

## CWT5011 CELLULAR RTU

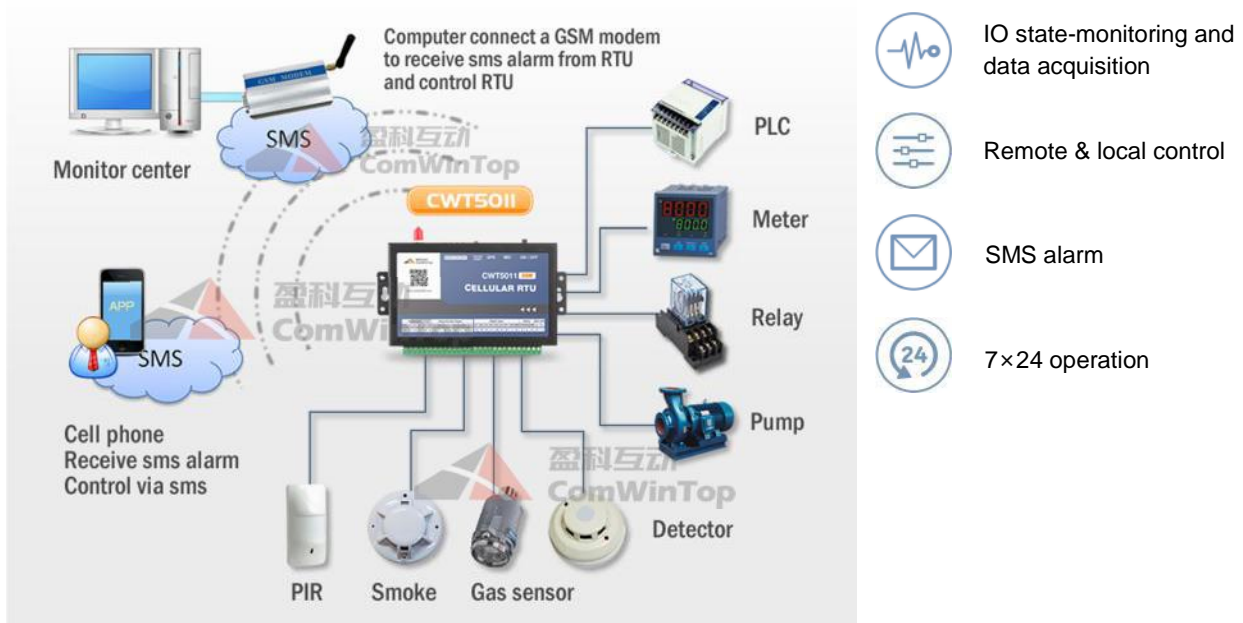
GSM/3G/4G optional

Data acquisition, transmission, control all in one



### Product Profile V2.0

CWT5011 RTU with 8 DI, 8 DO, 4 AI, RS232 standard electrical interface can connect various industrial equipment, such as PLC, meters, sensors, electrical switches. It monitors the industrial system real-time running status and data, as well as constructs the remote device to a proprietary central computer and mobile phones through the sms communication. It efficiently acquires the remote equipment operating parameters and process management, can be widely used in industrial automatic control, base station / computer room monitoring, environmental monitoring, water conservancy project, power industries, agriculture, etc.



## System Features

- Adopted highly integrated industrial 32-bit ARM MCU
- Reliable performance with built-in double watchdog, 24x7 operation
- With signal filtering mechanisms
- Network-reconnect and retransmission to ensure data accurately transmit
- Update RTC automatically or manually, clock source support Sms, NTP, CwtIO Server
- Can set multiple timers(second, minute, day, week, month) to execute actions, e.g. output, upload data, change setting
- Event-based linkage programming, e.g. alarm linkage output
- Provide configure software, visual programming, over 100 parameters can be set
- Inside temperature optional, can set high or low to alarm
- Optional inside battery that life is 8-20 hours, cellular module Intelligent sleep when power lost

## Port Features

Port	Qty	Features
<b>DI</b> (digital input)	8	<ul style="list-style-type: none"> <li>• Accept dry contact</li> </ul>
<b>DO</b> (digital output)	8	<ul style="list-style-type: none"> <li>• Transistor output (drive voltage=power supply voltage, Drive current≤500mA)</li> <li>• Remote or local event activate DO on/off/pulse</li> <li>• Remember status when power lost</li> </ul>
<b>AI</b> (analog input)	4	<ul style="list-style-type: none"> <li>• Accept 4-20mA (option: 0-5V), Sampling frequency: 33Hz, 10-bit precision)</li> <li>• Convert signal to actual measure value, support adjustment</li> <li>• Configurable parameters for signal acquisition, alarm, data communication</li> <li>• Detect connect or disconnect to alarm</li> </ul>
<b>RS232</b>	1	<ul style="list-style-type: none"> <li>• Configuration port</li> </ul>

