Elitech®
Innovation Preceding All

RCW-360 Pro 4G/WiFi
USER MANUAL

APP Android

IOS APP

Elitech iCold Platform: new.i-elitech.com

I. Overview

This product is a wireless Internet of Things monitor, providing such functions as real-time monitoring, alarm, data recording, data uploading, large screen display, etc. of temperature and humidity at monitoring points.Together with the "Elitech iCold" platform and APP, it can realize functions such as remote data viewing, historical data query, remote alarm push, etc. It is widely used in food, medicine, catering, international warehousing and logistics industries.

1. Features

- The product is suitable for various occasions, including warehouse, refrigerated storage, refrigerator car, shade cabinet, medicine cabinet, refrigerator lab, etc;
- Compact size, fashionable appearance, magnetic card tray design, easy installation;
- Large TFT color screen display, rich in content;
- Built-in rechargeable lithium battery enables long-time real-time data upload after power cut;
- Built-in sound-light alarm device can realize local alarm;
- Automatic screen-on/off;
- Supports up to 2 channels, each channel supports a variety of pluggable probe types, probe types see the selection list.

2. Interface

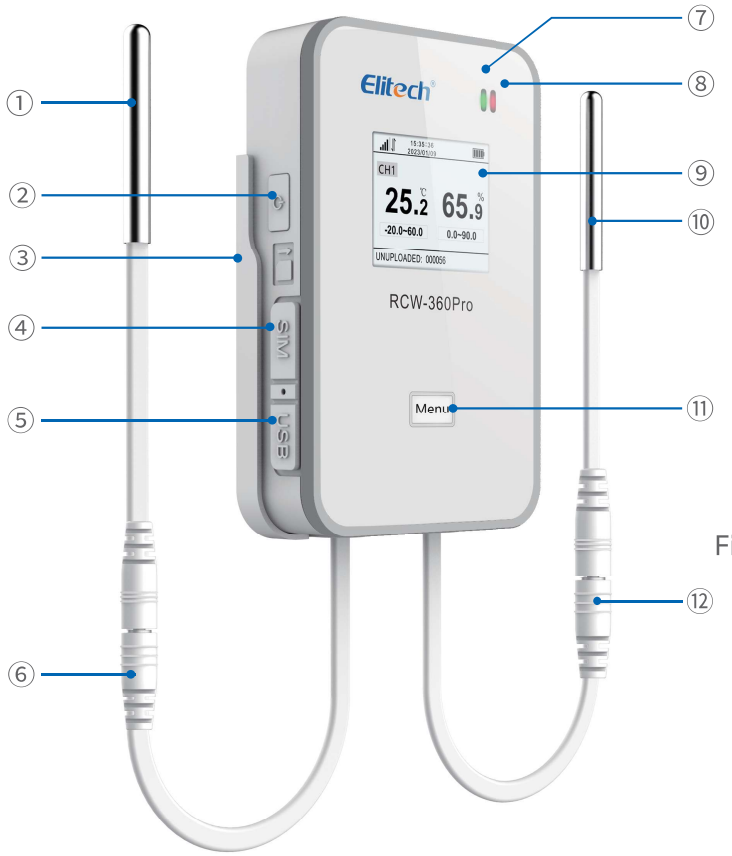




Figure: Gel bottle Sensor

① External probe 1	② On/off button	③ Magnetic card tray
④ SIM card interface(4G Version)	⑤ Charging interface	⑥ External Probe 1 Interface
⑦ Charging indicator	⑧ Alarm status indicator	⑨ Screen
⑩ External probe 2	⑪ "Menu" button	⑫ External Probe 2 Interface

3. Model Selection List

Collection Host:RCW-360Pro.

