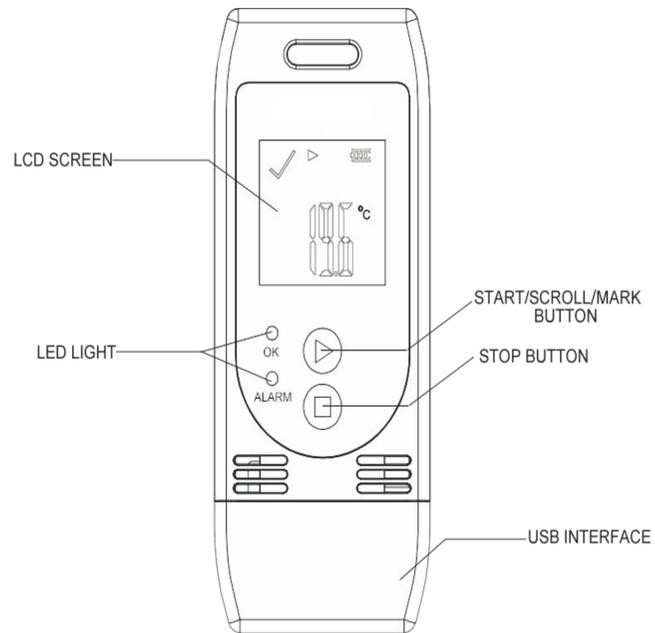


Multi-Use USB TEMP&RH Data Logger

User Manual



1.Product Profile

The device is mainly used to monitor the temperature and humidity data of food, medicine, chemical products and other products during storage and transportation. It is widely used in all links of warehousing and logistics cold-chain, such as reefer containers, refrigerated trucks, refrigerated distribution boxes, cold storage laboratory, etc. Compact and light, it is economical to use. After the recording is completed, it is inserted into the computer without any driver and automatically generates reports.

2.Product Features

- Designed to be Multi-use
- Temperature & Humidity measurement and recording
- Wide measuring range, high accuracy and large data memory
- Statistics available on LCD screen
- No software needed to retrieve data
- Automatically generates PDF report and CSV file
- Programmable software for logging parameters, alarms, and start delay

3. Technical Parameter

Item	Parameter
Temperature Scale	°C or °F
Accuracy	±5%RH; ±0.5°C(-20°C~+40°C),±1.0°C(other)
Measuring Range	Humidity 5%~95%RH, Temp -30°C~70°C
Resolution	0.1%RH typically, 0.1°C
Memory Capacity	32000
Start Mode	Button Start or Timed Start
Record Interval	10 seconds to 99 hours adjustable [Default:10 mins]
Start Delay	Programmable (0~72 hours) [Default:30 mins]
Alarm Delay	Programmable (0~99 hours) [Default:10 mins]
Alarm Range	Programmable high or low alarm limit for each channel [Default:<2°C or >8°C, <40%RH or >80%RH]
Shelf Life	2 years (battery replaceable)
Report Generation	PDF report and CSV files are optional (Default:PDF and CSV)
Communication Interface	USB2.0
Time Zone	UTC +0:00 (Default)
Dimensions	89mm*36mm*16mm
Product Weight	25g

4. Operating Instructions

a. Start Recording

Press and hold the “▶” button for more than 3S until the “OK” light is on, and the “▶” or “WAIT” displays on the screen, indicating start recording successfully.

b. Mark

When the device is in the recording status, press and hold the “▶” button for more than 3s, and the screen will switch to the “MARK” interface. The number of “MARK” will increase by one, indicating data was marked successfully.

(Note :

One record interval only can mark one time, the logger can mark 6 times in one recording trip.

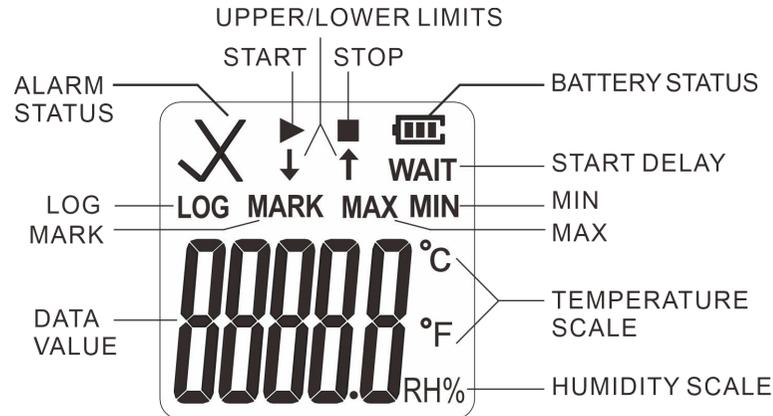
Under status of start delay, the mark operation is disabled.)

c. Stop Recording

Press and hold the “■” button for more than 3S until the “ALARM” light is on, and the “■” displays on the screen, indicating stop recording successfully.

