Temperature& Humidity Alarm Logger

Instructions

VER：1.7

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2020-12

Important Note

Before using the product, read and comply with these rules to protect against potential dangers.

✵ ***Power Supply:*** Use the power adapter provided with the product, the use of other adapters may cause damage.

✵ ***Move:*** Before moving it, unplug the power cord correctly and other connections.

✵ ***Placement:*** The product and accessories cannot be placed on or near any hot objects (such as heaters), so as not to cause a fire or damage. Make sure correct placement to prevent falls, which may cause injuries or damage. Prohibits the use in a wet environment, prohibit the chemical corrosive or explosive gas environments.

✵ ***Interference:*** This product may be subject to strong electromagnetic interference from wireless communication, so do not place it in the vicinity of strong electromagnetic radiation device, otherwise may affect the normal operation of the system.

✵ ***Specialized Services:*** This product must be installed or repaired by professionals, please do not disassemble the recorders and related components.

✵ ***Security Warning:***

The product is connected with strong electricity, when the power supply cord or plug is damaged or partly exposed, do not use, otherwise it will cause a fire or electric shock.

Do not touch the power supply with wet hands; there may be danger of electric shock.

The products and components should be placed where children can not touch, so as to avoid injuries or product damage. If you find that the battery smells or leakage or performance degradation, stop using it and promptly contact your dealer or customer service to replace the battery!

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YB-HY001-00 series temperature&humidity alarm logger is fitted with data collecting, display, record, query, text messaging and alarm functions. With LCD dot matrix display interface, the device can be usded for temperature monitoring and recording of refrigerators, freezers, cold rooms, freezer rooms, drug warehouses, grain storage, electronics factory, computer rooms, laboratories and other places.

1 Basic technical parameters

1.1 **Number of channels**：One channel

1.2 **Measurement Range**：

Temperature：-55℃～+100℃

Humidity: 0%~100%

1.3 **Measurement resolution**：

Temperature：0.1℃ Humidity: 0.1%

1.4 Measurement accuracy

Temperature：±0.5℃ Humidity: ±3%

1.5 **Display function**

Current data, alarm indication, battery status, TF card status, GSM signal strength, the historical data.

1.6 **Storage function**：Internal storage capacity of 32K ~ 128K, the standard configuration for 32K, can store about 15,000 data; TF card storage capacity of 32M ~ 1G, can continuously record data about 3-10 years.

1.7 **Storage frequency**：adjustable, from 1time/min～1time/24hour.

1.8 **Product size**：96.5×78.5×30mm.

2 Overview of component

2.1 **LCD screen**：Display measured temperature&humidity, the current time and the system status, setting information, etc..

2.2 **Key**：There are four keys, starting from the left are “up key ↑”、“down

key ↓”、“set key S”和“function key F”。

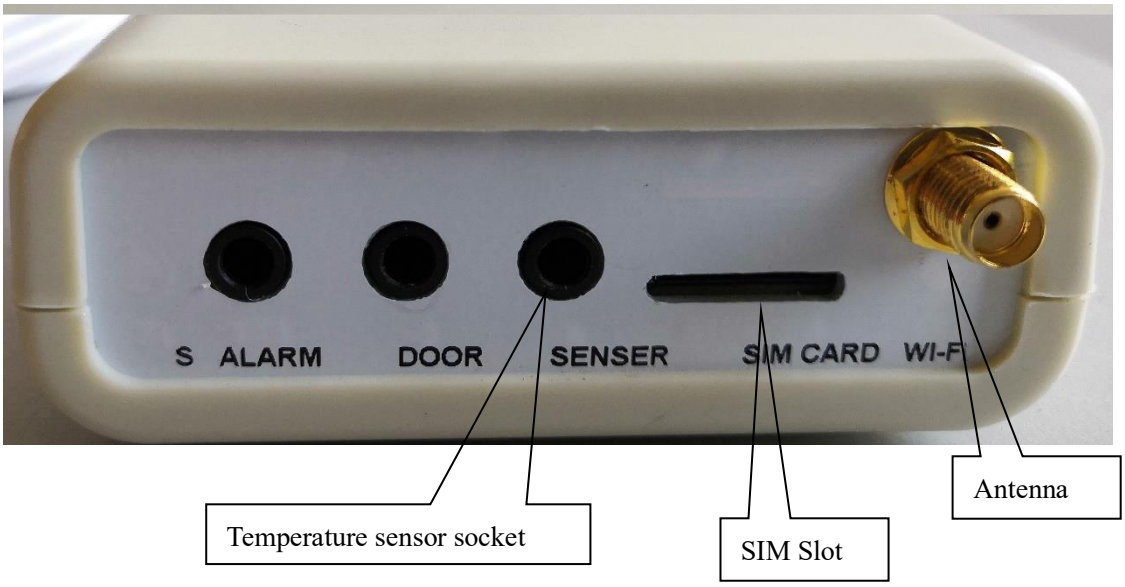
2.3 **Sensor：** A temperature&humidity, sensor wire with probe