Tips: The specific host model is subject to the actual product;

Probe model: the conventional probe models are shown in the table below:

Probe type	Single temperature	Dual temperature	Gel bottle temperature	Temperature and humidity	Ultra low temperature	Low Concentration CO2	High Concentration CO2
Model	TD3X-TE-R	TD3X-TDE-R	TD3X-TE(GLE)-R	TD3X-THE-R	PT100IIC-TLE-R	SCD4X-CO2E	STC3X-CO2E
Cable	5 Meters	5 Meters	5 Meters	5 Meters	3 Meters	2 Meters	2 Meters
Point	One temperature probe	Two temperature probe	One temperature probe	1 temperature probe and 1 humidity probe	One temperature probe	CO2 Concentration	CO2 Concentration
Range	-40~80°C			T: -40~80°C H: 0~100 %RH	-200~150°C	400~5000 ppm	0~100 vol%
Accuracy	±0.5°C			T: ±0.5°C, H: ±5%RH	±0.5°C(-40~80°C) ±1°C(-80~100°C) ±2°C(Others)	±(100+5% reading)	±(1+3% reading)
Sensor type	Digital temperature and humidity sensor, Digital temperature sensor				Analog to digital sensor	Carbon Dioxide Sensor	
Sensor interface	3.5mm four section headphone interface, using I2C communication mode						

Note:

1. The specific sersor type is subject to the actual product.

2. The host does not come standard with probes. Please choose probes according to actual needs, and each channel can adapt to the above types of probes.

II. Technical Parameters

1. Power input: 5V/2A (DC), Type-C.

2. Temperature display resolution: 0.1°C.

3. Humidity display resolution: 0.1%RH.

4. Number of offline recording groups: 100,000.

5. Data storage mode: circular storage.

6. Record, upload interval and alarm interval:

① Normal recording interval: 1 minutes ~ 24 hours allowed, Default 5 minutes.

② Alarm recording interval: 1 minutes ~ 24 hours allowed, Default 2 minutes.

③ Normal upload interval: 1 minutes ~ 24 hours allowed, Default 5 minutes.

④ Alarm upload interval: 1 minutes ~ 24 hours allowed, Default 2 minutes.

7. Battery life:

① Not less than 10 days (@25°C, good network environment, upload interval :5 minutes)

② Not less than 60 days (@25°C, good network environment, upload interval :30 minutes)

8. Indicator light: alarm indicator, charging indicator.

9. Screen: TFT color screen.

10. Buttons: power on/off, menu.

11. Alarm buzzer: alarm occurs, sounding for 1 minute.

12. Communication: 4G(can fall back to 2G),WIFI.

13. Location mode: LBS+GPS(optional).

14. Alarm modes: local alarm and cloud alarm.

15. Waterproof grade: IP64.

16. Working environment: -20~60 °C, 0~90% RH (non condensing).

17.Specification and dimension: 110x70x23mm.

III. Operation Instructions

1. Installing and removing the probe

Turn off the device and securely install the sensor to the headphone connector.
To removing the sensor, please turn it off first and then unplug the sensor.

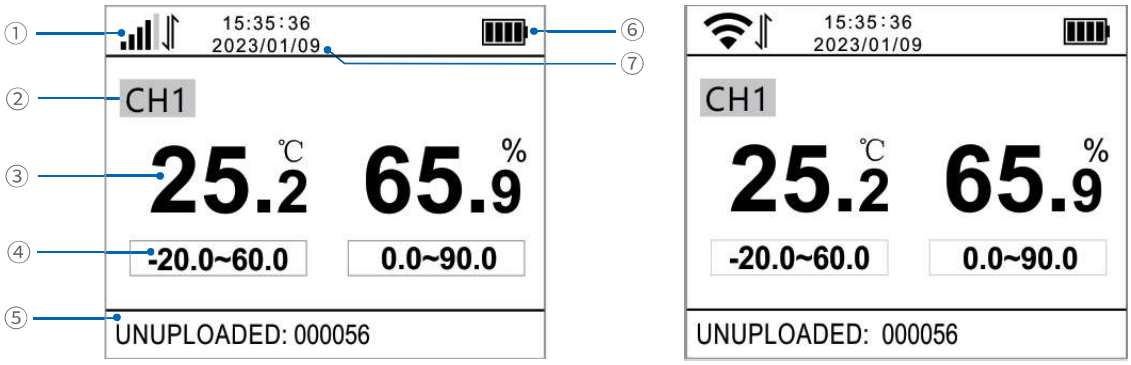
2. Charging

Connect to the power adapter via USB cable.
When charging, the charging indicator flashes, when it is fully charged, the charging indecator is always on.

