tempmate.®

tempmate.®-M2
User Manual

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1. Introduction

The tempmate.®-M2 is designed to be mounted on a shipment or stationary and measure relevant parameters such as temperature and optionally relative humidity. The device records data and stores it on an internal memory.
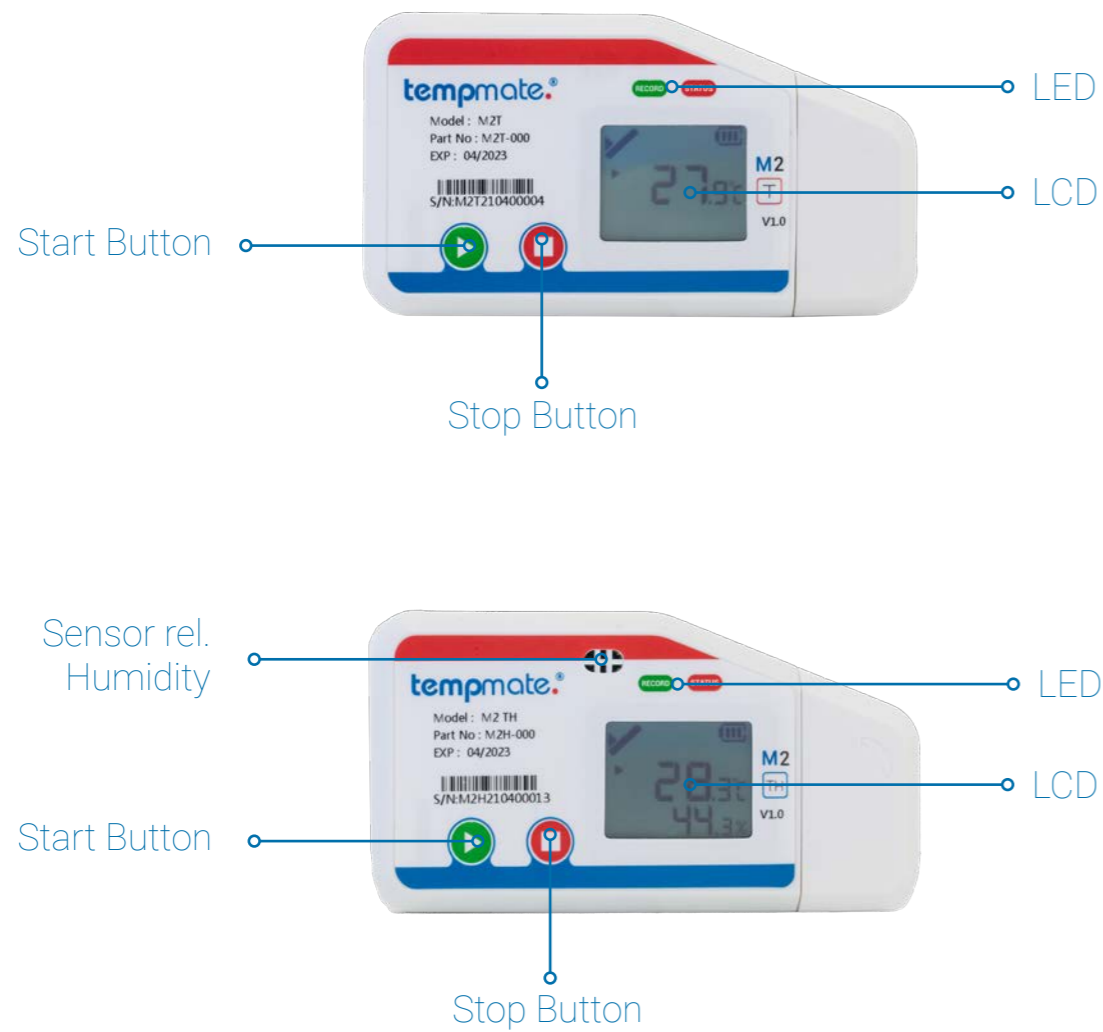
2. Intended Use

The tempmate.®-M2 is designed to be mounted on shipments or stationary and to record relevant parameters as mentioned in the data sheet. Any use or operation requiring specific requirements and standards not explicitly mentioned in the data sheet must be validated and tested at the customer's own responsibility.
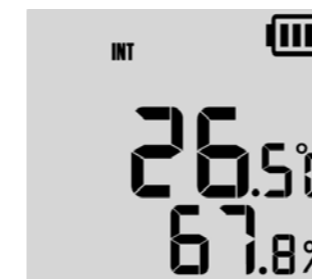
tempmate.®-M2 Model