2.4 **Power Interface：** Access 5V DC power supply.

2.5 **USB port：** Connect the device with computer through a USB communication cable.

2.6 **Status Indicator：** Indicate the current operating status of the TF card.

2.7 **TF card slot：** Insert the TF card.



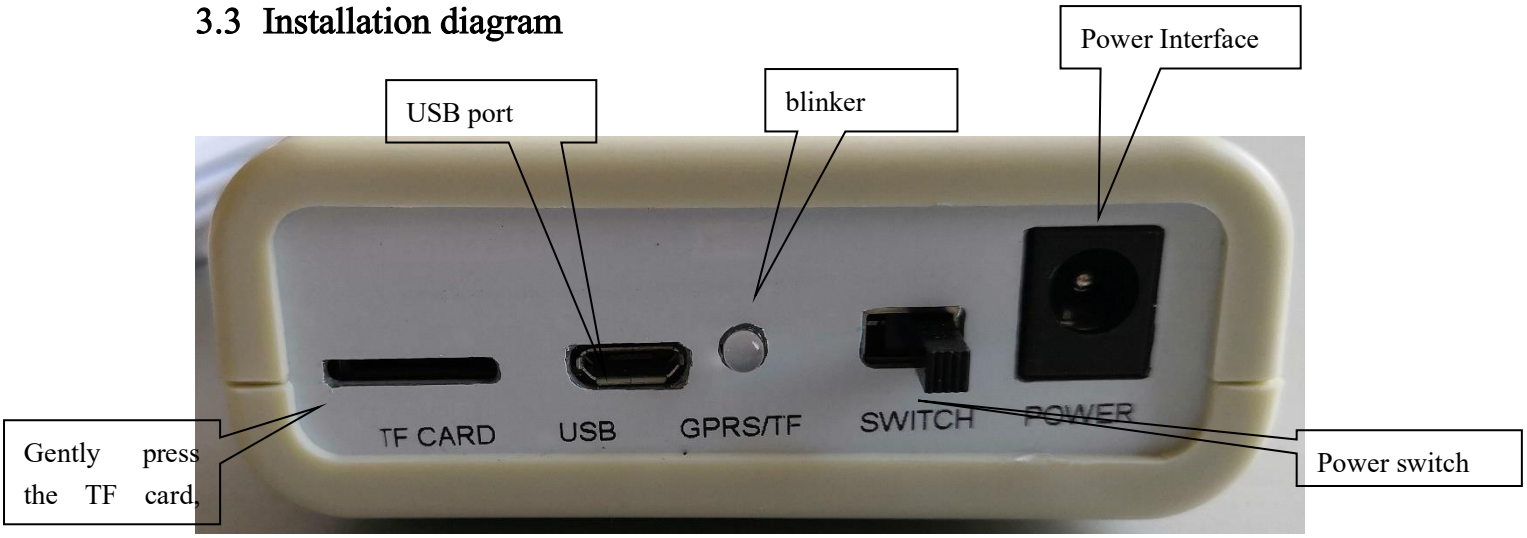
3 Installation

3.1 **Sensor connection：** The sensor connected by socket on the recorder. Sensor probe mounted in the position required.

3.2 **Installing the antenna and SIM card：** If the recorder has text messaging capabilities, you need to install the antenna to the recorder's antenna interface and plug SIM card into the slot. Inside the recorder SIM card is a button, press the button with the stylus, you can eject the SIM card drawer. Insert the SIM card into the drawer to the SIM card holder. Note the direction of SIM card holder, do not invert.