3. Power on/off

Press and hold the on/off button for 3 seconds to turn on or off the device.
Start recording data according to the recording interval after turn on, and report data according to the upload interval.
Stop recording after turn off.

4. Real time data



① **Networking signal icon:** Connect to the base station and display a signal bar. If the device networking is abnormal, an "X" will be displayed in the upper left corner of the signal.

② **Channel identification:** Represented by CH1 or CH2, indicating the probe data corresponding to channel 1 or 2 for the current data.

③ **Real time temperature or humidity:** Supports °C or °F display. If the platform turns off the probe, the corresponding position will display "OFF".

④ **Upper and lower alarm limits:** The data below the lower limit will be displayed in blue, and the data above the upper limit will be displayed in red.

⑤ **Number of data not uploaded:** Displays the number of recorded but not uploaded data.

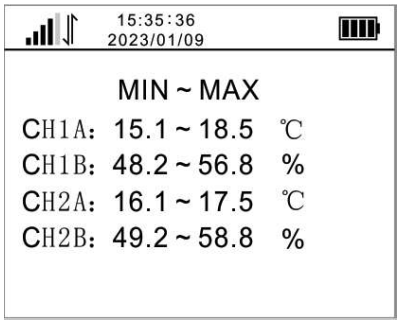
⑥ **Battery icon:** Four bar battery indicator. When charging, the battery indicator flashes and remains on when fully charged. When the battery level is below 20%, it is displayed in red.

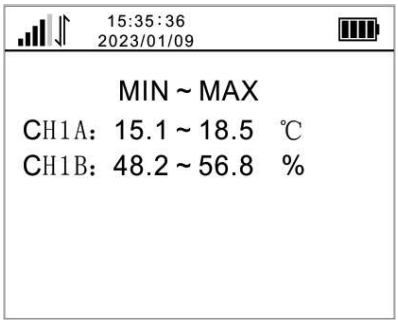
⑦ **Time and date**

** When both channels are connected with probes, the CH1 and CH2 channel data automatically switches display within 10 second cycle.*

5. Maximum and Minimum

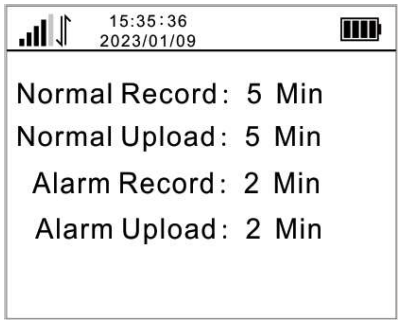
Short press the "Menu" key to enter the "Maximum and Minimum" page, as shown in the following figure. Count the maximum and minimum values in the recorded data. CH1A and CH1B represent the two collected values of channel 1 or 2, corresponding to sensor shutdown or single temperature probe. The B data displays "-~-".





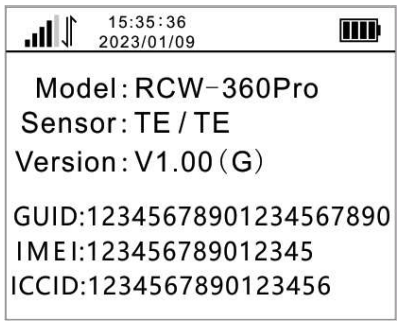
6. Viewing records and uploading intervals

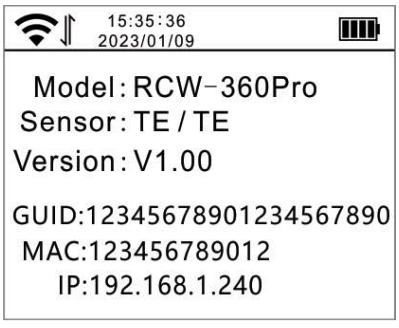
Short press the "Menu" button to enter the "Record and Upload Interval" page, as shown in the following figure, which can be set through the APP.



7. View device information

Press the "Menu" button to enter the "Device Information" page, as shown in the following figure. You can query the model, Sensor, version, GUID, IMEI, SIM card ICCID(only for Wi-Fi version)





8. Adding devices to the platform and basic operations

Adding decices to the platform and operation, please refer to “IV Elitech iCold”.

