

- A
- B
- C
- D
- E
- F
- G
- H

# User Manual

V1.4

## Professional Temperature and Humidity Data Logger

### 1. Product Safety Instructions

Before using the instrument, please read the following safety instructions carefully:

- (1)The temperature and humidity range of the normal working environment of the instrument is -30~65°C, 0~100%RH (non-condensing). If it is over the limited range while using, the instrument may be damaged.
- (2)The safe working temperature range of ordinary AAA alkaline batteries is -15~50°C. If the instrument needs to be used in an environment beyond this temperature range, it must be used with a suitable battery; if you have any questions, please contact the after-sales service department.
- (3)For precision instruments, please do not disassemble or repair without permission.
- (4)Please remove the battery if the instrument will not be used for a long time.

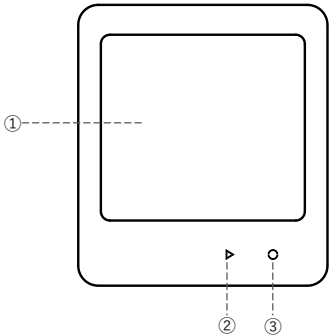
### 2. Product Selection Guide

| Optional   | Model | A  | B  | C      | D      | E  | F  | G      | H      |
|------------|-------|----|----|--------|--------|----|----|--------|--------|
| Probe Type |       | P1 | P2 | P3, P3 | P4, P4 | P1 | P2 | P3, P3 | P4, P4 |
| Bluetooth  |       | ○  | ○  | ○      | ○      | ●  | ●  | ●      | ●      |

● means that the function is supported, ○ means that the function is not supported.

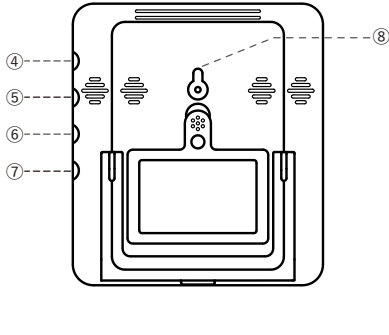
1

### 3. View



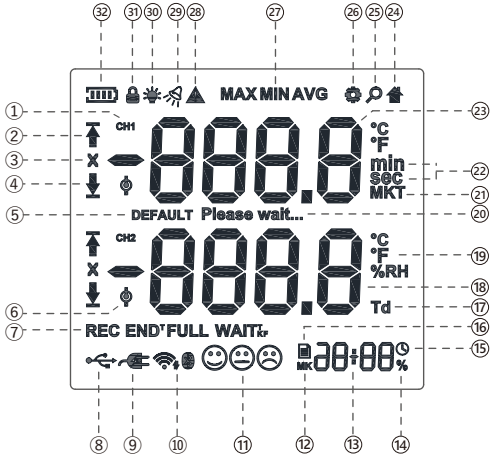
- ①LCD display
- ②Turn on/off , Record, Browse time
- ③Turn the screen on/off , View data , Mark
- ④External probe port

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- ⑤External probe port
- ⑥External probe port
- ⑦External probe port
- ⑧Reset button

### 5. LCD



- ↑ : Display when the current record point exceeds the high limit.
- ↓ : Display when the current record point exceeds the low limit.
- ✕ : Display when the current or previous record point exceeds limits.

