

RCW-3000/3200

DATA LOGGER AND TRANSCIEVER MONITOR SYSTEM

USER MANUAL



 APP Android



 IOS APP

Product Overview

The RCW-3000 split network monitoring system adopts LoRa, 4G, Wifi, Ethernet and other communication transmission technologies. It is composed of wireless data loggers, gateways, cloud platforms, mobile APPs, etc. The wireless data loggers can be deployed arbitrarily according to the monitoring location. The gateway is capable to upload data through 4G, Wifi, Ethernet and other methods of communication. With the cloud platform and APP, it can realize remote data viewing, historical data query, remote alarm push notification and other functions. RCW-3000 split network monitoring system is widely used in large-scale cold storage, shade storage, hospitals, fresh supermarkets, etc. RCW-3000 gateway only compatible with RCW-3200 sensors. Neither of them can be used independently.

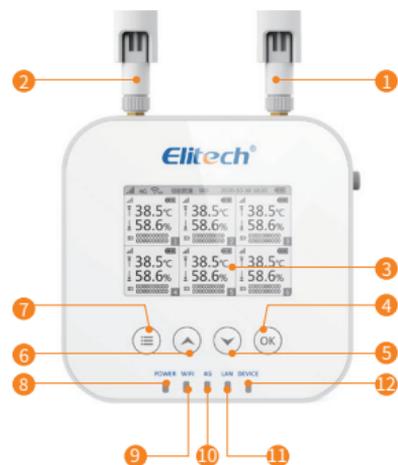
1. Product Features

- ◆ **WIRELESS:** Avoid punch wiring, easy installation. Wireless communication, meeting data transmission of 1000 meters within the visible distance.
- ◆ **LONG STANDBY TIME:** Large-capacity lithium battery, able to last for more than 12 months (10 minutes or 3 minutes upload interval).
- ◆ **MULTI-COMMUNICATION:** 4G and WiFi connection can be freely switchable to meet the communication requirements of different environments.
- ◆ **EMAIL/SMS/APP ALARM AVAILABLE:** Elitech App allows remote parameter settings and device management (support iOS and Android).



2. Product Structure

RCW-3000 Product Structure



① Lora antenna	② 4G antenna	③ LCD display
④ Confirm button (OK)	⑤ Navigation key (^)	
⑥ Navigation key (v)	⑦ Menu button	
⑧ Power indicator		
Red:Charging	Green: Charged	
⑨ WiFi indicator		
Green: WiFi Normal operation indication		
Red: WiFi Error operation indication, red light flashing for 3S		
⑩ 4G indicator		
Green: 4G normal operation indication	4G error	
operation indication, red light flashing for 3S		
⑪ LAN indicator		
Green : Ethernet normal operation indication		
Red : Ethernet error operation indication, red light flashing for 3S		
⑫ DEVICE indicator		
Green : Lora normal operation indication		
Red : Lora error operation indication, red light flashing for 3S		
⑬ SIM card access	⑭ SIM card	
⑮ WiFi switch key / network configuration key		
Short press: WiFi module on / off		
Long press: press and hold for 3s to select the network		
configuration mode for network configuration.		
⑯ Ethernet interface (wired version)		
⑰ GPS interface (mobile version)		
⑱ USB	⑲ Type-C interface	⑳ on / off button

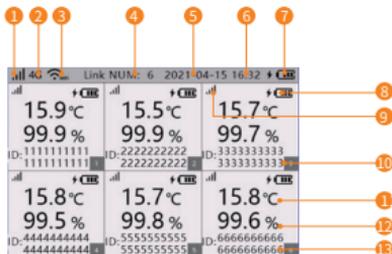
RCW-3200 Product Structure



- | | |
|------------------------------|--------------------|
| ① Charging Indicator | ② Status Indicator |
| ③ LCD | ④ Switch button |
| ⑤ The built-in sensor | ⑥ Bracket |
| ⑦ C/F unit conversion button | |
| ⑧ Micro USB interface | |
| ⑨ External probe interface | |

3. Display Interface

RCW-3000 Display Interface



- | | | |
|---------------------------------|----------------------------------|-------------------------------|
| ① Gateway 4G signal strength | ② Network mode of gateway | ③ WiFi signal strength |
| ④ Quantity of connected sensors | ⑤ Gateway current date | ⑥ Gateway current time |
| ⑦ Gateway power indicator | ⑧ Sensor battery power indicator | ⑨ Sensor Lora signal strength |
| ⑩ Quantity of sensors | ⑪ Current temperature | |
| ⑫ Current humidity | ⑬ Sensor GUID | |

The value is higher than the upper limit, the value is displayed in red, the normal range is displayed in black, the value is lower than the lower limit, the value is displayed in blue.

