

UT330T/UT330TH USB Datalogger

Introduction

The USB datalogger (Hereinafter referred to as "logger") is a low power consumption, high-accuracy temperature & humidity device. It is designed with IP65 dust/water protection, large data storage capacity, and features such as auto storage, USB transfer, real-time display, data export, etc. It is widely used in food processing, cold-chain transportation, warehouse storage, and other applications.

Accessories

User manual.....	1 piece
Battery.....	1 piece
Holder.....	1 piece
Screw.....	2 pieces

Safety information

- Check if the logger is damaged before use.
- Replace the battery when the logger displays "▲".
- If the logger is found abnormal, please stop using and contact your seller.
- Do not use the logger near explosive gas, volatile gas, corrosive gas, vapor and powder.
- Do not charge the battery.
- 3.0V CR2032 battery is recommended.
- Install the battery according to its polarity.
- Take out the battery if the logger is not used for a long time.

Structure (Figure 1)

No.	Description
1	USB cover
2	Indicator (Green light: logging, red light: alarm)
3	Display screen
4	Start/select
5	Stop/switch humidity and temperature
6	Holder

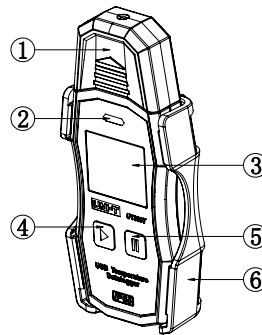


Figure 1

Display (Figure 2)

No.	Description	No.	Description
1	Start	10	Temperature & humidity display area
2	Stop	11	Time display area
3	Minimum value	12	Set a fixed time/delay
4	Marking	13	Alarm due to abnormal logging
5	Mean kinetic temperature	14	Not alarm
6	Number of sets	15	Set lower value
7	Temperature unit	16	Set upper value
8	Low battery	17	Maximum value
9	Humidity unit		

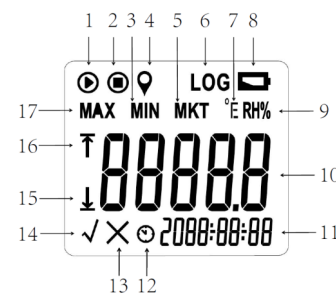


Figure 2

Setting

USB communication

- Download the instruction and PC software according to the attached file, then, install the software step by step.
- Insert the logger into USB port of PC, the main interface of logger will display "USB". After the computer identifies the USB, open the software to set parameters and analyze the data.

- Open the computer software to browse and analyze data. As for how to use the software, users can click the help option on the operation interface to find "software manual".

Parameter configuration

After logging stops, insert the logger into USB port of PC, open the computer software after identifying the USB, then, click "parameter" to set parameters, take "UT330TH" as example (Figure 3).

Model	The computer identifies the logger model automatically.
Unit	°C or °F.
ID	Users can set the ID, the range is 0~255.
SN	Factory number.
Description	Users can add descriptions in numbers or letters.
Alarm delay	The logger will not alarm when the temperature is beyond the upper/lower value, but it will alarm when the exceeding time is longer than the delay time.
Single alarm	The logger alarms if the continuous alarm time is greater than the delay time. The logger will not alarm if the reading resumes normal within the delay time.
Accumulated alarm	The logger alarms if the accumulated alarm time is greater than the delay time.
Temperature and humidity Adjusting	Adjust the logger error by changing the calibration value.
Sampling interval	10 seconds to 24 hours.
Sampling delay	Start logging after the delay time. 0 to 240 minutes.
Start logging	Press the button to start, start immediately through the software, start at a fixed time.

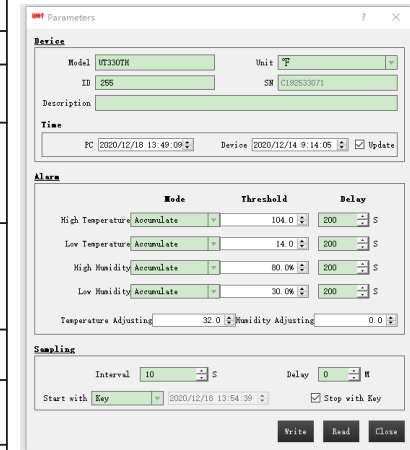


Figure 3

Operations

Starting the logger

There are three starting modes:

1. Press the button to start the logger.
 2. Start logging through the software.
 3. Start logging at preset fixed time.
- **Mode 1:** Long press the start button for 3 seconds in main interface to start logging. This start mode supports start delay, if delay time is set, the logger will start logging after a delayed time.
 - **Mode 2:** Start logging through the software: On PC software, when parameter setting is completed, the logger will start logging after user unplugs the logger from the computer.
 - **Mode 3:** Start the logger at preset fixed time: On PC software, when parameter setting is completed, the logger will start logging at preset time after user unplugs the logger from the computer. Mode 1 now is disabled.