IV. Elitech iCold

The Elitech iCold Cloud platform supports two methods for adding and managing devices: APP or WEB client. The following mainly introduces the APP method. WEB client can log in to new.i-elitech.com for operation.

1. Download and Install APP

Please scan the QR code on the cover of the manual or search Elitech iCold APP Store or Google play to download Elitech App.

2. Account registration and APP Login

Open the APP, in the login page, as shown in Figure 1, follow the prompts, enter the verification information, and click "Login". After entering the APP, select "New".

PS:

a. If you have not an account, please click on "**Register**" in the login page, as shown in Figure 2, follow the prompts and enter verification information to complete account registration.

b. If you forget the password, click "**Forget password**" to find password as shown in Figure 3. According to the prompts to finish verfication and find out password.

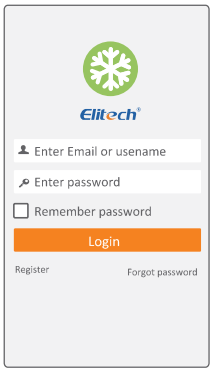


Figure 1

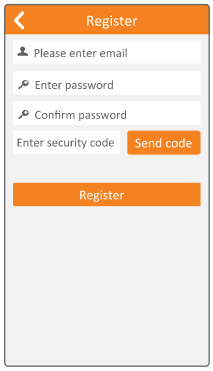


Figure 2

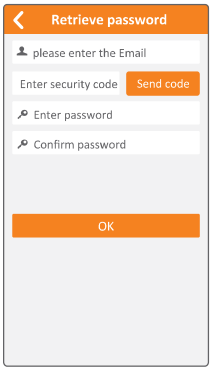
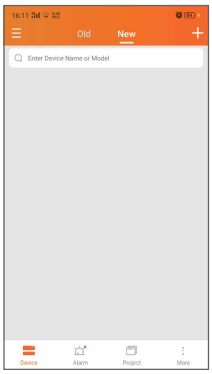


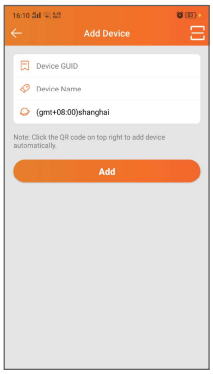
Figure 3

3. Add Device

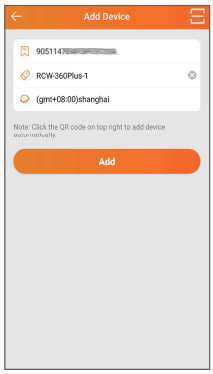
1. Click " + " in the upper right corner
2. Click " ⊡ " in the upper right corner, scan the QR code or enter GUID back on the device, then fill in the device name and choose time zone.
3. Click " Add ", the device is added.



1



2

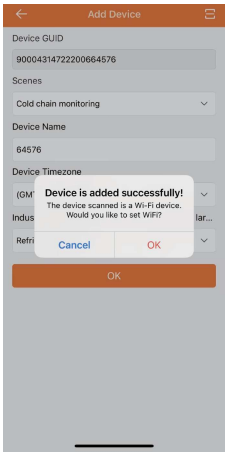


3

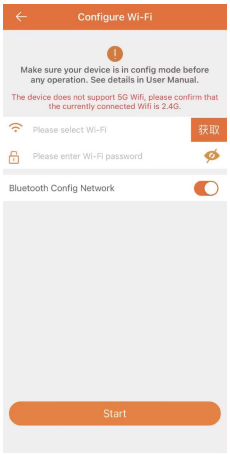
Tip*: If the device shows offline after being added to the platform, first check the network icon and offline records on the device. If everything is normal, please wait for a few minutes or restart the device before turning it on. The device uploads data according to the set reporting cycle; If the device is offline for a long time, please check if the SIM card is overdue. Ultimately unable to resolve, please call the service hotline for consultation.*