3.2 **Installation TF card：** TF card Goldfinger down, push TF card slot, you can put it into the recorder. Push again TF card, it can be ejected from the recorder. Insert TF card reader into your computer then you can read the data.

3.3 Installation diagram

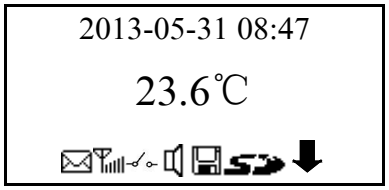


3.4 Fixing： Remove the fixing plate on the back of the recorder; fix it with screws to a wall or other fixed position, then mount the recorder on the mounting plate.

3.5 Connecting the Power： DC 5V. Equipped with an AC-DC adapter to connect to civil power AC 220V power. The output side of the adapter is connected to the device's power connector. When powered on, a recorder is displayed on the LCD screen splash screen, starting to collect data after entering the state.

4 Display

After completing Self- Test, the current time displays on top of the screen, the temperature&humidity, channel data in the middle, and the device's current work status at the lower display. See below：



The meaning of each icon：

Indicates a logger messaging task being processed, which is sending text messages.

This means SMS module has entered the normal working condition. Appear as when power on， and in a blink. However, if this icon is always displayed, then the SMS module is faulty. Normal situation is that after some time, SMS module finds

the network, and then the icon stops blinking, icon cell number may reflect the current signal strength.

Indicates the state of the digital sensor.

Indicates that the current buzzer can tweet, if displayed as 'A' indicates that the buzzer does not beep.

This means opening of the historical or alarm memory. If you do not open the storage function, then here is blank.

Indicates that an SD card is inserted, then the recorder will check whether the internal memory stores data temporarily. If so, the data is copied to the TF card. If the TF card is not inserted, then here is blank.

Indicates logger is transmitting data to TF card. NOTE: In this sign appears, the user can not eject the SD card, otherwise it will cause an error.

Note: When the switch is off or power is off, the buzzer will beep at intervals . If the temperature and humidity data exceeds the set value, the buzzer will sound continuously and the audible and visual alarm will be activated. This time by a short press on the turn key or down key can temporarily prohibit their chirping; short press the arrow keys again, resume their tweets. When the alarm is released, the sound of the buzzer will be automatically lifted, when the alarm occurs again, the buzzer will beep. If you want to permanently disable the buzzer, you can set through the keypad or the PC software.

5 Historical data operations

Historical data operation including: view historical data, delete historical data. Method of operation is as follows:
Current data in the display state, press the function key F for about 5 seconds, the display shows "historical data" with option to "view historical data", "delete historical data", "Exit." Press the arrow keys to select. Press the Setup key S to confirm the selection.

5.1 View Historical Data

Select "View History Data", by setting key "S", the display shows the date, time,

including the year, month, day, hour, minute, press the arrow keys to select the object you want to set, press the set key S to confirm the object, press the arrow keys to modify its value. Press the function key F to return to the previous display state; move to "Yes" option, press the Set button S to confirm the selection. The display shows the temperature&humidity data at selected time. Press the arrow keys to select the previous or next data. Note: This operation can only query the data of the selected date. For products with TF card recorder, the query is the internal memory of the historical data; TF card data needs to be viewed through the software on your computer.

5.2 Deleting historical data

When set key S shows "DelHisData", select it and press key ‘S’, the device will delete historical data, select "No" by pressing key ‘S’ or directly press the function key ‘F’ to return to the previous display.
Note: Deleting historical data is to delete temperature&humidity data and SMS records, and cannot be restored, please prepare backup before deleting data.

5.3 Exit

Select "Exit", press SET key ‘S’, to return to show the current state of the data.

6 Device settings

Before using, it may need to re-set various parameters according to user needs, such as: alarm, error correction, recording parameters and time. Normally at display mode, press the set key ‘S’ about 5 seconds to enter the parameter setting state. Parameter settings are divided into the following several options, namely: "Basic Setting", "Channel Settings", "Record Setting", "Date &Time", "SMS " and "Exit." If the recorder without SMS function, then that part of the setting does not work.
Each option has multiple sub-options. In each parameter settings, if you do not wish to retain the modified results, press the function key ‘F’ to return, and it will not be saved.

