

MT/TH Series User Manual
Multiple (Single) PDF Temperature (Humidity) Data Logger

Overview

MT/TH series data loggers are used to monitor and record the temperature (humidity) for foods, pharmaceuticals, and other products during their storage and transport, and in each stage of cold chain logistics, such as refrigerated containers/trucks, cooler bags, cooling cabinets, medical cabinets, freezers, and laboratories.

The main features of this product: multiple use, automatically generated PDF report, high waterproof level, battery exchangeable, with LCD screen and two buttons designed to avoid accidental touches. You can view device status and parameters by button press.



① USB Interface

② LCD Screen

③ LED Indicator

④ Button

⑤ Internal Sensor

USB Data Loggers

Model	ST	MT	STH	MTH
Type	Single use	Multiple use	Single use	Multiple use
Measuring	Temperature	Temperature	Temperature & Humidity	Temperature & Humidity
Measuring Range	-30°C~+70°C	-30°C~+70°C	-30°C~+70°C 5%RH~95%RH	-30°C~+70°C 5%RH~95%RH
Sensor	Digital Temperature Sensor		Digital Temperature and Humidity Sensor	
Accuracy	Temperature: $\pm 0.3^{\circ}\text{C}$ ($-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$), $\pm 0.5^{\circ}\text{C}$ (other range) Humidity: $\pm 3\% \text{RH}$ (25°C : $20\% \text{RH} \sim 80\% \text{RH}$) , $\pm 5\%$ (Others)			

Specifications

Temp Scale: °C or °F

Resolution: Temperature: 0.1 °C; Humidity: 0.1%RH

Memory: 18,000 points (max)

Logging Interval: 1m ~ 24h

Start Mode: Press button or use software

Alarm Threshold: Configurable; Temperature: 1 high limit and 1 low limit; Humidity: 1 high limit and 1 low limit

Alarm Type: Single, cumulative

Alarm Delay: 10s ~ 24h

Data Interface: USB

Battery: CR2450 3.0V wide-temperature button cell

Protection Level: IP65

Dimensions: 90x 42 x 20 mm (LxWxH)

Weight: Approx. 45 g

Operation

1.Download & Install Software

Please ask the distributor or manufacturer to download and install the free software (Windows)

2.Configure Parameters


For first time use or after battery replacement: connect the data logger to the computer via USB Port, Configure the logger via reprogrammable software.

Warning !

To avoid time or time zone errors, please make sure you Save Parameter before usage to configure your local time & parameters into the logger via reprogrammable Software.


3.Start Logging

Press Button:

Press and hold the left button(Start button) for 5 seconds until the icon  shows on the LCD & Green LED flash 5 times, indicating the logger starts logging.

Note: If the icon DELAY lighting, it means the logger configured with start delay; it will start logging after the set delay time elapses.

4. Stop Logging

Press Button: Press and hold the right button (STOP button) for 5 seconds until the icon  shows on the LCD, indicating the logger stops logging.

Note: This logger could not be stopped by pressing button before at least two readings after recording begins.

5.Download Data

Connect the data logger to your computer via USB Port, wait until MT/TH storage disk on your computer, then

download without software: A PDF report will generate automatically. Please save the PDF report to your computer for viewing.

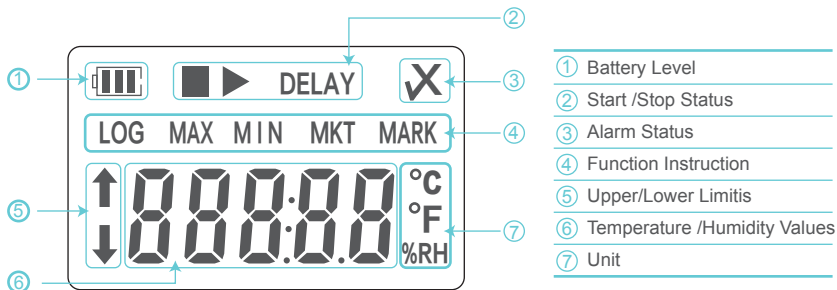
6.Re-use the Logger

To reuse a stopped logger, please connect it to the computer, and make sure you have saved or exported the data;Next reconfigure the logger by repeating the operation in 2. Configure Parameters*. After finished, please follow 3. Start Logging to restart the logger for new logging, if you do not need the new configuration, just restart logger follow 3 (Please note this operation will automatic delete the last report, please make sure you have saved the data to your computer).

