

RCW-800W

IoT Data Logger Manual



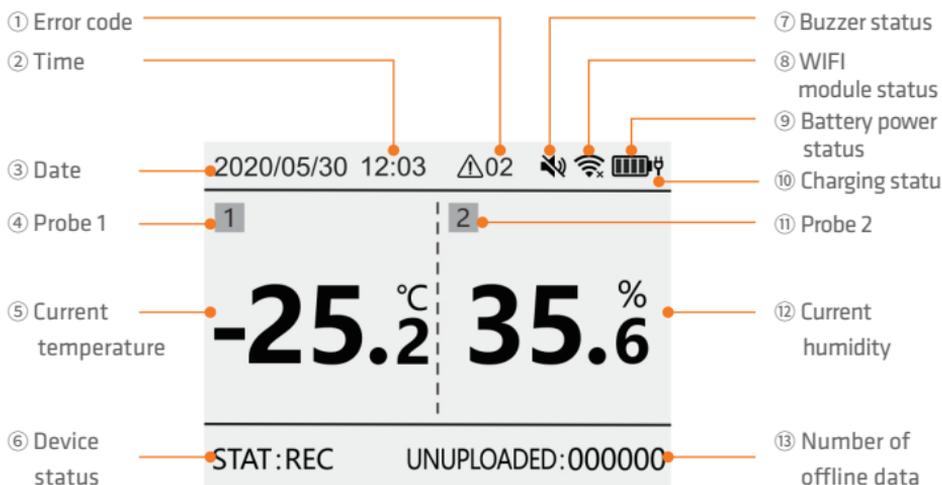
1. Product description

RCW-800W series is an IoT recorder that communicates through WIFI network, which is used for real-time monitoring, recording, alarming and data uploading of ambient temperature/humidity. The recorder is mainly composed of a temperature/humidity sensor and a host instrument. It directly transmits the measured value to the Elitech cold cloud through the Wi-Fi network. It can be stored in the Elitech cold anytime, anywhere through mobile phones and PCs with Internet access functions. View and analyze the data in the cloud platform. After the limit is exceeded, the alarm can be sent in time through SMS, email, voice and other methods.

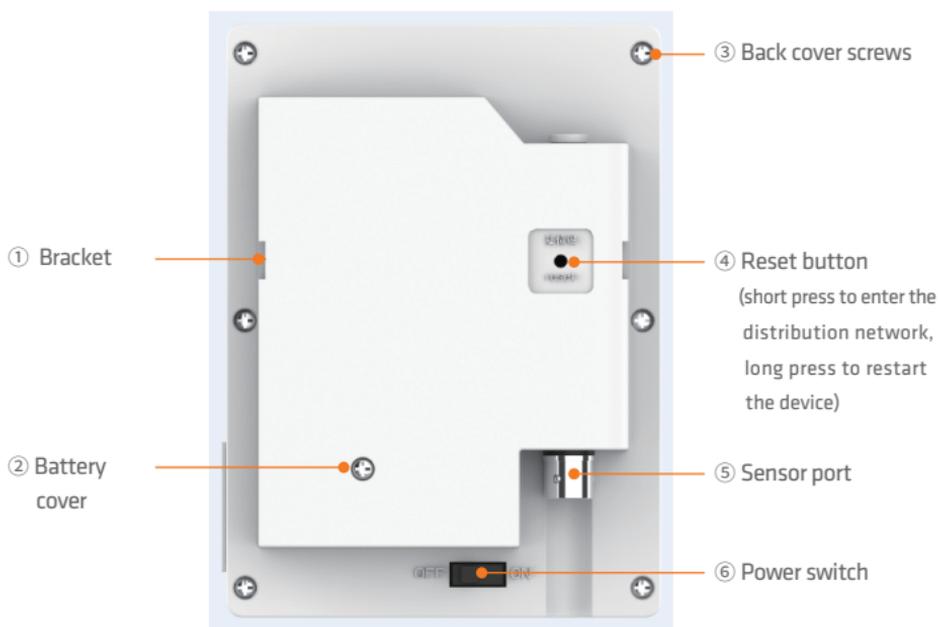
2. Features

- Small size, stylish shape, magnetic tray design, easy to install
- Large-size TFT color screen display
- Built-in rechargeable lithium battery, can still provide real-time data upload for a long time after power failure
- The product is suitable for warehouses, cold storage, refrigerated trucks, cool cabinets, medicine cabinets, freezer laboratories and other scenarios

3. Product interface



*When the temperature and humidity are higher than the upper limit, the screen value will display red; when the temperature and humidity are lower than the lower limit, the screen value will display blue.