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### 4. Specification

| Probe Model                     | P1(Internal)                                                                                                                      |                                       | P2(Seperated)                 |                               | P3(Seperated)                 | P4(Seperated)                 | P5(Internal)                       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------------|
| Measurement Parameter           | Temperature(Digital)                                                                                                              | Humidity(Digital)                     | Temperature(Digital)          | Humidity(Digital)             | Temperature(Digital)          | Temperature(PT1000)           | Temperature(Digital)               |
| Measuring Range                 | -30~65°C                                                                                                                          | 0~100%RH(Non-condesing)               | -40~125°C                     | 0~100%RH(Non-condesing)       | -40~125°C                     | See the datasheet for details | -30~65°C                           |
| Accuracy                        | ±0.3°C(-10~65°C)<br>±0.5°C(Others)                                                                                                | ±3%RH(10~90%RH,25°C)<br>±4%RH(Others) | See the datasheet for details | See the datasheet for details | See the datasheet for details | See the datasheet for details | ±0.3°C(-10~65°C)<br>±0.5°C(Others) |
| Resolution                      | 0.1°C                                                                                                                             | 0.1%RH                                | 0.1°C                         | 0.1%RH                        | 0.1°C                         | 0.1°C                         | 0.1°C                              |
| Response Time(t <sub>90</sub> ) | Internal: 15 mins, Seperated: 5 mins                                                                                              |                                       |                               |                               |                               |                               |                                    |
| Sample Interval                 | 5 seconds                                                                                                                         |                                       |                               |                               |                               |                               |                                    |
| Memory Capacity                 | 25920 or 500000 groups of readings (Optional from software)                                                                       |                                       |                               |                               |                               |                               |                                    |
| Connection                      | USB2.0, Bluetooth 4.2 (Only for models with Bluetooth)                                                                            |                                       |                               |                               |                               |                               |                                    |
| Operation Temperature           | -30~65°C                                                                                                                          |                                       |                               |                               |                               |                               |                                    |
| Storage Temperature             | -30~65°C (Without battery)                                                                                                        |                                       |                               |                               |                               |                               |                                    |
| Battery Capacity                | 1.5V AAA (Alkaline battery)                                                                                                       |                                       |                               |                               |                               |                               |                                    |
| Battery Life                    | About 1 year (Condition: when the environment temperature is 25°C, backlight and buzzer are off, and Bluetooth is not connected.) |                                       |                               |                               |                               |                               |                                    |
| Power Connector                 | Micro USB, DC 5V/2A                                                                                                               |                                       |                               |                               |                               |                               |                                    |
| Size                            | 96*108*20mm                                                                                                                       |                                       |                               |                               |                               |                               |                                    |
| Case Material                   | ABS                                                                                                                               |                                       |                               |                               |                               |                               |                                    |
| Weight                          | About 120g (Not including battery)                                                                                                |                                       |                               |                               |                               |                               |                                    |
| Protection Class                | IP20                                                                                                                              |                                       |                               |                               |                               |                               |                                    |

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- ①Channel number
- ②High limit exceeded indication
- ③Sign for alarm trace
- ④Low limit exceeded indication
- ⑤Default sign
- ⑥External probe
- ⑦Record status indication
- ⑧USB communication
- ⑨USB power supply
- ⑩Wireless signal indication
- ⑪Emoji
- ⑫Point mark MK indication
- ⑬Time display area
- ⑭Percent sign
- ⑮Clock
- ⑯File symbol
- ⑰Dew point temperature symbol
- ⑱Measurement data display area 2
- ⑲Temperature and humidity unit
- ⑳Waiting reminder symbol
- ㉑Average kinetic temperature
- ㉒Time unit
- ㉓Measurement data display area 1
- ㉔Main mode indication
- ㉕Query mode indication
- ㉖Setting mode indication
- ㉗Maximum and average symbol
- ㉘Warning symbols
- ㉙Buzzer alarm activation indication
- ㉚Backlight activation indicator
- ㉛Key lock symbol
- ㉜Battery level indicator

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6. Quick Guide

If there is no operation on the touch button for more than 15 seconds, the instrument will automatically lock and display the icon . If user needs to operate the instrument, must press and hold the button for 3 seconds to unlock it. When the buzzer of the instrument button sounds “beep...” after the button is short-pressed or long-pressed by user, which means that the operation is valid.

6.1 Turn On

When the power supply is restarted, the instrument will automatically turn on.

6.2 Turn Off

When the battery power is too low, the instrument will automatically shut down (you must reconnect the power to turn it on).

6.3 Turn On Display

When the display is off, press button 3 seconds to turn on the display.

6.4 Turn Off Display

When the display is on, press button 3 seconds to turn off the display (the display can not be turned off when the point mark surface is displayed).

6.5 Switch Display of Time/Point Mark

Click the button in turn to switch the year, month, day, hour, minute, and point mark interface.