Warning !

**All previous logging data inside the logger will be deleted after re-configuration or new start as to make space for the new logging.If you do not need new parameters, you can directly Re start the logger for new using. No matter new configuration required or not, please make sure last logging data has been saved in your computer.*

LCD Screen



Status Indication

1. Buttons

Function	Operation	Indicator
Start logging	Press and hold the left button for 5 seconds	● flashes 5 times
Stop logging	Press and hold the right button for 5 seconds	● flashes 5 times
Before started	Press and release the left button	● and ● flashes once
After started	Press and release the right button	● or ● flashes once

 **Note:** Shortly press to switch to different display interface.

Before started: The interfaces shown in sequence are respectively-Temperature upper limit interface-Temperature lower limit interface-Humidity upper limit interface-Humidity lower limit.

During recording:The interfaces shown in sequence are respectively -Real Time temperature interface-Real time humidity interface-Max temperature ever recorded (to the time press button)-Min temperature ever recorded (to the time press button)-Max humidity ever recorded (to the time press button)-Min humidity ever recorded (to the time press button).

Indication Instructions

1, LCD Page indications (Before Started).

A single click on the left button (Start button) allows browsing each LCD Page.



Temperature upper limit



Temperature lower limit



Humidity upper limit



Humidity Lower limit

2, LCD Page indications (During Recording).

A single click on the right button (Start button) allows browsing each LCD Page.



Real Time temperature



Real Time Humidity



Max temperature ever recorded
(to the time press button)



Min temperature ever recorded
(to the time press button)



Max humidity ever recorded
(to the time press button)



Min humidity ever recorded
(to the time press button).

3, LCD Indication (After stopped)

A single click on the right button (Stop button)



Alarm Activated



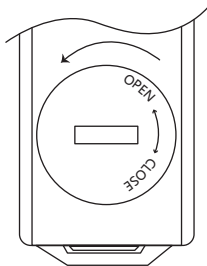
No Alarm Activated

LCD-LED Indication

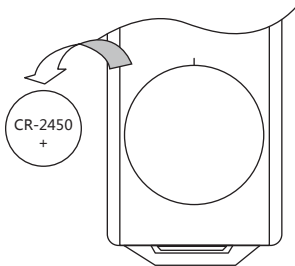
LCD Display	LED Indicator	Meaning
▶		Started
■		Stopped
√	● flashes once every 30 seconds	Logging normally
x	● flashes once every 30 seconds	High/low temperature limit exceeded.

Battery Replacement

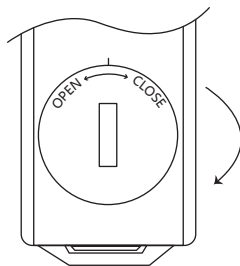
- (1) Turn the battery cover counter clockwise and remove it, take out the old battery.
- (2) Remove the old battery and wire cable, install the new spare battery and wire cable via mistake-proof socket.
- (3) Turn the battery cover clockwise and tighten it.



(1)



(2)



(3)

Battery Management

Battery level indication	Battery capacity
	Full
	Good
	Medium
	Low(please replace battery)







What's Include

Temperature (Humidity) Data Logger x 1

User Manual x 1

Certificate of Verification x 1

Warning !

-  Please store your logger at room temperature.
-  If you use the logger for the first time, please use reprogrammable software to synchronize system time and configure parameters.
-  Do not remove the battery if the logger is recording.
-  The LCD screen will be automatically after 30 seconds of inactivity. Press the right button again to turn on the screen.
Parameter configuration on reprogrammable software will clear previously recorded data inside the logger. Please save all history data before you apply new configurations.
-  To ensure the humidity accuracy, please avoid contact with unstable chemical solvents or compounds, especially avoid long-term storage or exposure to the environments with high concentrations of ketene, acetone, ethanol, isopropanol, toluene, etc.
-  Do not use the logger for long-distance transport if the battery icon is less than half as it may half stopped