4. Model Selection

Probe Type	External	
Aisle	1 temperature 1 humidity	Dual temperature
Measuring range	Temperature: -40°C~80°C Humidity: 0%RH~100%RH	Temperature: -40°C~80°C
Sensor type	Digital temperature & humidity sensor or NTC Temperature Sensor	
Measurement accuracy	Temperature: -20~+40°C ±0.5°C, others ±1°C Humidity: ±5%RH	

5. Technical Specifications

1. Power input: 5V/1A
2. Temperature display resolution: 0.1°C
3. Humidity display resolution: 0.1%RH
4. Offline record :20,000 points
5. Data storage method: circulating memory
6. Record,Upload interval&Alarm interval
 - ① Normal Recording interval: 1min~24H can be set
 - ② Alarm logging interval:1min~24H can be set(The alarm recording interval must be less than or equal to the normal recording interval)
 - ③ Normal Upload interval: 1min~24H can be set,default5mins
 - ④ Alarm upload interval: 1min~24H can be set,default2mins(The alarm upload interval must be less than or equal to the normal upload interval)
- 7.Battery life: no less than 7 days (@25°C, upload interval 5 minutes)
- 8.Indicator light: Alarm indicator light, charging indicator light
- 9.Screen: TFT color screen
- 10.Communication method: WIFI
- 11.Alarm method:Local alarm, cloud alarm (SMS, APP, email)
- 12.Buttons: switch machine, reset button (WIFI/Bluetooth), left key, home key, right key, Celsius/Fahrenheit conversion, monitoring start/stop, buzzer on/off,
- 13.Protection grade: IP50
- 14.Standard sizes:110mm*78mm*27mm

6. Instructions

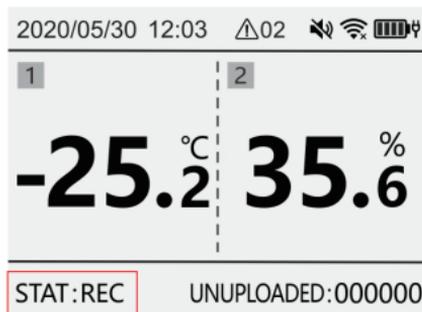
● Charge

Connect to the power adapter via a USB cable;

When charging, the charging indicator light will be always on.The status bar will display the charging icon.

● Button

- 🏠 Home button: Short press to switch to the home page
 - ⏪ Left key: short press the interface to page forward
 - ⏩ Right key: short press the interface to page backwards
 - 🌡️ Celsius/Fahrenheit conversion key: press and hold for 3 seconds, the temperature unit will switch between Celsius/Fahrenheit.
 - 🔊 Monitoring start/stop button: long press for 3 seconds, start/stop monitoring, data start/stop record storage, display
- The lower left corner will display the status synchronously: monitoring/not monitoring



- 🔊 Buzzer on/off key: long press for 3 seconds, the buzzer function is turned on/closure open icon 🔊 / close icon 🔇
- Short press in an alarm state will turn off the current buzzer alarm

● Interface

Dual temperature configuration parameter interface

The screenshot shows the configuration screen for two temperature probes. The status bar is identical to the previous screenshot. The main content area has two sections, one for 'Temp1' and one for 'Temp2'. Each section contains two rows: 'Alarm Upper Limit' and 'Alarm Lower Limit'. The values for both are '30 °C' and '-20 °C' respectively. Callouts on the left point to the 'Alarm Limit' text in each section. Callouts on the right point to the numerical values in each row.