	T	TH
Multi-Use	●	●
Temperature	●	●
Rel. Humidity		●
LCD	●	●

4. Device Description

LED

LCD

Start Button

Stop Button

Sensor rel.
Humidity

LED

LCD

Start Button

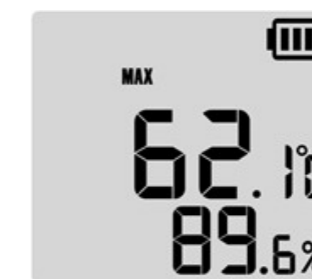Stop Button

5. Display

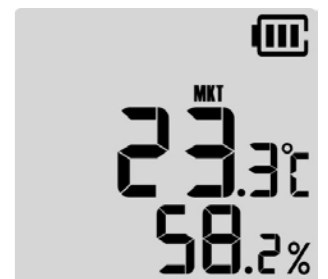Not Started

Number Measured
Values

Average Value

Started*

Highest
Measured Value

MKT Value

Stopped

Lowest
Measured Value

Time & Date

* if the start delay is set, this symbol ▶ flashes after a successful start until the time limit has elapsed

6. Operation and Usage

STEP 1 Configuration *optional
This step is only necessary if you want to adapt the pre-installed configuration to your application.

- Download the free tempbase 2 software – https://www.tempmate.com/de/download/
- Install the tempbase 2 software on your PC.
- Remove the cap and connect the not started logger to your PC.
- Open the tempbase 2 software and select the „Logger Setup" button" (1).
- Make the desired settings and save them via the „Save Parameter" button (2).
- Remove the logger from your PC and replace the cap securely.
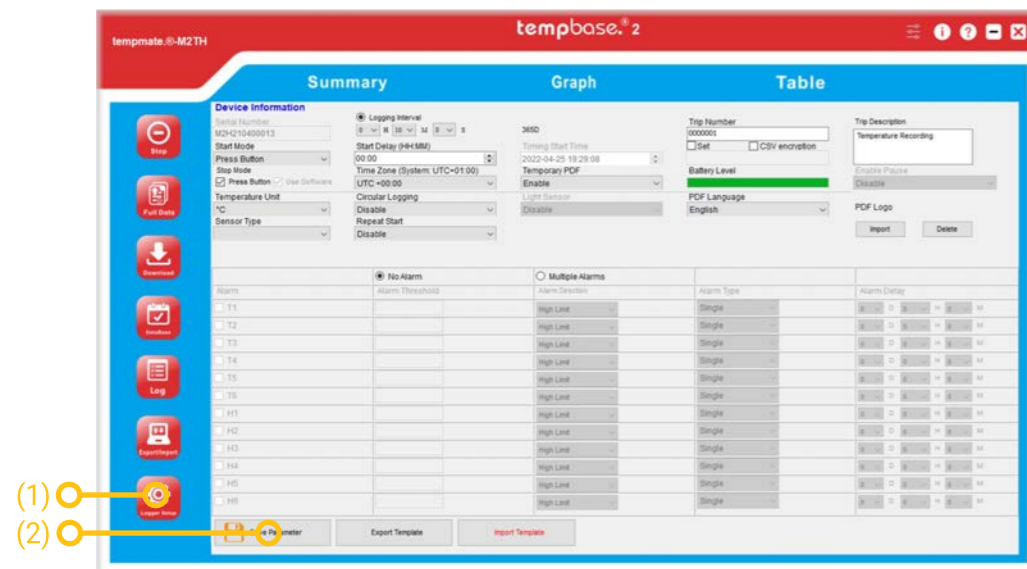
STEP 2 Start Logger

- Press and hold the green start button ▶ for 5 seconds.
- A successful start is indicated by the green LED on your device flashing 10 times.
- Note: If another or no flashing signal appears, do not use the logger and contact support.

STEP 3 Set Mark
- Briefly press the green start button ▶ twice in succession to set a mark.
- A successfully set mark is indicated by the word „MARK" and the number of marks set so far in your display.
- Note: Up to 10 marks can be set per operation.

STEP 4 Stop Logger

- Press and hold the red stop button ■ for 5 seconds.
- A successful stop is indicated by the red LED on your device flashing 10 times.

Alternative stop modes

Automatic Stop (default setting)
- o The device will stop automatically when the maximum number of measured values in the data memory is reached and no manual stop is performed beforehand.
- o This stop mode works in addition to the manual stop.

Software Stop (optional)
- o This setting can be made in the tempbase 2 software. (see STEP 1)
- o The stop is triggered automatically by connecting the logger to the PC and opening the software.
- o A manual stop is not possible in this configuration.

