

# AltRTU600L Industrial Cellular RTU Specification

Support 5G/4G Industrial Data Acquisition instrument



AltRTU600L is an industrial cellular RTU developed based on 5G/4G LTE connectivity. It adopts high-powered industrial 32 bits CPU and industrial wireless module, and embedded real time operating system to realize comprehensive functions such as data acquisition, storage, control, alarm, remote transmission and remote management.

AltRTU600L supports RS232, RS485, Ethernet, Tipping bucket Rain gauge, Analog Input, Digital Input (dry and wet contacts), Digital Output, Relay Output and other interfaces. It supports internal flash and external expansion Micro-SD card to store data, and network communication through 5G or 4G, NB IoT, Lora, Ultra-short wave and other ways. It has powerful functions, stable performance, and supports low power consumption working mode.

AltRTU600L has been widely used in flood mitigation, hydrology, water resources, water pollution, environmental monitoring, meteorological monitoring, and so on.

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## Product advantages

- ✓ Trigger collection Rainfall data
- ✓ Regularly collection Water Level, Rainfall , Water Quality, and other data
- ✓ Regularly upload Rainfall, Water Level, Flow rate, Water Quality, and other data
- ✓ Alarm trigger and upload Rainfall, Water Level, Flow rate, Water Quality, and other data
- ✓ Support local storage Rainfall, Water Level, Flow rate, Water Quality, and other data
- ✓ Remote measurement current Rainfall, Water Level, Flow rate, Water Quality, and other data
- ✓ Remote query local historical data
- ✓ Local export historical data
- ✓ Support upload battery voltage
- ✓ Support capture image
- ✓ Support local manual setting data
- ✓ Backup data through 5G/4G network data communication and SMS
- ✓ Built in temperature and humidity sensors
- ✓ Support GPS positioning (optional)
- ✓ Support PoE(PSE)(optional)

### Interface description

**Serial ports:** 2 RS232 and 4 RS485

-- Form: 3.5mm pitch industrial terminal

**Debug serial:** 1 RS232--Form:DB9 Female

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

**Antenna:** Standard SMA female interface, 50 ohm

**SIM/UIM :** Standard drawer type user card interface

**Micro SD card:** Standard self-propelled Micro SD card interface

**Power :** 1 main power supply

--Form: 4PIN 3.81MM pitch industrial terminal

**Wake up button:** Tact switch

**Grounding terminal:** M3 screw grounding protection terminal

**Indicator lights:** Power, Online, SIM, Run, APP, LINK

**Udometer interface:** 1 tipping bucket Udometer interface

**ADC:** 4-channels analog input interface, 4-20mA&0-5V

**DI:** 4-channels digital input interface (optical isolation)

**DO:** 1-channel digital output interface (optical isolation, OC gate output)

**Relay:** 2-channels relay output interface

**Power output:** 4-channels controllable output power supply

(single channel rated output current 1A, 4-channel rated output current total 2A, built-in overcurrent protection)

### Electrical parameters

**Power supply range:** DC 9~35V (12VDC recommended)

**Communication current :** 100mA@12VDC

(HIGH mode, 100B/S data transmission)

**Collection current:** <10mA@12VDC

**Sleep(Static duty) current:** <2mA@12VDC

**Deep Sleep current:** < 40uA @ 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:** 116.2x114.2x33.1mm (excluding accessories)

**Weight:** approximately 460g (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/ 66/71/77 178/79

**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

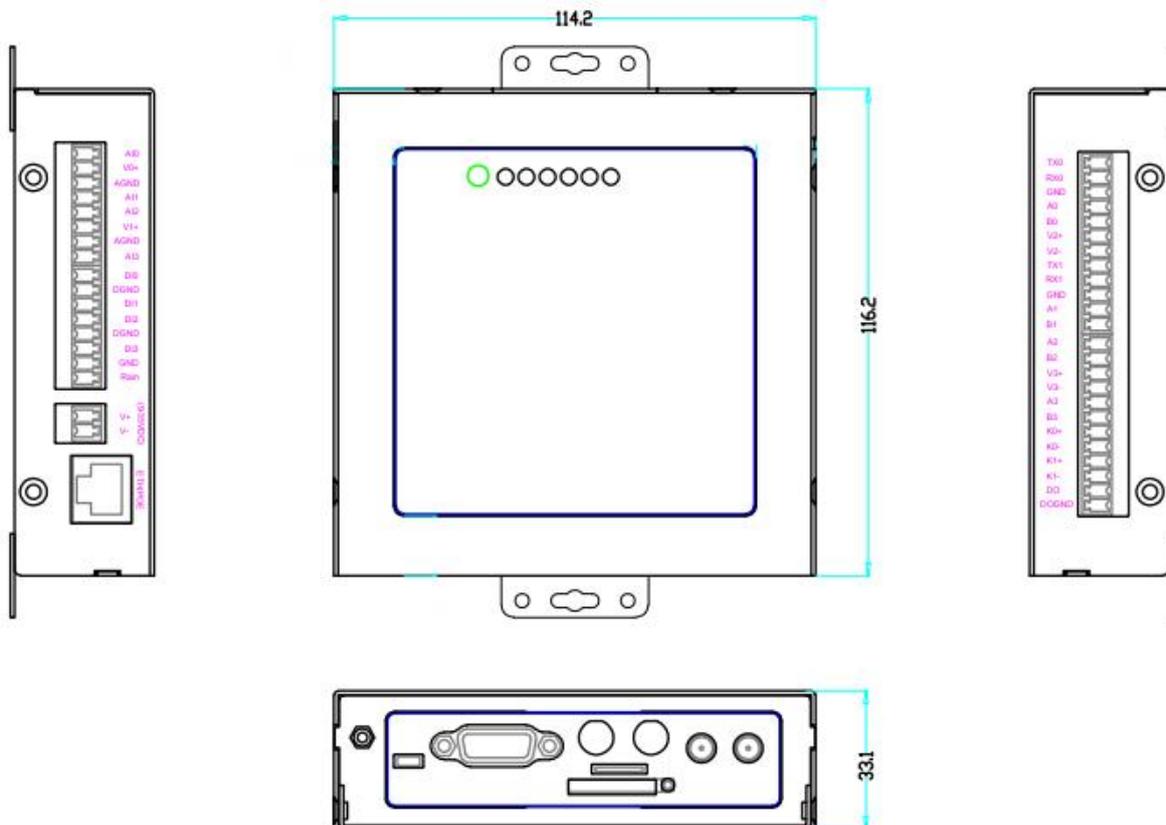
**TD-SCDMA:**1880-1920/2010-2025MHz(A/F)

**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
<b>Standard</b>	AltRTU600L-R	5G industrial cellular RTU
	AltRTU600L-L	5G Redcap industrial cellular RTU
	AltRTU600L-A	4G industrial cellular RTU
	AltRTU600L-F	4G FDD industrial cellular RTU
	AltRTU600L-Q	4G FDD/TDD industrial cellular RTU
	AltRTU600L-H	4G Cat1 industrial cellular RTU
<b>GPS</b>	AltRTU600L-RP	GPS+5G industrial cellular RTU
	AltRTU600L-LP	GPS+5G Redcap industrial cellular RTU
	AltRTU600L-AP	GPS+4G industrial cellular RTU
	AltRTU600L-FP	GPS+4G FDD industrial cellular RTU
	AltRTU600L-QP	GPS+4G FDD/TDD industrial cellular RTU
	AltRTU600L-HP	GPS+4G Cat1 industrial cellular RTU