① Probe 1 temperature alarm limit	Temp1	Alarm Upper Limit	30 °C	③ Temperature upper limit alarm value
	Temp1	Alarm Lower Limit	-20 °C	④ Temperature lower limit alarm value
② Probe 2 temperature alarm limit	Temp2	Alarm Upper Limit	30 °C	⑤ Temperature upper limit alarm value
	Temp2	Alarm Lower Limit	-20 °C	⑥ Temperature lower limit alarm value

Temperature and humidity configuration parameter interface

The screenshot shows the configuration screen for one temperature probe and one humidity probe. The status bar is identical. The main content area has two sections. The first section is for 'Temp1' with 'Alarm Upper Limit' and 'Alarm Lower Limit' values of '30 °C' and '-20 °C'. The second section is for 'Humi2' with 'Alarm Upper Limit' and 'Alarm Lower Limit' values of '80 %' and '10 %'. Callouts on the left point to the 'Alarm Limit' text in each section. Callouts on the right point to the numerical values in each row.

① Probe 1 temperature alarm limit	Temp1	Alarm Upper Limit	30 °C	③ Temperature upper limit alarm value
	Temp1	Alarm Lower Limit	-20 °C	④ Temperature lower limit alarm value
② Probe 1 humidity alarm limit	Humi2	Alarm Upper Limit	80 %	⑤ Humidity upper limit alarm value
	Humi2	Alarm Lower Limit	10 %	⑥ Humidity lower limit alarm value

Configuration parameter interface

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Normal Recording Interval	1 min	① Time interval between two data recordings
Alarm Recording Interval	1 min	② Data logging interval when alarming
Normal Uploading Interval	1 min	③ Data upload interval
Alarm Uploading Interval	1 min	④ Time interval for uploading data to cloud platform when alarming
Recording Duration	5 day 12 hour 14 min	⑤ Current record time of the collector
Data Points	7053 item	⑥ The total number of data recorded by the collector this time
Display Time	15 sec	⑦ Automatic sleep time after no operation

system information interface

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IP:192.168.12.102	① IP address
MAC: AC-CF-23-78-F8-E0	② WIFI MAC address
GUID: 12345-12345 12345-12345	③ ID number 20 digits
Version: V1.00	④ Software version
Router: configured	⑤ WIFI configured: configured/unconfigured

7. APP operation instructions

1. Download and install APP

Please scan the QR code below to download the "Elitech iCold"



2. Account registration and login

Open the APP, in the login interface (as shown in Figure 1), enter the verification information according to the prompts, and click "Login" to complete the account login. If you have not yet registered an account, please click "Register Now" in the login interface. In this interface (as shown in Figure 2), enter the verification information according to the prompts to complete the account registration.

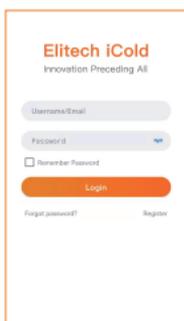


Figure 1: Account login interface

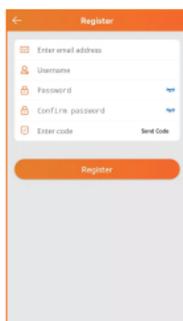
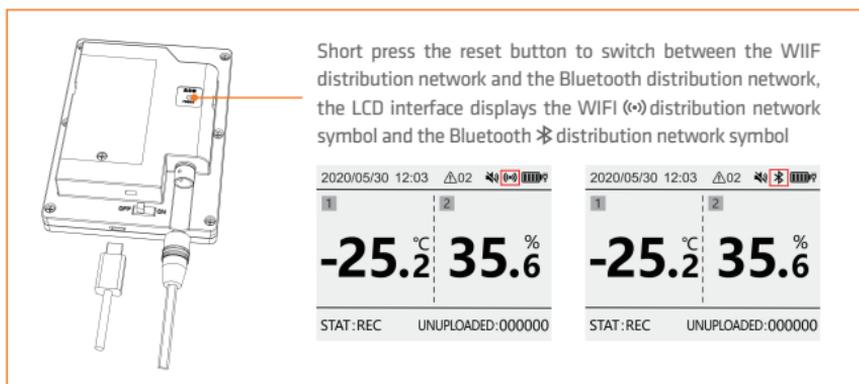


Figure 2: Account registration interface

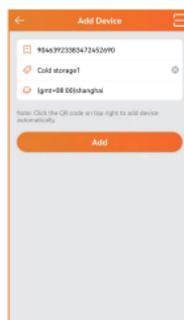
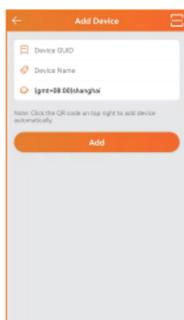
3. WiFi distribution network