6.1 Basic Setting

6.1.1 Backlight： The setting range is from 2 to 99, on, off. Default value is 10s. If set

to ON, was long bright; When set to Off, was not lit

6.1.2 Contrast：The setting range is 0 to 99, recommended value is 62。

6.1.3 Buzzer：Choose On or Off. When set to OFF, regardless of whether there is an alarm, the buzzer does not beep.

6.1.4 Filtering times：The setting range is 0～9。

6.1.5 Device Address：The setting range is 1～255。

6.2 Channel Setting

LCD screen displays the channel you want to set. Press the Set key 'S' to enter the channel's alarm upper limit, lower limit alarm and error correction value setting interface.

For example, currently the 2nd channel alarm limit is 60, the lower limit is 0, to set the 2nd channel limit is 80, the lower limit is 20, then follow these steps:

ChannelSetting
No.1Channel（Tem）
No.2Channel（Hum）

1. Press the set key S, to enter on the 2nd channel settings. Select the alarm upper limit, then the alarm limit value is highlighted. Figure:

No.2Channel（Hum）	
UpperLimit	60.0%
LowerLimit	0.0%
Correct	0.0%

2. Press the set key S, to enter on the 2nd channel alarm limit setting. At this point alarm limit value is highlighted. Press the arrow keys to modify its value. Press Set again, save the modifications. Figure:

No.2Channel（Hum）	
UpperLimit	80.0%
LowerLimit	2.0%
Correct	0.0%

3. Alarm limit setting method and limit setting method is similar.
4. After modification, press the function key F, return to the main menu.

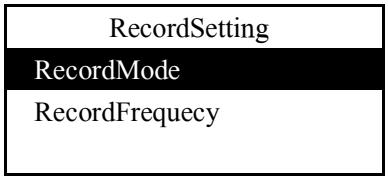
6.3 Record Setting

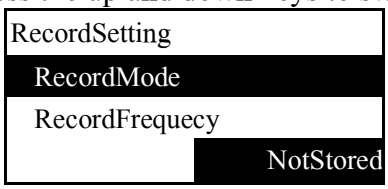
First, press the arrow keys to select Set Record Mode or Record Frequency, and press Set S to enter the settings operation.

RecordMode：NotStored、Timing storage、Alarm storage。

RecordFrequecy：1～1440min。

For example, to set the timing storage interval of 10 minutes. Then follow these steps:

1. Press the "Up" key or "Down" keys to select the storage method at this time, "storage" is highlighted. Figure：
2. 

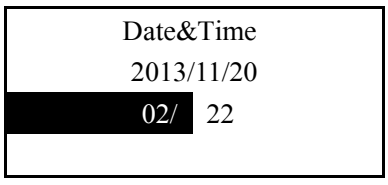
3. Press the Set key S to enter the storage mode setting interface. At this point the bottom line of the LCD screen can be set to options: Not stored, Timing, Alarm, and highlighted. Press the up and down keys to switch options. Figure：


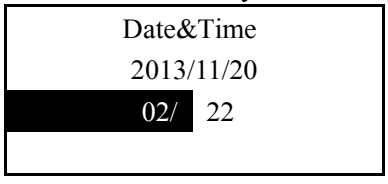
4. Press the set key S to save the changes made and returns to "Recordsettings" screen. Repeat the above steps to set the interval time.
5. After modification, press the function key F, return to the main menu.

6.4 Date & Time

First, press the arrow keys to select the object you want to set, including: year, month, day, hour, minute. Then press the Set button to enter setting, press the arrow keys to modify its value. After setting, press the function key F to exit the setting and return to the main menu.

For example：Set the current time is 2013-11-20 17:27, while the original time 2013-11-20 2:22, you need to modify the hours and minutes. Set as follows:

1. Press the Up or Down keys to select "hour", then "time" will be highlighted. Figure：


2. Press the set key S, to enter on the "time" setting. At this point the value part will be highlighted. Press the arrow keys to modify its value. Figure：


3. Press the set key ‘S’, save the changes and return to the "Date&Time" main interface. Repeat the above steps to set the "minute"。
4. After setting, press the function key ‘F’, return to the main menu.。

6.5 Exit

Select "Exit" will return the current data collection show.