## Communication Features



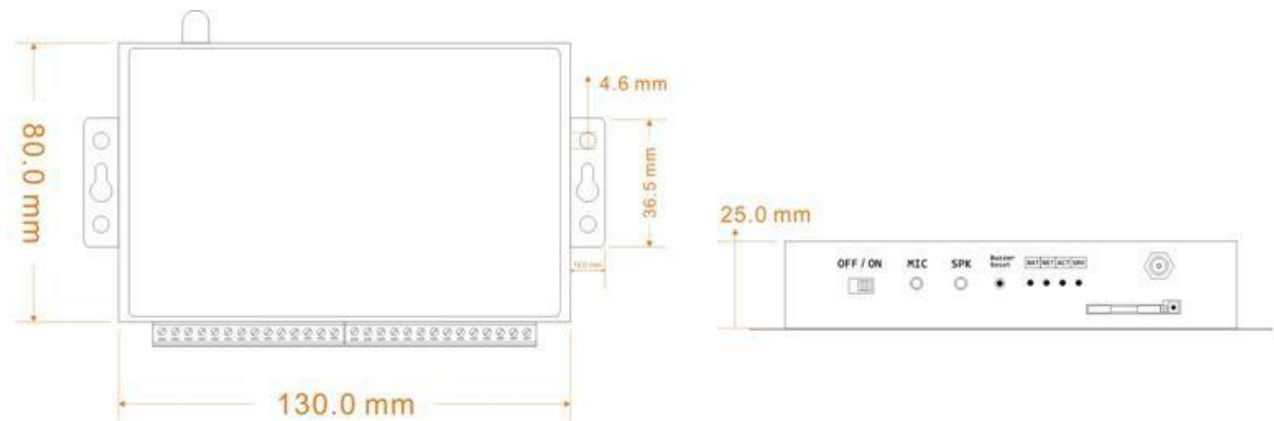
**SMS**  
Communication  
(available for  
cellular version)

- Preset 10 phone numbers (support distribute authority to receive sms)
- Sms alarm when any IO channel triggered or out of preset normal range
- Editable alarm and recover sms with time stamp
- Query any IO channel's status or value via sms command
- Control output via sms command
- Sms report any IO channel's status or value on schedule
- Remote setting via sms commands
- Can query SIM card balance, sms forward
- support power lost sms alarm and recover sms(works with inside battery)

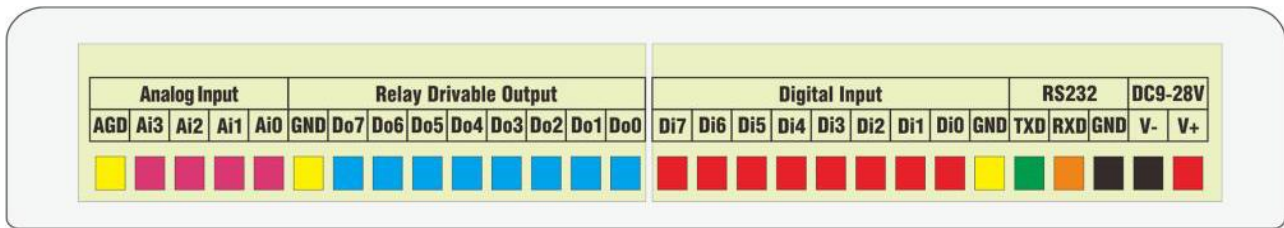
## Specifications

<b>Core</b>	MCU	Cortex M3 32-bit ARM
<b>Power</b>	Power supply	9-28V DC (Standard adapter: DC 12V/1.5A)
	Consumption	12V input Max. 150mA/Average 50mA
<b>Network</b>	Wireless Network	Default: GSM/GPRS (4 band 850/900/1800/1900Mhz) Option: WCDMA (3G), FDD LTE(4G)
<b>IO channel</b>	Digital input(DI)	8 channels, Dry contact trigger
	Digital output(DO)	8 channels, transistor output Output drive voltage=power supply DC voltage Drive current $\leq 500\text{mA}$
	Analog Input(AI)	4 channels, receive 4-20mA(option: 0-5V), Sampling frequency: 33Hz, 10-bit precision, Dual digital filters for anti-noise
<b>Series port</b>	RS232	1 port, baud rate: 1200~115200dps, default 9600,n,8,1
<b>Other interface</b>	SIM/UIM	Standard user card interface
	Antenna	Standard SMA female interface (50Ω)
<b>Others</b>	Battery	Optional lithium-polymer, 500mAh/3.7V, life:8-20 hours
	GPS module	Optional
<b>Working Environment</b>	temperature	-30℃~+70℃
	humidity	5~95%(non-condensing)
<b>Physical</b>	Terminals	2×14pin 3.81mm spacing, pluggable
	Housing	Providing IP30 protection
	Dimension	130×80×25mm
	Weight	370g

## Size diagram



## Terminals figure



## Package list

RTUx1, antennax1, Standard adapter: DC 12V/1.5Ax1, serial cablex1

## Free Configure Software

- No programming! set parameter by visual interface
  - Can save config file, one click finish config
  - Over 100 parameters can be set, flexible!
- Meeting various industrial requirements

