Elitech®
Innovation Preceding All

Multi Use Real Time Data Logger
RCW-360 Plus
USER MANUAL

Android APP

IOS APP

Elitech iCold Platform: **new.i-elitech.com**

I. Overview

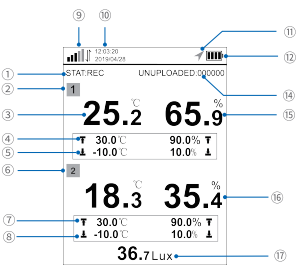
This device is a wireless Internet of Things (IoT) monitoring product that offers real-time monitoring, alarms, data logging, data uploading, and large screen display for temperature and humidity at monitoring points. When paired with the "Elitech Cold Cloud" cloud platform and app, it enables remote data viewing, historical data queries, remote alarm notifications, and device GPS positioning (only for the 4G version). The product is widely used in industries such as food, pharmaceuticals, catering, and international warehousing logistics. It features an aviation plug for easy sensor replacement. The main unit supports both 4G and Wi-Fi, allowing you to choose between 4G or Wi-Fi communication methods. The main unit comes with dual channels, and the external probes offer several options: single temperature, dual temperature, gel bottle, ultra-low temperature, and temperature and humidity.

1. Features

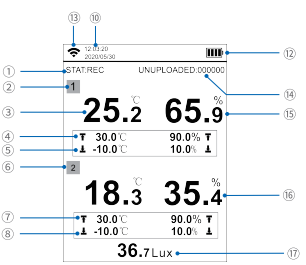
- The product is suitable for various occasions, including warehouse, refrigerated storage, refrigerator car, shade cabinet, medicine cabinet, refrigerator lab, etc;
- Compact size, fashionable appearance, magnetic card tray design, easy installation;
- Large TFT color screen display, rich in content;
- 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;
- GPS positioning allows real-time tracking of the equipment location(4G version only);
- Bluetooth printing function enables data printing and recording on site;
- Illumination intensity sensing function enables detection of the door up/close status to realize automatic screen-on/off;
- Multiple probe types available (see model selection list for details).

2. Interface

4G version



WIFI version



① Monitoring status	② Channel 1	③ Current temperature	④ Upper limit mark
⑤ Lower limit mark	⑥ Channel 2	⑦ Upper and lower alarm limits for temperature setting	
⑧ Upper and lower alarm limits for humidity setting			⑨ Signal intensity
⑩ Time and date			
⑪ GPS icon (: GPS off : GPS on)			
⑫ Power status icon (: battery powered mode		: USB powered mode)	
⑬ WIFI icon(:Connection Status	: Configuration status)		
⑭ The number of local data cache groups that have not yet been uploaded to network		⑮ Current humidity	
⑯ Temperature and humidity display area (actual version shall prevail)		⑰ Current Light Intensity	

** When the temperature and humidity are higher than the upper limits, the values are in red; When the temperature and humidity are lower than the lower limits, the values are in blue.*

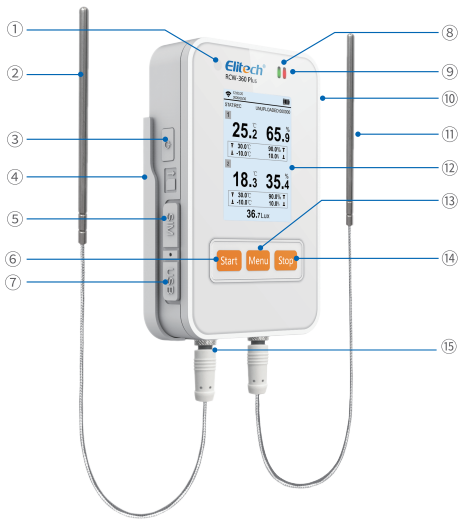


Figure: Gel bottle Sensor

Figure: The Aircraft Interface

① Photosensitive sensor	② External probe 1	③ On/off button
④ Magnetic card tray	⑤ SIM card interface(4G version only)	⑥ "Start" button
⑦ Charging interface	⑧ Charging indicator	⑨ Alarm status indicator
⑩ Built-in probe	⑪ External probe 2	⑫ Screen
⑬ "Menu" button	⑭ "Stop" button	⑮ External Probe Interface