Not logging



Logging



Delay logging



Logging at fixed time

Stopping the logger

When the logger reaches up to the maximum capacity, it will stop logging, the "Press the button to stop" mode supports the "Stop logging through the computer software" mode.

There are two stop modes:

1. Press the button to stop.
 2. Stop logging through the software.
- **Mode 1:** In main interface, long press stop button for 3 seconds to stop the logger, this function will be disabled if "Stop logging through the software" is set.
 - **Mode 2:** After connecting the logger to the computer, click the stop icon on the main interface of the computer to stop logging.

Function Interface 1

Short press stop button to switch between temperature and humidity in the main interface. Users can short press stop button at any time to go back to the main interface. If no button is pressed for 5 seconds, the logger will enter the power-saving mode.

Marking

When the device is in logging state, long press start button for 3 seconds to mark the current data for future reference, the mark icon and current value will flash 3 times, total number of mark value is 10.

Function Interface 2

In the main interface, press the start button and stop button together for 3 seconds to enter the Function Interface 2, short press start button to view: Y/M/D, device ID, maximum numbers of remaining storage groups, numbers of marking groups.

Alarm State

When the logger is operating,
Alarm disabled: Green LED flashes every 10 seconds and main interface displays "√".
Alarm enabled: Red LED flashes every 10 seconds and main interface displays "x".
No LED lights when the logger is in stopping state.

Viewing data

- Users can view the data in stop or operating state.
- View the data in stop state: Connect the logger to the PC, if the LED flashes at this time, the PDF report is being generated, do not unplug the logger at this time. After the PDF report is generated, users can click the PDF file to view and export the data from the computer software.
 - View the data in operating state: Connect the logger to the PC, the logger will generate a PDF report for all previous data, at the same time, the logger will continue logging data and it can only generate a PDF report with new data the next time.

Maintenance

Battery replacement (Figure 4)

Replace the battery with the following steps when the logger displays "■".

- Rotate the battery cover counter-clockwise.
- Install CR2032 battery and waterproof rubber ring.
- Install the cover in arrow direction and rotate it clockwise.

Cleaning the logger

Wipe the logger with soft cloth or sponge dipped with a little water, detergent, soapy water. Do not clean the logger with water directly to avoid damage to the circuit board.

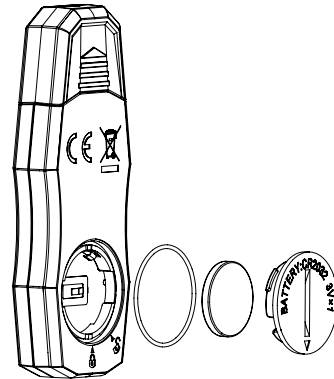


Figure 4

Specification

Function		UT330T	UT330TH
	Range	Accuracy	Accuracy
Temperature	-30.0°C -20.1°C	±0.8°C	±0.4°C
	-20.0°C 40.0°C	±0.4°C	
	40.1°C 70.0°C	±0.8°C	
Humidity	0 99.9%RH	/	±2.5%RH
Resolution		Temperature: 0.1°C; Humidity: 0.1%RH	
Logging capacity		64000 sets	
Logging interval		10s 24h	
Unit/alarm setting		The default unit is °C. Alarm types include single and accumulated alarm, the default type is single alarm. Alarm type can be changed through the PC soft.	
Start mode		Press the button to start the logger or start the logger through the software (Immediately/delay/at fixed time).	
Logging delay		0min 240min, it defaults at 0 and can be changed through the PC software.	
Device ID		0 255, it defaults at 0 and can be changed through the PC software.	
Alarm delay		0s 10h, it defaults at 0 and can be changed through the PC software.	
Screen off time		5s	
Battery type		CR2032	
Data export		View the real-time data and export the data (PDF, XLS) through the computer	
Working time		140 days at an test interval of 15min.	
Working temperature & humidity		-30°C ~ 70°C, ≤99%, non-condensable	
Storage temperature		-50°C~70°C	
Protection degree		IP65	

EMC standard: EN61326-1 2013

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