4. WIFI distribution network(WIFI version only)

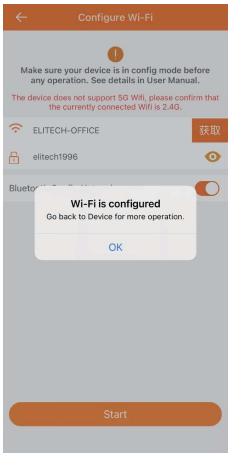
1. Press the "Menu" key briefly to enter the "device Information" page.
2. Press and hold the "Menu" key, and a Bluetooth icon "ᛒ"will appear in the upper left corner of the device
3. Use the app to distribute the network with this device via Bluetooth, as shown in the following figures ① ~ ③



①



②



③

5. Configure probe type

When using the device for the first time or changing the probe type, it is necessary to reconfigure the probe, as shown in Figure 4 and Figure 5 for operation;

Operation method: Log in to the APP →select the device to be changed →select "Parameter Configuration" →select "User Parameters" →select the corresponding probe model based on the actual selected probe type and channel →click "SET".

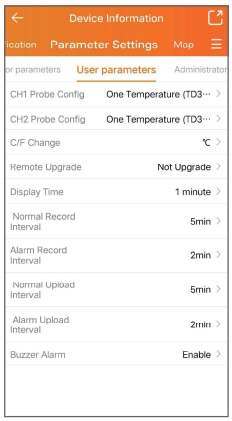


Figure 4

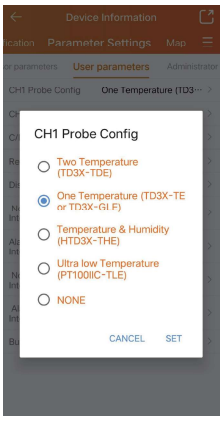


Figure 5

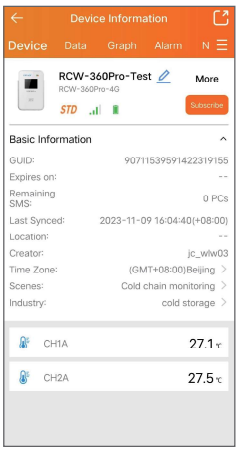
Note:

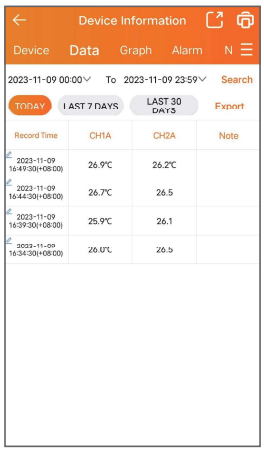
(1) After reconfiguring the probe type, it is necessary to wait for an upload cycle to synchronize the probe type to the device, or the device can be restarted to synchronize immediately.

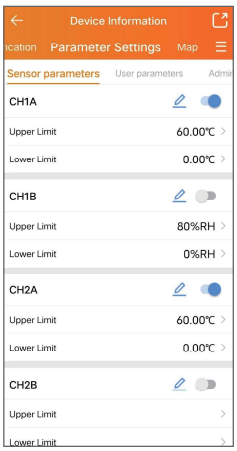
(2) Replace the probe. Due to the time difference between replacing the probe and configuring it, there may be faulty data in the data list.

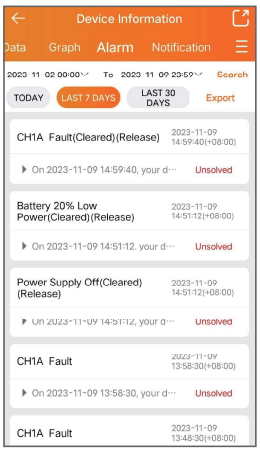
6. Device management

Click on the device on the main page of the APP to enter the device management related page. You can view device information, change device names, view data lists, set alarm upper and lower limits, record/upload intervals, configure alarm push, view maps, export reports, and other operations.









VII. Elitech iCold Platform

For more functions, Please log in Elitech iCold Platform: **new.i-elitech.com**.

VIII. Top-up

Free data & advanced platform service will be activated after the device be first time registered to Elitech platform. After the probation period, customers need to recharge the device by referring to operation manual.



V1.3