3. Model Selection List

Collection Host: RCW-360 Plus
Tips: The specific host model is subject to the actual product; The host does not come with a probe. Choose a probe according to actual needs, and each channel can be adapted to the following types of probes.
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
Model	TD3X-TE-H	TD3X-TDE-H	TD3X-TE(GLE)-H	HTD3X-THE-H	PT100IIC-TLE-H
Cable	5 Meters	5 Meters	2 Meters	5 Meters	3 Meters
Point	One temperature probe	Two temperature probe	One temperature probe	1 temperature probe and 1 humidity probe	One temperature probe
Range	-40℃~85℃			T:-40℃~85℃ H:0%RH~100%RH	-200℃~150℃
Accuracy	±0.5℃			T:±0.5℃ H:±5%RH	±0.5℃(-40~85℃) ±1℃(-100~150℃) ±2℃(others)

Note: The specific sensor type is subject to the actual product.

II. Technical Parameters

1.Power Supply: Power adapter: 5V2A (DC), Type-C interface

2.Battery: 4000mAh/3.7V rechargeable lithium battery

3.Endurance: No less than 20 days (at 25℃, upload interval 5 minutes, good network environment)
No less than 7 days (at 25℃, upload interval 5 minutes, GPS positioning, good network environment)

4.Positioning Accuracy: GPS: ≤50 meters, positioning interval consistent with recording interval, and not less than 5 minutes
LBS: Urban areas ≤500 meters, rural areas ≤3km

5.Storage Capacity: 100,000 data sets (cyclic storage)

6.Recording Interval: 1 minute to 24 hours, default: normal recording interval 5 minutes, alarm recording interval 2 minutes

7.Upload Interval: 1 minute to 24 hours, default: normal upload interval 5 minutes, alarm upload interval 2 minutes

8.Local Alarm: Buzzer, LED

9.Platform Alarm: Voice, SMS, WeChat, APP, Email

10.Waterproof Rating: IP65

11.Operating Environment: -20~60℃, 0~100%RH (no condensation), below 1km altitude

12.Storage Environment: -20~60℃, 0~90%RH

13.Product Weight: Main unit approximately 200g

14.Product Dimensions: 109*69.5*23mm

III. Operation Instructions

1. Installing and removing the probe (Only aircraft head interface)

As shown in Figure, first align the aviation plug with the interface and insert it, then turn the screw clockwise to fix the probe. To disassemble, turn the screw counterclockwise and pull out the probe.

2.Charging

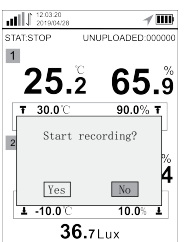
Connect to the power adapter via USB cable.
When charging, the charging indicator flashes; When it is fully charged, the charging indicator is always on.

3. Power on/off

Press the power on/off button for 5 seconds to turn the device on/off.
** It is not allowed to turn off when recording is in process.*

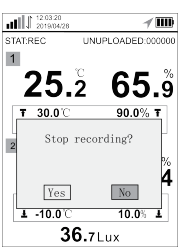
4. Start recording

When the equipment is in unmonitored running state, press the "Start" button for 5 seconds; click the "Start" button in the pop-up box to click "Yes", and then click the "Menu" button to confirm the start.



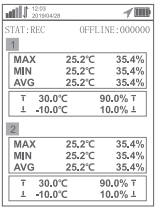
5. Stop recording

When the equipment is in monitored running state, press the "Stop" button for 5 seconds; click the "Start" button in the pop-up box to click "Yes", and then click the "Menu" button to confirm the stop.