Note:If the logger is stopped during the status of start delay, there will be a PDF Report but no data.

5.LCD Display Instructions



During normal use, press “▶” to switch the screen display interface. The data logger display interfaces include: Real-time temperature interface→Real-time humidity interface→LOG interface→MARK interface→Temperature maximum interface→Temperature minimum interface→Humidity maximum interface →Humidity minimum interface.

Note:

- If the device is used for the first time or after re-configuration, the real-time temperature interface will be the initialization interface.
- Temperature, humidity real-time interface is updated every 5 seconds.

At the real time TEMP&RH interface:

If the symbol “▶” appears, it indicates the data logger is in the status of recording;

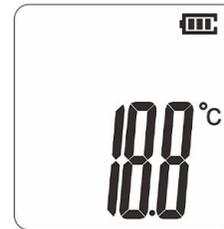
If the symbol “■” appears, it indicates the data logger has stopped recording;

If the “WAIT” appears, it indicates the data logger is in the status of start delay;

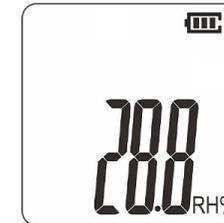
If the symbol “√” appears, it indicates that the temperature and humidity are within the normal range;

If the symbol “x” and “↑” appear, it indicates the measured temperature/humidity exceeds its temperature/humidity upper limit;

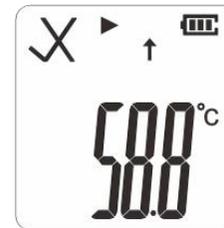
If the symbol “x” and “↓” appear, it indicates the measured temperature/humidity exceeds its temperature/humidity lower limit;



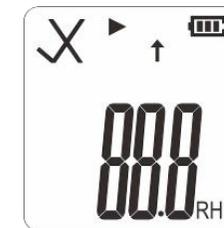
①Real-time Temperature Interface (Initialization)



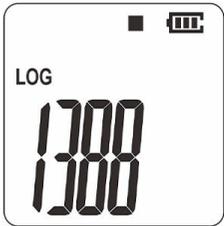
②Real-time Humidity Interface (Initialization)



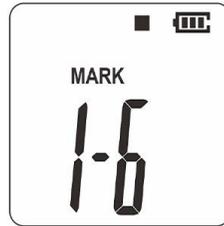
③Real-time Temperature Interface (Above upper limits)



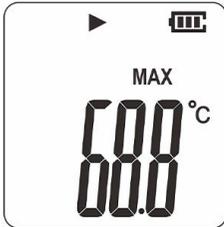
④Real-time Humidity Interface (Above upper limits)



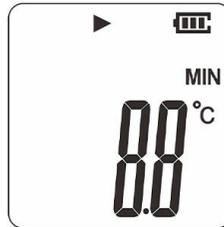
⑤ LOG Interface
(Stop recording status)



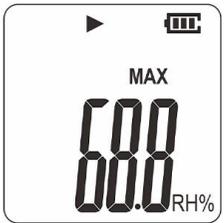
⑥ MARK Interface
(Stop recording status)



⑦ Temperature maximum interface
(Recording status)



⑧ Temperature minimum
(Recording status)



⑨ Humidity maximum interface
(Recording status)



⑩ Humidity minimum interface
(Recording status)