Device Information

1	Software Ver:	V1.00	1
2	GUID:	99999999999999999999(5)	2
3	Not uploaded:	10	3
4	Wireless period:	1 Min	4
5	Upload period:	1 Min	5
6	Wireless Freq:	895.0 M	6
7	ICCID:	89111111111111111111	7
8	WiFi SSID:	Elitech	8
9	WiFi MAC:	AAAAAAAAAA	9

① Software ver: Device firmware version

② Gateway GUID

③ not uploaded: The number of non uploaded data stored in the gateway

④ Wireless period: communication interval between Sensor and gateway

⑤ Upload period: data upload cycle of cloud platform

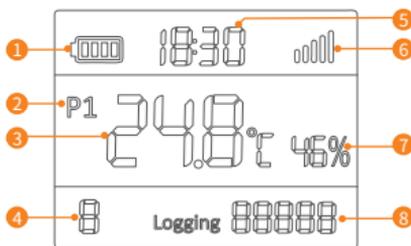
⑥ Wireless Freq: Lora wireless networking frequency

⑦ ICCID: Iccid of SIM card

⑧ WiFi SSID: SSID of WiFi linked by gateway

⑨ WiFi MAC: Gateway WiFi MAC

RCW-3200 Display Interface



① Battery power

② Probe number

③ Current Temperature

④ Equipment status(E : Lora connectionstatus)

⑤ Time display

⑥ Signal strength

⑦ Current Humidity

⑧ Offline data

Technical Parameters

Gateway RCW-3000 Technical Parameters	
Data Upload Interval	1 - 1440 mins (default 1 min)
Wireless Connection Interval	1 - 1440 mins (default 1 min)
Maximum Transmission Distance	Open communication distance ≤1000m
Gateway Access Number	≤100units (1 minute interval)
Storage Capacity	1 million groups
Data Storage Method	Circular Storage
Interface	USB Type-C (support charging and data export)
Standby Time	≥48h (@25°C, Upload interval 5mins, 20 Sensors access) ≥24h (@-10°C, Upload interval 5mins, 20 Sensors access)
Power Input	5V / 2A DC
Battery Capacity	5000mAh Rechargeable lithium battery
Operating Temperature	-10°C ~ 50°C
Indicator Light	Power / WiFi / 4G / LAN / Device Indicator
Button	Switch, Menu, Up, Down, Confirm, WiFi button
Display Screen	TFT color screen
Alarm Method	Device sound and light alarm; Platform alarm
Product Size	130*130*35mm (Length × Width × Height)

Wireless Sensor RCW-3200 Technical Indicators	
Logging Interval	1 - 1440 mins (default 5 mins)
Alarm Collection Interval	1 - 1440 mins (default 2 mins)
Storage Capacity	32000 Groups
Interface	Micro USB (support charging and data export)
Button	switch temperature unit between C and F; - Light up the screen
Working Frequency	470-510 MHz ISM frequency band
Display Screen	1.7" LCD Screen
Battery Capacity	3200mAh Rechargeable lithium battery
Standby Time	≥1 year (@2-8 C , connection interval 5mins)
Power Adapter	5V / 1A
Protection Level	Built-in: IP65; External: IP64
Product Size	110*70*18mm (Length × Width × Height)

Sensor Type	INTERNAL T&H SENSOR	EXTERNAL T&H SENSOR
Measuring Range	Temperature: -20°C-50°C Humidity: 0%RH-99%RH	Temperature: -40°C-85°C Humidity: 0%RH-99%RH
Sensor Accuracy	Temperature accuracy: 0.3°C (-20°C- 40°C), +0.5°C Humidity accuracy: +3%RH	

Operation Instructions

1. Charging

By the USB line connected to the power adapter.

RCW-3000 : Connect to the power adapter via Type-C data cable.

When charging: the battery power icon on the display turns into a charging icon, and the charging indicator red light is always on; After charging is completed , the charging indicator green light is always on.

* When the device is turned off , the device can be charged normally, and the charging indicator does not display .

RCW-3200 : Connect to the power adapter via a Micro USB cable

When charging, charging indicator red light; charging is completed, charging indicator green lamp lit;

2. Turn on and off

RCW-3000 : Device off / open the machine, press the power button, the display lighting / off , the device power / off successfully .