6. Maximum, Minimum, Average View

Click the "Menu" button to enter the maximum, minimum and average display page.



7. Menu

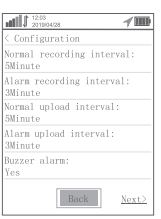
Press the "menu" button for 3 seconds to enter the main menu page.

The functions of the buttons in the menu are as follows:

● "Menu" button: confirm/select ● "Start" button: switch up ● "Stop" button: switch down

① View configuration information

Including: normal recording interval, alarm recording interval, normal uploading interval, alarm uploading interval, buzzer alarm on/off, GPS positioning on/off, temperature alarm delay, humidity alarm delay and other parameters.



② View device information

Including: device name, GUID, offline data capacity, IMEI,ICCID.

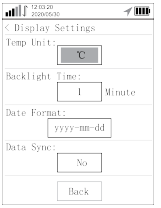
③ Display setting

Enter the "Display Settings" menu to set backlight brightness, backlight time and date format.

Brightness: 5 levels of brightness available, and 5 is the brightest.

Backlight time: 4 options available, i.e. 1 min, 10 min, 30 min and normally on.

Date format: 3 options available, i.e. yyyy-mm-dd, dd-mm-yyyy, mm-dd- yyyy.



8. Add device to the platform and operation. Please refer to IV Elitech iCold.

IV. Elitech iCold

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

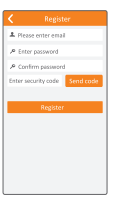


Figure 2

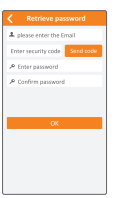


Figure 3

3. Add Device

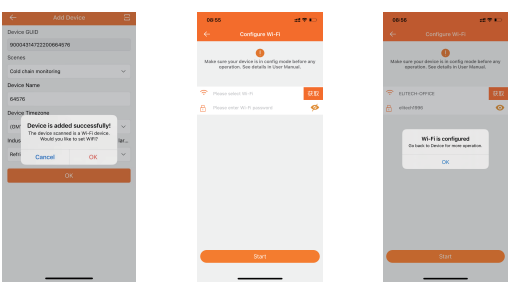
1. Click "+" in the upper right corner
2. Click "⎙" in the upper right corner, scan the QR code or enter GUID back on the device, then fill in the device name and choose time zone.
3. Click "Add", the device is added.

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

1. Press and hold the "Menu" key, briefly to enter the "WIFI Config" page.
2. Press the "Menu" key and a Wi-Fi icon "((•))"will appear in the upper left corner of the device
3. Use the app to distribute the network with this device via Wi-Fi, 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".

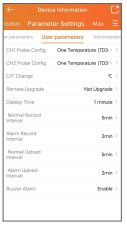


Figure 4

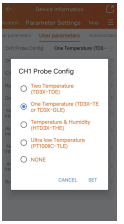
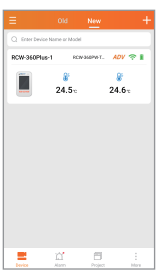


Figure 5

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.

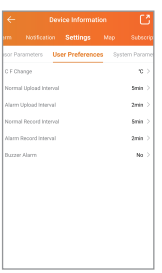
6. Device Management

1) After the device has started recording and added to the platform, wait for the data to be uploaded, then display online. Start recording reference III-3.
2) If you want to make other configurations for the device, please enter the device information page, such as historical data, temperature unit, upper and lower alarm limits, upload record interval, etc. As shown in Figure ⑦-⑨.
Note: After the device temperature unit is changed, it needs to be changed under user settings(More-Setting).

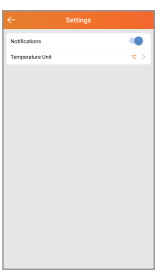


⑥ Online Data

⑦ Historical data



⑧ Configurations



⑨ Temperature Unit

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.

V5.0