7 TF Card Storage

7.1 YB-HY001-00 series recorder models support TF card expansion storage function. Before insert the TF card into the slot format it on a computer, supportive format as FAT32 or FAT16

7.2 SD card reader use: After the TF card insert into the card reader, then plug into the computer's USB port, you can see on the computer the drive letter that corresponds to the TF card. And its related operations are similar to the U disk.

7.3 YB-HY001-00 without TF card can also work, according to user-defined data storage methods and storage intervals stored in the internal memory of the recorder. When the internal memory is full, the first stored data will be overwritten by the newest data.

7.4 When the TF card inserts into the recorder, the recorder appears on the display SD flag, TF card indicator shows green, indicating that the recorder has identified TF card. If at this time there has been data stored inside the memory, the logger will check for updates TF card data. When the recorder is transferring data to the TF card, the ⬇ flag displays. After all data transfer is completed, the recorder will delete temporary data in the internal memory.

Note: During data transfer, the user should not pull out the TF card, otherwise it may cause data errors.

7.5 When the TF card inserts into the recorder, future data will not be stored in the machine's memory, but directly saved to the TF card at the set intervals, until the TF card is removed.

8 SMS settings

8.1 SMS Receiving Number：

Logger can be set up to save 8 messages receiver numbers, supporting international standard formats such as +92300xxxxxxx and so on. If a bit is set to an empty string, the corresponding position number does not work.

8.2 Transmission Setting：

Including setting whether to receive regular text messages, whether to receive alarm messages, time interval.

8.3 Switch：

Here is the switch alarm SMS setting. "Delay" means that when the switch is disconnected for a set period of time, an alarm message is sent. "Interval" means that if the switch is continuously turned on after the initial alarm message is sent, the alarm message will be sent continuously at regular time intervals.

8.4 SMS format：

8.4.1 Timing SMS：

Current status: Channel xxxx1: Tem: 22.5(0.0 to 30.0) xxxx2: Hum: 62.5(30.0 to 50.0)

8.4.2 Alarm SMS：

Alarm: Channel xxxx1: Tem: 32.5(0.0 to 30.0) xxxx2: Hum: 62.5(30.0 to 50.0)

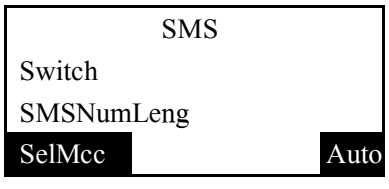
Power failure alarm：

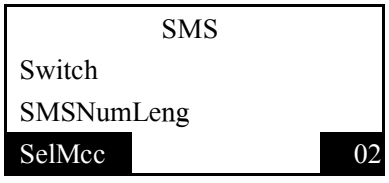
Power failure alarm: Channel xxxx1: Tem 22.5(0.0 to 30.0)

Note：Power failure alarm will be sent after 5 minutes delay

8.5 MCC：

Here you can choose the mode in which the recorder selects the operator. The default is automatic mode, and the recorder automatically selects available operator from among the searched operators. Users can also manually select operator by number.





9 Fault handling

Note: User should not modify the internal parts or disassemble the logger, otherwise it will not covered by warranty.

9.1 Display：

Please check the power supply is normal. The device is equipped with a power supply input AC 220V, 50HZ, output DC 5V, the maximum output current of 3A, if the power supply does not match this requirement, it may damage the recorder.

9.2 Error display data：

If the temperature display is 85.0,127.0 or other data, it may be a temperature sensor failure, please double-check.

9.3 Cannot communicate：

Check if the USB driver is installed correctly.

9.4 Historical data cannot be viewed：

Check if the memory settings are correct, the date and time are correct and whether the clock is modified. If the clock is modified, some data may be overwritten. We remind users who want to modify the clock that historical data will be deleted after modifying it. In addition, the data record is loop recording, if the memory is full, the oldest data will be overwritten.

9.5 Recorder cannot wake up from dormancy：

It's possible that the battery is low, you can use an external power supply to charge the battery. Or manual reset. Turn off the power switch and then on again.