RCW-3200 : When the device is in the shutdown/running state, press and hold the power button for about 3 seconds. After the screen turns on/off, let go, and the device is turned on/off successfully. RCW-3200 : When the device is in the shutdown/running state, press and hold the power button for about 3 seconds . After the screen turns on/off, let go, and the device is turned on/off successfully.

*After the wireless Sensor RCW-3200 is powered on, it will automatically connect to the gateway (default group : 0) to upload data . You can use the client configuration software to modify the group .

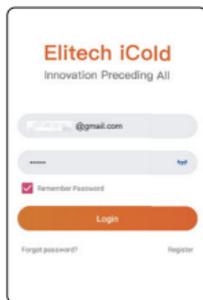


press and hold the power button for about 3 seconds

APP Operation Instructions

1.Register and Login

Please scan the QR code on the front of the manual or search Elitech iCold on App store or Google Play to download Elitech iCold app.Register and log in to your account.



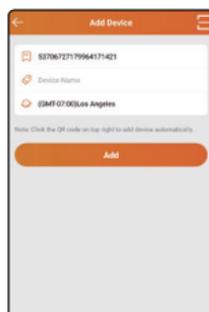
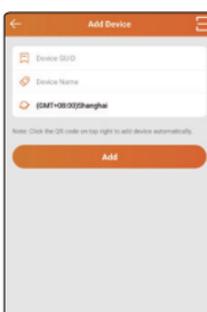
2. Add Device

Non- WIFI device operation instructions : Please press the following steps ① ~ ⑤ for operation ;

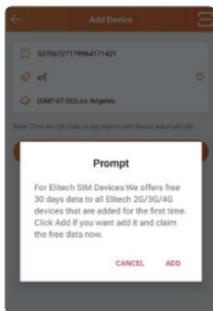
① Open the APP and click the "+" icon

② Click the " " icon, scan the QR code on the back of the device or manually enter the device GUID

③ Edit the device name, select the time zone, and click "Add" to add the device successfully



④ At the pop-up page, click "ADD"



⑤ Device added successfully



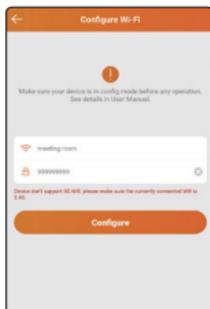
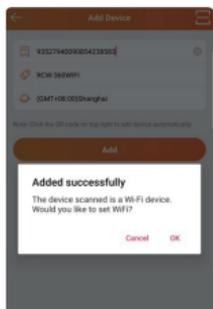
WiFi Device Operating Instructions

- 1) Connect the mobile phone to the WiFi network and open the APP ;
- 2) After the device is turned on, in the main interface of the display , long press the **WiFi button** for 3 seconds , and the device enters the **WiFi networking configuration** mode . Select APP configuration , click **OK** button to start WiFi configuration of the device ;

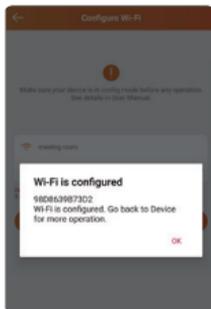


- 3) according to the steps ① ~ ⑧ (wherein ① ~ ⑤ supra), the top of the screen display , "WiFi" , the device WiFi arranged successful ;

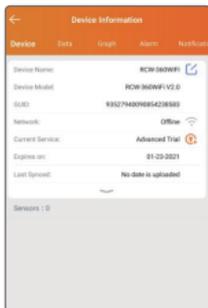
⑥ Click **OK** to start configuring WiFi ; ⑦ Enter **WiFi Password** in the APP ;



- ⑧ Click **【Confirm】** , the APP prompts WiFi **【 Configuration successful】** , and at the same time, the device prompts **【Network configuration successful】** ;



- 4) If the device WiFi configuration is unsuccessful, repeat the above steps 1) ~ 3);
- 5) When the device needs to reconfigure WiFi , first follow steps 1) ~ 2). Then open the "device information" of the device in the APP, and click the " "  " icon in the details page (Figure 3). Follow the steps ⑤ ~ ⑥ in step 3) to complete the device WiFi configuration.



