

## AD7028D(T)&AD7028D(Z) Cellular Router Specification

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



AD7028D(T)&AD7028D(Z) 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 1 RS232 (or 1 RS485) ,1 10/100M LAN and 1 10/100M LAN/WAN 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.

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### 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 standard1 RS232(or 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:** 1 RS232 (or 1 RS485)

-- Form: 5PIN 3.81MM pitch industrial terminal

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

**LAN/WAN:** 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: 5PIN 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 the RUN&LINK 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 B11

**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:** Iron

**Dimensions:** 110x85x32mm (excluding accessories)

**Weight:** 330g (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

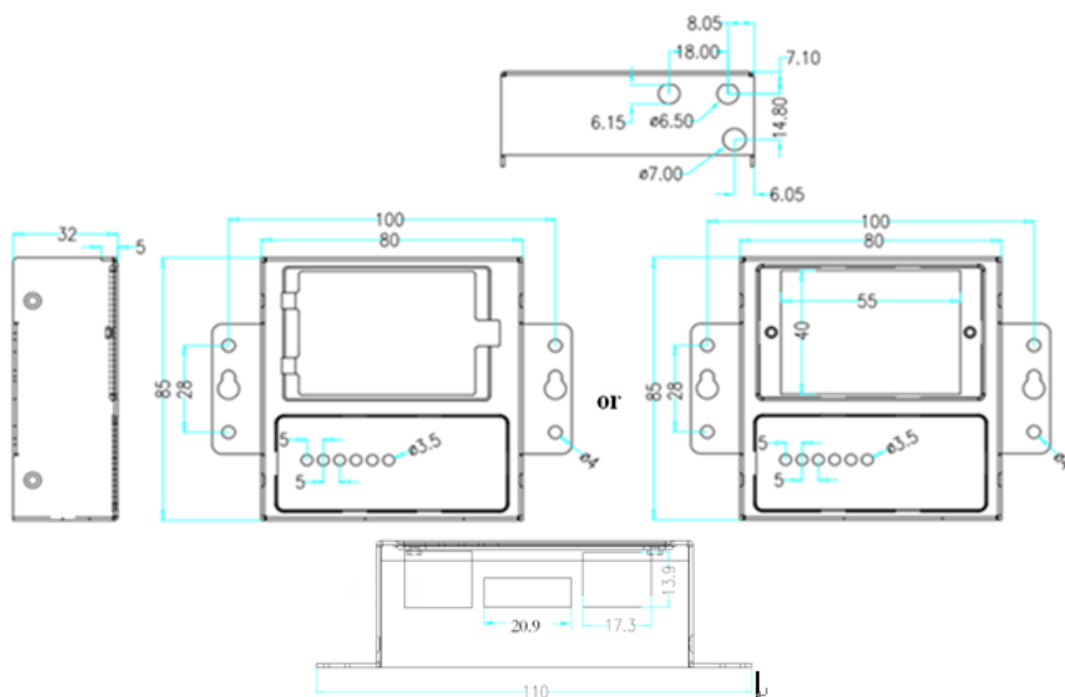
**TD-SCDMA:**1880-1920/2010-2025MHz(A/F)

**CDMA2000 1x/ EVDO Rev. A:**800/1900MHz

**GSM/GPRS/EDGE:**850/900/1800/1900MHz

**CDMA:**800/1900MHz

Dimension: (Unit: mm)



**Applicable Models:**

Shell Type	Product Type	Model	Product Name
Iron shell + iron cover	Standard	AD7028D(T)-R	5G Cellular Router
		AD7028D(T)-A	4G Cellular Router
		AD7028D(T)-B	TDD/FDD-LTE Cellular Router
		AD7028D(T)-H	4G Cat1 Cellular Router
		AD7028D(T)-F	FDD-LTE Cellular Router
	Dual SIM	AD7028D(T)-RS	5G Dual SIM Cellular Router
		AD7028D(T)-AS	4G Dual SIM Cellular Router
		AD7028D(T)-BS	TDD/FDD-LTE Dual SIM Cellular Router
		AD7028D(T)-HS	4G Cat1 Dual SIM Cellular Router
		AD7028D(T)-FS	FDD-LTE Dual SIM Cellular Router
	GPS	AD7028D(T)-RP	GPS+5G Cellular Router
		AD7028D(T)-AP	GPS+4G Cellular Router
		AD7028D(T)-BP	GPS+TDD/FDD-LTE Cellular Router
		AD7028D(T)-HP	GPS+4G Cat1 Cellular Router
		AD7028D(T)-FP	GPS+FDD-LTE Cellular Router
	GPS+Dual SIM	AD7028D(T)-RSP	GPS+5G Dual SIM Cellular Router
		AD7028D(T)-ASP	GPS+4G Dual SIM Cellular Router
		AD7028D(T)-BSP	GPS+TDD/FDD-LTE Dual SIM Cellular
		AD7028D(T)-HSP	GPS+4G Cat1 Dual SIM Cellular Router
		AD7028D(T)-FSP	GPS+FDD-LTE Dual SIM Cellular Router
Iron shell + plastic cover	Standard	AD7028D(Z)-R	5G Cellular Router
		AD7028D(Z)-A	4G Cellular Router
		AD7028D(Z)-B	TDD/FDD-LTE Cellular Router
		AD7028D(Z)-H	4G Cat1 Cellular Router
		AD7028D(Z)-F	FDD-LTE Cellular Router
	Dual SIM	AD7028D(Z)-RS	5G Dual SIM Cellular Router
		AD7028D(Z)-AS	4G Dual SIM Cellular Router
		AD7028D(Z)-BS	TDD/FDD-LTE Dual SIM Cellular Router
		AD7028D(Z)-HS	4G Cat1 Dual SIM Cellular Router
		AD7028D(Z)-FS	FDD-LTE Dual SIM Cellular Router
	GPS	AD7028D(Z)-RP	GPS+5G Cellular Router
		AD7028D(Z)-AP	GPS+4G Cellular Router
		AD7028D(Z)-BP	GPS+TDD/FDD-LTE Cellular Router
		AD7028D(Z)-HP	GPS+4G Cat1 Cellular Router
		AD7028D(Z)-FP	GPS+FDD-LTE Cellular Router
	GPS+Dual SIM	AD7028D(Z)-RSP	GPS+5G Dual SIM Cellular Router
		AD7028D(Z)-ASP	GPS+4G Dual SIM Cellular Router
		AD7028D(Z)-BSP	GPS+TDD/FDD-LTE Dual SIM Cellular
		AD7028D(Z)-HSP	GPS+4G Cat1 Dual SIM Cellular Router
		AD7028D(Z)-FSP	GPS+FDD-LTE Dual SIM Cellular Router