RCW-800W

IoT Data Logger Manual

Elitech iCold Platform: new.i-elitech.com
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

![Product Interface Diagram]

- Error code
- Time
- Date
- Probe 1
- Current temperature
- Device status
- Buzzer status
- WIFI module status
- Battery power status
- Charging status
- Probe 2
- Current humidity
- Number of offline data

*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

<table>
<thead>
<tr>
<th>Probe Type</th>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aisle</td>
<td>1 temperature 1 humidity</td>
</tr>
<tr>
<td>Measuring range</td>
<td>Temperature: -40°C~80°C</td>
</tr>
<tr>
<td></td>
<td>Temperature: -40°C~80°C</td>
</tr>
<tr>
<td>Sensor type</td>
<td>Digital temperature &amp; humidity sensor or NTC Temperature Sensor</td>
</tr>
<tr>
<td>Measurement</td>
<td>Temperature: -20°C~+40°C ±0.5°C, others ±1°C</td>
</tr>
<tr>
<td></td>
<td>Humidity: ±5%RH</td>
</tr>
</tbody>
</table>

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, default 5mins
   ④ Alarm upload interval: 1min~24H can be set, default 2mins (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

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Temp1 Alarm Upper Limit</th>
<th>Temp1 Alarm Lower Limit</th>
<th>Temp2 Alarm Upper Limit</th>
<th>Temp2 Alarm Lower Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020/05/30</td>
<td>12:03</td>
<td>30 °C</td>
<td>-20 °C</td>
<td>30 °C</td>
<td>-20 °C</td>
</tr>
</tbody>
</table>

Temperature and humidity configuration parameter interface

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Temp1 Alarm Upper Limit</th>
<th>Temp1 Alarm Lower Limit</th>
<th>Humi2 Alarm Upper Limit</th>
<th>Humi2 Alarm Lower Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020/05/30</td>
<td>12:03</td>
<td>30 °C</td>
<td>-20 °C</td>
<td>80 %</td>
<td>10 %</td>
</tr>
</tbody>
</table>
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.
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 "_COUNTRY" 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. 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) Click “Confirm” to start configuring WiFi;
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 "WiFi” icon in the details page (as shown in Figure 3). Follow ⑤～⑥ in step 3) to complete the device WiFi configuration.

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.

- Turn on the Bluetooth network
- Obtain IP address automatically
- 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
- 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](http://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.