AltRTU600M Industrial Cellular RTU Specification

Support 5G/4G Industrial Data Acquisition instrument

AltRTU600M 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.

AltRTU600M supports RS232(or RS485),Ethernet, Tipping bucket Rain gauge, Analog Input, Digital Input (dry and wet contacts) interfaces. It supports internal flash 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.

AltRTU600M has been widely used in flood mitigation, hydrology, water resources, water pollution, environmental monitoring, meteorological monitoring, and so on.

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 capture image

✓ Support local manual setting data

✓ Backup data through 5G/4G network data communication and SMS

✓ Support GPS positioning (optional)

✓ Support Dual SIM (optional)

Interface description

Serial ports：1 RS232 or 1 RS485

-- Form: 8pin 3.5mm pitch industrial terminal

Debug serial：1 USB-Form:USB Type-C.Can be directly connected to PC for debugging.

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

Antenna: Standard SMA female interface, 50 ohm

SIM/UIM : Standard clamshell card holder

Power : 1 main power supply

   --Form: 2PIN 3.81MM pitch industrial terminal

Wake up button: Tact switch

Indicator lights: POWER, MODULE, SIM, STATUS

Udometer interface: 1 tipping bucket Udometer interface

ADC: 1-channel analog input interface, 4-20mA&0-5V

DI: 1-channel   digital input interface (optical isolation)

Power output: 1-channel controllable output power supply.The max output current is 1A.

Electrical parameters

Power supply range: DC 9~60V (12VDC recommended)

Communication current(4G) : 85mA@12VDC

Communication current(5G) : 120mA@12VDC

(Middle power mode, 255B/S data transmission)

Environmental parameters

Operating temperature: -35~+75ºC(-31~+167℉)

Storage temperature: -40~+85ºC(-40~+185℉)

Relative humidity: 95% (non-condensing)

Mechanical parameters

Shell Material: Iron

Dimensions: 110x85x32mm (excluding accessories)

Weight: approximately 312g (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
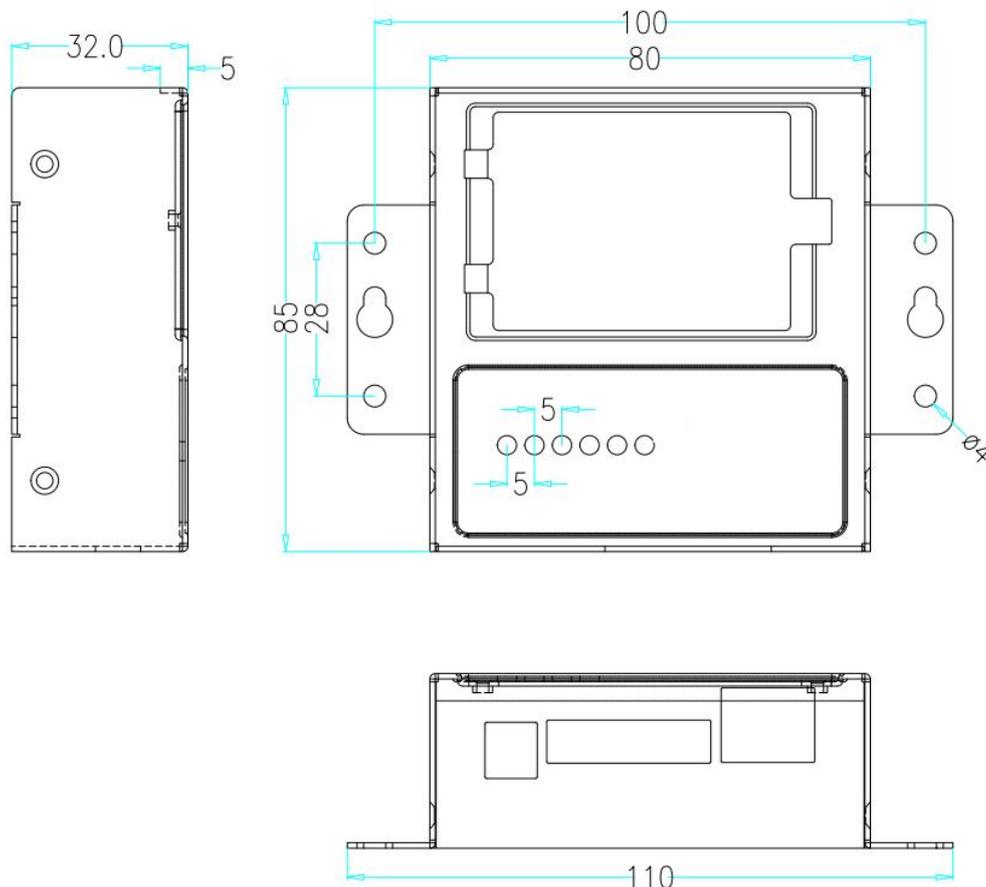**FDD-LTE:**B1/2/3/4/5/7/8/13/17/20/25/28
WCDMA:850/900/1900/2100MHz
TD-SCDMA:1880-1920/2010-2025MHz(A/F)
CDMA2000 1x/ EVDO Rev. A:800/1900MHz
GSM/GPRS/EDGE:850/900/1800/1900MHz
CDMA:800/1900MHz

Dimension: (Unit: mm)

Applicable Models:

Product Type	Model	Product Name
Standard	AltRTU600M-R	5G industrial cellular RTU
	AltRTU600M-L	5G Redcap industrial cellular RTU
	AltRTU600M-A	4G industrial cellular RTU
	AltRTU600M-F	4G FDD industrial cellular RTU
	AltRTU600M-Q	4G FDD/TDD industrial cellular RTU
	AltRTU600M-H	4G Cat1 industrial cellular RTU
Dual SIM	AltRTU600M-RS	5G Dual SIM industrial cellular RTU
	AltRTU600M-LS	5G Redcap Dual SIM industrial cellular RTU
	AltRTU600M-AS	4G Dual SIM industrial cellular RTU
	AltRTU600M-FS	4G FDD Dual SIM industrial cellular RTU
	AltRTU600M-QS	4G FDD/TDD Dual SIM industrial cellular RTU
	AltRTU600M-HS	4G Cat1 Dual SIM industrial cellular RTU
GPS	AltRTU600M-RP	GPS+5G industrial cellular RTU
	AltRTU600M-LP	GPS+5G Redcap industrial cellular RTU
	AltRTU600M-AP	GPS+4G industrial cellular RTU
	AltRTU600M-FP	GPS+4G FDD industrial cellular RTU
	AltRTU600M-QP	GPS+4G FDD/TDD industrial cellular RTU
	AltRTU600M-HP	GPS+4G Cat1 industrial cellular RTU
GPS+Dual SIM	AltRTU600M-RSP	GPS+5G Dual SIM industrial cellular RTU
	AltRTU600M-LSP	GPS+5G Redcap Dual SIM industrial cellular RTU
	AltRTU600M-ASP	GPS+4G Dual SIM industrial cellular RTU
	AltRTU600M-FSP	GPS+4G FDD Dual SIM industrial cellular RTU
	AltRTU600M-QSP	GPS+4G FDD/TDD Dual SIM industrial cellular RTU
	AltRTU600M-HSP	GPS+4G Cat1 Dual SIM industrial cellular RTU