STEP 5 Manual Readout of Data

- Remove the cap and connect the logger to your PC.
- A successful connection is indicated by both LEDs flashing. The abbreviations CSV and PDF appear one after the other in the display.
- The logger automatically opens as an external drive on your PC. This process may take a few minutes depending on the amount of data.

- Open the drive and copy the PDF and CSV report stored on it for your filing.
- Note: A report is automatically generated as PDF and/or CSV when the device is stopped. The device can still be read out during a running measurement and an intermediate report can be downloaded.
- Note: Already generated reports are automatically overwritten and deleted when the device is restarted.

Readout with the tempbase 2 software (optional)

- Remove the cap and connect the logger to your PC.
- Open the tempbase 2 software and select the „Export/Import" button (3).
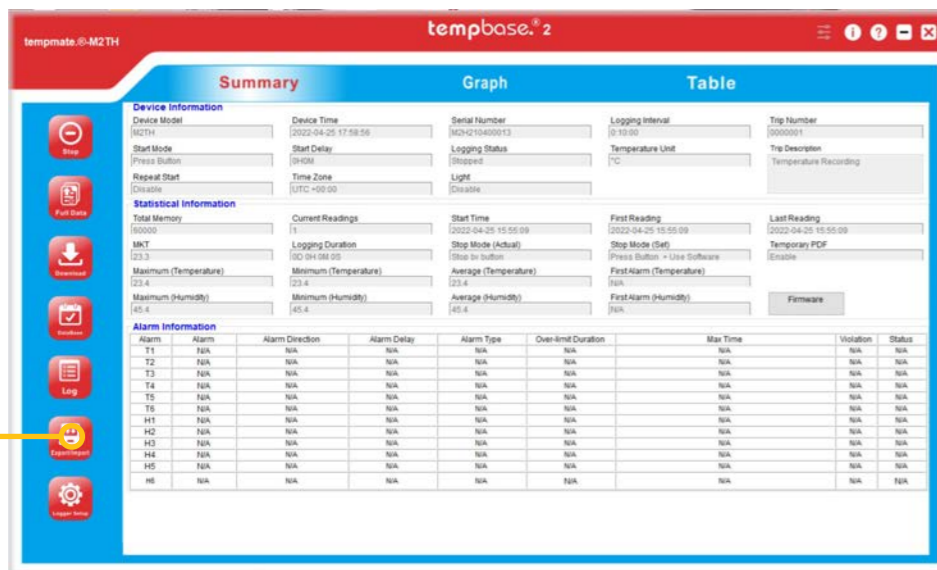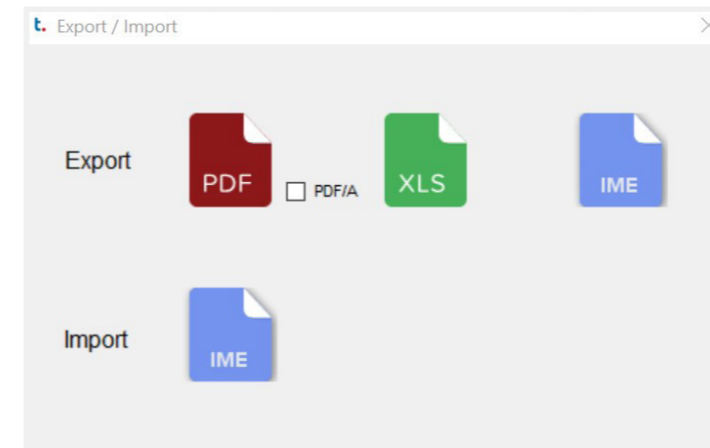
- Select the desired file format (PDF/XLS/IME) for export and the file location and confirm the download.

7. External Sensors

- Remove the cap and connect the not started logger to your PC.
- Open the tempbase 2 software and select the „Logger Setup" button.
- In the „Sensor Type" area, select the sensor type you want to work with.
- Confirm your configuration by clicking on „Save Parameter" and remove the device from your PC.
- To record with an external sensor, use a screwdriver to loosen the screw on the bottom of the device and remove the standard cap.
- Replace it with the external sensor of your choice and screw it again.

8. Replace Battery

- Open the cover on the back of the device by turning it counterclockwise.
- Remove the old battery and dispose of it according to national regulations.

- Insert the new battery and replace the cover, closing it clockwise.
- Remove the cap and connect the logger to your PC.
- Open the tempbase 2 software to synchronize date & time again. This process is automatically triggered when the logger is connected to PC and software.
- Caution: Back up your data and download your last report before removing the battery from the instrument.

9. Important Notes

- Configuration cannot be changed during recording.
- We recommend recalibration after 1 year.
- Always dispose of batteries according to your country's regulations.
- Do not place the device in corrosive liquids and do not expose it to direct heat.

