GPS+4G Cat1 Industrial Cellular Router
GPS+Dual SIM	AD7028V-RSP	GPS+5G Dual SIM Industrial Cellular Router
	AD7028V-ASP	GPS+4G Dual SIM Industrial Cellular Router
	AD7028V-FSP	GPS+4G FDD Dual SIM Industrial Cellular Router
	AD7028V-QSP	GPS+4G FDD/TDD Dual SIM Industrial Cellular Router
	AD7028V-HSP	GPS+4G Cat1 Dual SIM Industrial Cellular Router
RS485	AD7028V-R-R	5G Industrial Cellular Router(RS485)
	AD7028V-A-R	4G Industrial Cellular Router(RS485)
	AD7028V-F-R	4G FDD Industrial Cellular Router(RS485)
	AD7028V-Q-R	4G FDD/TDD Industrial Cellular Router(RS485)
	AD7028V-H-R	4G Cat1 Industrial Cellular Router(RS485)