6.6 Start Recording

- (1) Long press the button for 3 seconds to start recording. In addition, for models with Bluetooth, users can also choose to start recording in the mobile APP.
- (2) When the recording instrument is set to not be recorded repeatedly, the instrument needs to be reset after each recording, then start perform the operation (1).

6.7 Stop Recording

- (1) Long press the button for 3 seconds to stop recording (function of Stop by Button needs to be set). In addition, for models with Bluetooth, users can also choose to stop in the mobile APP.
- (2) When the number of recording points reaches the maximum limit, the recording will stop automatically.
- (3) If the battery is too low, it will automatically stop recording, save data and shut down.
- (4) The instrument can be stop recording while connected with PC or other equipment (non-adapter) during recording (NODATA function has to be turned off).

6.8 Query Max, Min, Average, High and Low Limits

- (1) When valid data is recorded (both probes record at least one reading or more), click the button in turn to query the maximum, minimum, average value and the high, low limit.
- (2) When there is no valid data recorded, click the button in turn to query the high and low limits.
- (3) After entering the query state, the icon disappears and the icon will be displayed. If there is no any operation for 10 seconds, or pressing any other buttons, it will return to the main interface. The icon disappears and the icon will be displayed.

6.9 Turn Off Buzzer Alarm

When the instrument is over-limits, the over-limit indication or of the relevant channel will be displayed. If the time of the buzzer alarm has been set to a valid value, the buzzer will sound. Click any button to turn off the alarm bell.

6.10 Point Mark Operation

When the instrument is in the recording state, enter the point marking interface, press and hold the button for 3 seconds to do point marking once, and it can mark 3 points maximum.

6.11 File Generation

- (1) Insert the recorded instrument into a readable U-disk device (PC, etc.) to view the file on the device. The types of files can be set by the software.
  - (2) It takes time for files to generating. While waiting for the file conversion process, it will be displayed “Please wait...”.
  - (3) After the file conversion is completed, the icon will be displayed and the character “uSb” will be appeared.
- 6.12 Bluetooth Wakeup
- Short press button to wake up the instrument from Bluetooth sleep state (applicable to models with Bluetooth).
- 6.13 Standard Software
- The instrument is equipped with a mobile APP (for models with Bluetooth) and professional PC software. The mobile phone APP software can be downloaded by scanning the QR code in the instruction, and the PC software can be obtained by consulting our professional staff. After the software is installed, you can perform parameter setting, data download, data analysis and data exporting operations on the instrument. If you have any questions, please consult after-sales service department.

7. Tips and Help

7.1 Tips for General Use

- (1) The instrument can be set to use internal or external probes in the PC software. When the instrument is set to use an external probe, insert the probe correctly into the external probe jack to start measurement.
- (2) In the point marking interface, the number of marked points and the maximum number of points that can be marked are displayed.
- (3) Models with Bluetooth communication function do not have NODATA function.
- (4) The LCD recording status indication can be compared with the following table (when the instrument is running normally).

Recording Status Indicator Comparison Table

|          |                                                                                    |
|----------|------------------------------------------------------------------------------------|
| WAITκ    | Waiting to start recording by pressing button                                      |
| WAITʹ    | Wait for the start delay to end                                                    |
| REC      | Recording                                                                          |
| END      | Record stopped, press button to stop                                               |
| ENDʹ     | Recording stopped, stop when the start delay is not over                           |
| END FULL | Stop recording, stop when the number of recording points reaches the maximum limit |

7.2 FAQ

- (1) The instrument can only be used the external probes provided by our company. If you need to use probes not provided by our company, please consult the after-sales service department in time.
- (2) When sign of the battery power on the LCD is flashing, or “oFF” is displayed and the screen then goes off immediately after the instrument is turned on, which means that the battery power is too low, please replace the new battery in time.
- (3) When user is marking the recording point, the same recording point can only be marked once. If the same recording point is marked again, the instrument will sound “beep——”, which indicates that the operation is invalid and there is no indication on the LCD.
- (4) When the instrument works abnormally, the LCD will display the icon , and user only need to reconfigure the instrument.