Main Technical Specifications tempmate.®-M2 [T]

Temperature Sensor	HQ Digital Temperature sensor (internal and external optional)
Temperature Range	-30°C to +70°C (−40°C to +90°C with ext. T Sensor) (-80°C to +200°C with ext. PT100 Sensor)
Temperature Accuracy	±0.3°C (at −20°C to + 40°C, other 0.5°C)
Temperature Resolution	0.1°C
Humidity Sensor	n/a
Humidity Range	n/a
Humidity Accuracy	n/a
Humidity Resolution	n/a
Data Storage	60,000 values
Display	Big Multifunction LCD
Start Setting	Manually by pressing button, by software or timed
Recording Time	Up to 6 months
Interval	10sec. up to 11h 59min. (default 10 min.)
Alarm Settings	Up to 6 points customizable
Alarm Type	Single alarm or cumulative
Battery	CR2450 / replaceable by customer
Dimensions	100 x 53 x 12 mm
Weight	54g
Protection Class	IP65
Connection Interface	USB 2.0, A-Type
Conformity	EN 12830, CE, RoHS
Software	PDF or CSV reader or tempbase 2 software / free download
Interface to PC	Integrated USB port
Reprogrammable	Yes, with internal HTML tool* or optional tempbase 2 Software
Automatic Reporting	PDF & CSV

Main Technical Specifications tempmate.®-M2 [TH]

Temperature Sensor	HQ Digital Temperature sensor (internal and external optional)
Temperature Range	-30°C to +70°C (−40°C to +90°C with ext. T Sensor) (-80°C to +200°C with ext. PT100 Sensor)
Temperature Accuracy	±0.3°C (at −20°C to + 40°C, other 0.5°C)
Temperature Resolution	0.1°C
Humidity Sensor	HQ Digital Temperature/rel. Humidity sensor (internal and external optional)
Humidity Range	0%rH to 100%rH
Humidity Accuracy	±3%rH (20 to 80%rH), 5% others (at 25°C)
Humidity Resolution	0.1%rH
Data Storage	60,000 values
Display	Big Multifunction LCD
Start Setting	Manually by pressing button, by software or timed
Recording Time	Up to 6 months
Interval	10sec. up to 11h 59min. (default 10 min.)
Alarm Settings	up to 6 points temperature and 2 points humidity customizable
Alarm Type	Single alarm or cumulative
Battery	CR2450 / replaceable by customer
Dimensions	100 x 53 x 12 mm
Weight	54g
Protection Class	IP65
Connection Interface	USB 2.0, A-Type
Conformity	EN 12830, CE, RoHS
Software	PDF or CSV reader or tempbase 2 software / free download
Interface to PC	integrated USB port
Reprogrammable	Yes, with internal HTML tool* or optional tempbase 2 Software
Automatic Reporting	PDF & CSV

Main Technical Specifications **temp**mate.®-M2 Accessory

tempmate.®-M2 External T-Sensor

Sensor	HQ Digital Temperature Sensor
Temperature Range	−40°C to +90°C
Temperature Accuracy	0.3°C (at −20 ° C to + 40 ° C, other 0.5°C)
Temperature Resolution	0,1°C
Sensor Tip	Stainless Steel (30 x 5 mm)
Sensor Connetion	M2-USB Connection
Cable length	1.2 m
Cable Diameter	3 mm
Cable Material	PVC

tempmate.®-M2 External High/Low T-Sensor

Temperature Sensor	PT100 Sensor
Temperature Range	-80°C to +200°C
Temperature Accuracy	±1°C
Temperature Resolution	0,1°C
Sensor Tip	Stainless Steel (30 x 5 mm)
Sensor Connetion	M2-USB Connection
Cable Diameter	3 mm
Cable length	1.2 m
Cable Material	PTFE

tempmate.®-M2 External T/rH-Sensor

Sensor	HQ Digital Temperature/rel. Humidity Sensor
Temperature Range	−40°C to +90°C
Temperature Accuracy	0.3°C (at −20 ° C to + 40 ° C, other 0.5°C)
Temperature Resolution	0,1°C
Humidity Range	0 - 100 %rH
Humidity Accuracy	±3%rH (10% to 70%), 5% others (at +25°C)
Humidity Resolution	0.1 %rH
Sensor Tip	Stainless Steel (30 x 5 mm)
Sensor Connetion	M2-USB Connection
Cable length	1.2 m
Cable Diameter	3 mm
Cable Material	PVC

Contact

Do you have any questions? Please contact us - our experienced team will be happy to support you.

sales@tempmate.com

+49 7131 6354 0