6.LED Indicator Description

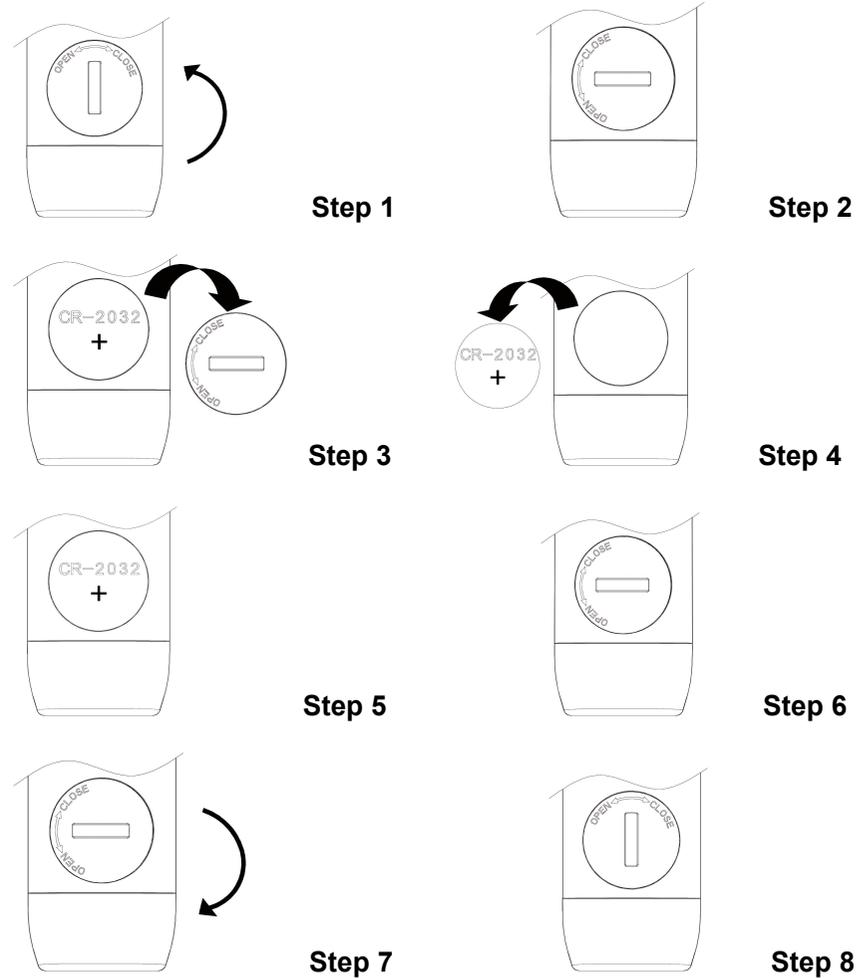
Status	Operating	Indicator status
Inactivated	Short press the button	The "OK" (green light) and the "Alarm" (red light) will flash simultaneously.
Activated		<p>During the recording process, the device will automatically flash every 10s.</p> <p>If the "OK"(green light) flashes every 10s, it means that the device is not over-TEMP/RH during the recording process;</p> <p>If the "Alarm" (red light) flashes every 10s, it shows the over-TEMP/RH during the recording process.</p> <p>Note: As long as over-TEMP/RH is found during the recording process, the "OK" will no longer flash.</p>
Stopped	No press the button	The "OK" (green light) and "Alarm"(red light) are not flashed.
	Short press the button	<p>The "OK" (green light) flashes, indicating that the TEMP/RH has not been over during the recording process.</p> <p>The "Alarm" (red light) flashes, indicating over-TEMP/RH during the recording process.</p>

Button	Indicator light	Status
Press and hold the “▶” button for 3 seconds for the first time.	The “OK” (green light) is lighting for 3 seconds.	Start Recording
After turning on, press and hold the “■” button for 3s.	The “Alarm” (red light) is lighting for 3 seconds.	Stop Recording

7. Battery Level Indication

Battery Level Indication	Capacity
	40%~100%
	15%~40%
	5%~15%
	<5%

8. Battery Replacement



Step 1: Turn the battery cover counter clockwise to open it.

Step 2: The battery cover position is as shown, indicating that it has been counter clockwise to the accordant position.

Step 3: Take off the battery cover.

Step 4: Remove the CR2032 battery.

Step 5: Replace the battery. (Please note that the positive and negative anodes.)

Step 6: Please install the battery cover in the direction shown in the figure.

Step 7: Cover the battery and clockwise rotate it to close.

Step 8: The battery cover is oriented as shown, indicating that the battery cover tightly.

Note:

It is recommended to check the battery status before restarting the logger to ensure that the remaining battery life could finish the recording task.

9.Computer Operation

Insert the device into the computer and wait until the PDF and CSV reports are generated. The computer will display the U disk of the device and click to view the report.

10.Management Software Download

Download address of the management software:

<http://www.tzonedigital.com/d/TM.exe>

or <http://d.tzonedigital.com/TM.aspx>

11.Notes

1. For the first use, please connect to the computer for parameter configuration to synchronize the system time.
2. After reconfiguration, the previously recorded data will be cleared. Please read and save the historical data before configuring the device parameters.
3. If there is no button operation for one minute, the device will automatically turn off the screen. Click the button to light up the screen again.
4. Please do not remove the battery during the device recording
5. When the power on the LCD is less than full, do not use it for long-distance transportation.
6. In the initialization/stop recording status, the display may show "RE-CF" after replacing the battery. Please save the device parameters again, otherwise the time may be wrong.



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