Web Page Configuration Instructions

The equipment provides configuration software for network distribution and APP network distribution , as well as web page distribution methods for selection . The detailed configuration information is as follows:

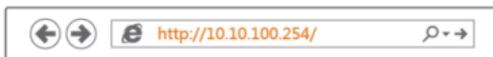
- 1) After the device is turned on, press and hold the WiFi button for 3 s in the main interface , the device enters the WIFI networking configuration mode , and select **【Web Configuration】** ;



2) Use a computer or smart phone with a wireless network card to search for the wireless network and connect to the wireless network of the corresponding device: 3000 WiFi ;



3) Open the browser: Enter the I P address: 10.10.100.254 ;

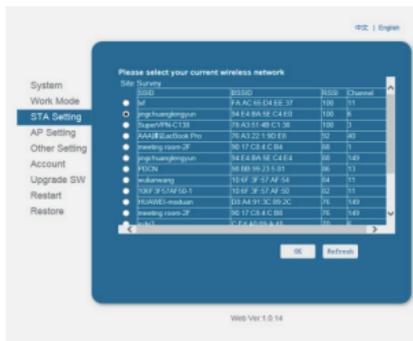


4) Enter the login page and enter the initial user name: admin ; initial password : admin ;
5) Operating Instructions mode selection: Select " STA mode";



6) Click " Search " ;

7) Select the available WiFi network, such as "jingchuanglengyun" ;



8) Click "OK" ;

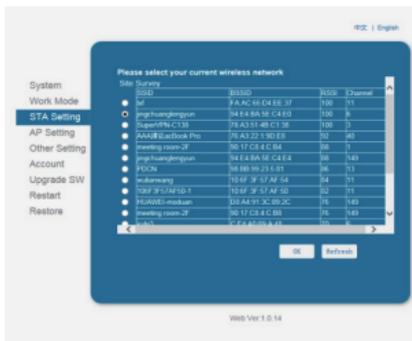
9) The web page prompts "The password is empty!" ;



10) Click **OK** and enter the WiFi password ;



7) Select the available WiFi network, such as "jingchuanglengyun" ;



8) Click "OK" ;

9) The web page prompts "The password is empty!" ;

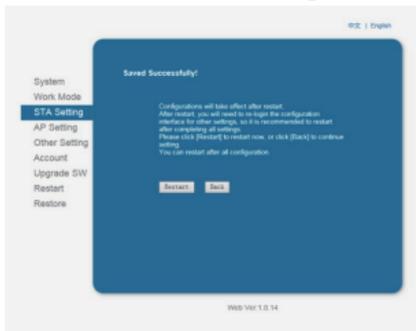


10) Click **OK** and enter the WiFi password ;

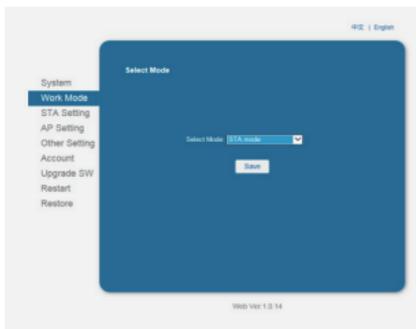


11) After inputting the network name and password, click **Save** . After prompting that the save is successful, click **Return** to set the STA ;

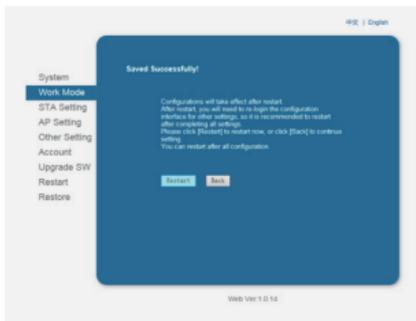
* Complete the STA setting, do not click [Restart], otherwise the network configuration fails and you need to operate the device to enter the network configuration mode again.



12) Select **STA Mode** in the mode setting ;



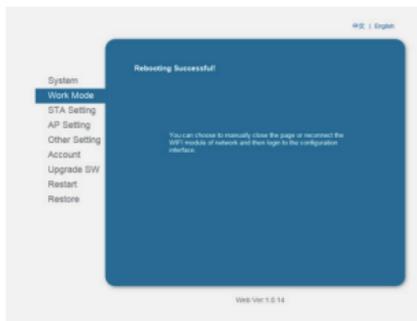
13) After the mode is configured, click **Restart** ;



14) After the WiFi is successfully connected, the device status displays " " and prompts 【 Configuration successful】 ;



15) If the WIFI configuration is unsuccessful, repeat the above steps 1)~5) .



Login Cloud Portal

Please type in the URL <https://new.i-elitech.com/> to log in for more operation ,Click "Help" to obtain Cloud and App operation instructions.

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