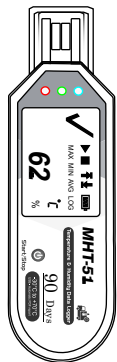


User Manual



MHT51

Temperature & Humidity Data Logger
Single-Use USB



P/N:7603594



Scan for Details



Product Overview

The MarMonix MHT51 is a single-use USB temperature and relative humidity data logger designed for monitoring and recording environmental conditions during storage, transportation, and other temperature- and humidity-sensitive processes.

The built-in LCD provides clear information about the recording status, alarm status, temperature and humidity values, as well as maximum, minimum, and average readings.

Main Functions

- Temperature and relative humidity measurement and recording
- Built-in LCD screen
- PDF and CSV data report export via USB
- Temperature and humidity alarm monitoring
- Maximum, minimum, and average value display
- IP66 protection
- Configurable recording interval and duration
- Configurable start delay and alarm limits
- Single-use / disposable operation

Package Includes

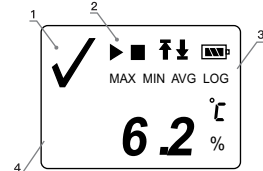
The MHT51 is equipped with:

- USB Interface
- Start Delay LED (Blue)
- OK LED (Green)
- Alarm LED (Red)
- LCD Display
- Start/Stop Button

Technical Specifications

Model	MHT51
Sensor	Internal temperature & RH sensor
Battery	CR2032
Size	83.5 × 27.7 × 7.5 mm
Weight	16g
Waterproof Level	IP66
Operating Temperature	-30°C to +70°C / -22°F to +158°F
Temperature Accuracy	±0.5°C (-20°C to +40°C); ±1°C (others)
Humidity Accuracy	±3% RH (25°C, 20% to 80%); ±5% RH
LCD Display Resolution	Resolution: 0.1°C/°F, 1% RH
Time Zone	UTC+0:00 (Default or Customizable)
Log Interval	5 mins (Customizable from 1 min to 24 hrs)
Log Duration	90 days (Customizable from 7 to 360 days)
Start Delay	30 mins (Default or Customizable)
Alarm Preset	Customizable, <2°C or >8°C; 20% to 80% RH (Default)
Temperature Unit	°C/°F

Display Overview



Overview

No./ Icon	Function	Instruction
1	Alarm State	✓ Normal X Alarm
2	Recording State	▶ Recording ■ Stopped
3	Value State	MAX/MIN/AVG value
4	Temperature & Humidity Data	Displays the last recorded temperature & humidity data

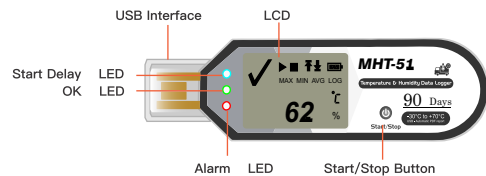
Support

For technical support, product information, calibration documentation, or service assistance, please contact your authorized MarMonix Instruments distributor or supplier.

Display Examples

1		The device is recording, and there are alarms. The last recorded temperature is 8.7°C.
2		The device is recording, and there are no alarms. The last recorded humidity is 55% RH.
3		During data recording, the average temperature is 8.4°C, and the average humidity is 55% RH.
4		During data recording, the minimum temperature is 1.3°C, and the minimum humidity is 20% RH.
5		During data recording, the maximum temperature is 8.7°C, and the maximum humidity is 85% RH.
6		The upper limits for the temperature and humidity alarms are 8°C and 80% RH.
7		The lower limits for the temperature and humidity alarms are 2°C and 20% RH.

Starting the Logger



1. Make sure the logger is in the **shutdown state**.
2. Press and hold the **Start/Stop Button for 3 seconds**.
3. The **blue LED flashes once every 10 seconds**, indicating that the logger is in delayed recording mode.
4. After the configured start delay, the logger automatically starts recording.

Delay Mode

- During the start-delay period, the logger has not yet started recording. The blue LED indicates that the device is waiting for the configured recording start time.

Recording Status



Recording, none-alarm status

Normal Recording

When the logger is recording normally and the measured values are within the preset alarm limits:

- The green LED flashes every 10 seconds.
- The LCD shows the recording status and measured values.

Alarm Recording

When the temperature or humidity exceeds the preset alarm limits:

- The red LED flashes every 10 seconds.
- The LCD indicates the alarm condition.
- The logger continues recording the measured data.

Alarm Function



Recording, alarm status

The MHT51 monitors the measured temperature and humidity against the configured alarm limits. Default alarm settings:

- Temperature: Below 2°C or above 8°C
- Relative Humidity: 20–80% RH

The alarm limits can be customized according to the application requirements.

When an alarm condition occurs, the red LED flashes every 10 seconds and the LCD indicates the alarm status.

Stop Recording



The Recording is stopped

Recording can be stopped by either of the following methods:

1. Press and hold the Start/Stop Button for 3 seconds until the logger turns off.
2. Connect the logger to a computer through the USB interface.

Once recording has stopped, the recorded data can be accessed through the USB interface.

PDF / CSV Data Export

1. Stop the logger's recording.
2. Connect the MHT51 to a computer using the USB interface.
3. The logger automatically generates the PDF report.
4. Recorded data is also available in CSV format.
5. When the blue LED flashes during PDF generation, do not disconnect the logger.

Disconnecting the logger during report generation may result in missing data points.

Important Notes

- The MHT51 is a single-use / disposable data logger.
- Do not press and hold the button while the logger is recording.
- Do not connect the logger to a computer while recording, as this will end the recording.
- If the red LED remains continuously ON, the device may be damaged. Stop using the logger.
- Do not disconnect the logger while the PDF report is being generated.
- Keep the logger within its specified operating temperature and humidity range.
- Handle the USB interface carefully.