- 1) Connect the phone to the WiFi network and open the APP;
- 2) Short press the reset button on the back of the machine to enter the WiFi network configuration mode, please see the LCD status bar icon for the specific status;

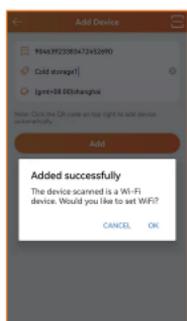


- 3) Follow the steps below to configure WiFi, the top of the screen displays " ", and the device has successfully configured WiFi;

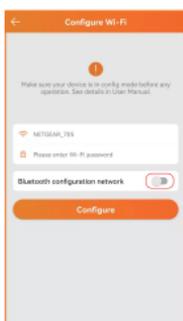
- ① Open the APP, click the "+" icon;
- ② Click the " " icon, scan the QR code on the back of the device or manually enter the device GUID;
- ③ Edit the device name, select the time zone, and click "Add" to add the device successfully.



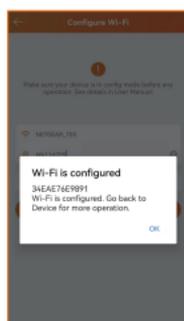
④ Click "Confirm" to start configuring WiFi;



⑤ Enter the WiFi password in the APP;



⑥ Click "Confirm", the WiFi configuration is successful.



4) If the device WiFi configuration is unsuccessful, repeat the above steps 1) to 3).

5) When the device needs to reconfigure WiFi, follow steps 1) to 2). Then open the "Device Information" of the device in the APP, and click the "📶" icon in the details page (as shown in Figure 3). Follow ⑤~⑥ in step 3) to complete the device WiFi configuration.

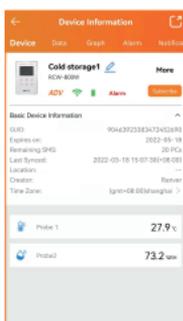
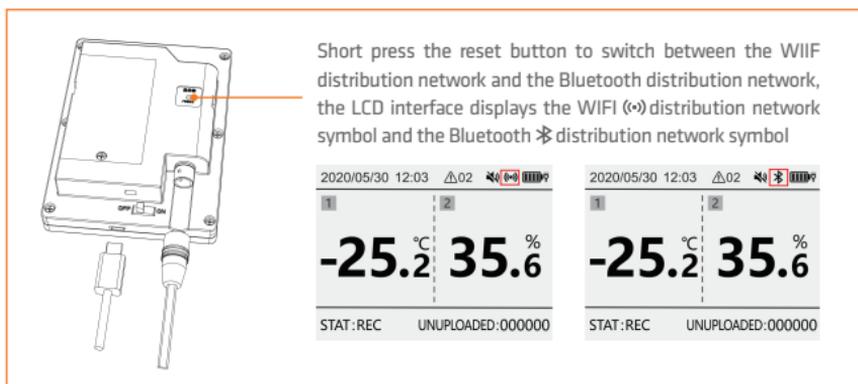


Figure 3: Device Information

4. Bluetooth distribution network

1) Connect the phone to the WiFi network, open the APP and Bluetooth;

2) Short press the reset button on the back of the machine to switch to the Bluetooth network configuration mode. Please see the LCD status bar icon for the specific status;



3) Refer to the WiFi network for the network steps, and the Bluetooth network can support static IP address settings.

① Turn on the Bluetooth network



② Obtain IP address automatically



③ Turn off automatic IP address acquisition: fill in the IP address manually Please refer to the current networking message requirements: IP address, subnet grab code, gateway address, DSN server address



④ Enter the WiFi password in the APP



8. Elitech iCloud Platform

For more functions, please log in to the Elitech iCloud platform: www.new.i-elitech.com, do more.

9. Recharge

After the device is added for the first time, you can get free SMS, data and premium service trial, please recharge the device after the trial service expires. For more recharge details, please refer to the "Elitech Cold Cloud Value-added Service Recharge Guide" in the APP to operate.

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Nascon Instruments

Process control instrumentation

7-2-202, II Floor, Ghanamandi Road, Secunderabad-3

Tele/Fax: 040-66206871

WhatsApp: 96522 59196

Cell: 92463 66871

E-mail: nasconin@yahoo.com, nasconin@gmail.com

Website: www.nasconinstruments.com