

MANUAL

tempmate®-S1

How to use the easy single-use temperature datalogger



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1. Intended Use & Important Information

The tempmate-S1V2 is an easy-to-use data logger that records all relevant temperature data during its usage. This information can then easily be read out as comprehensive and detailed PDF- or CSV-report without requiring any additional hard- or software.

The tempmate-S1V2 can be used for all kinds of applications where monitoring and recording temperature is required.

The data logger is provided ready-to-use in a default configuration and offers further possibilities through its free configuration software tempbase-2 (available on www.tempmate.com)

Quick Notes & Important Information:

The tempmate-S1V2 is a single-use data logger; as such, once it is stopped it cannot be started again. The device cannot be recharged, but it receives enough power via the USB connection to be able to read the data even after the expiry date.

The data logger runs for up to 110 days with its default configuration and if kept under optimal storage conditions (room temperatures) before. During the activity, it measures temperature between -30°C and +70°C (-22°F to 158°F) every 10 minutes.

The user can optionally configure the tempmate-S1V2 (through tempbase-2) before the logger was started.

The data logger must be unwrapped for an optional configuration; each packing unit of this model comes with additional ZIP bags, where the data loggers can be placed back into to keep the protection class.

Start, stop, activity and status are indicated by the built-in LEDs, which allows a fast and easy evaluation.

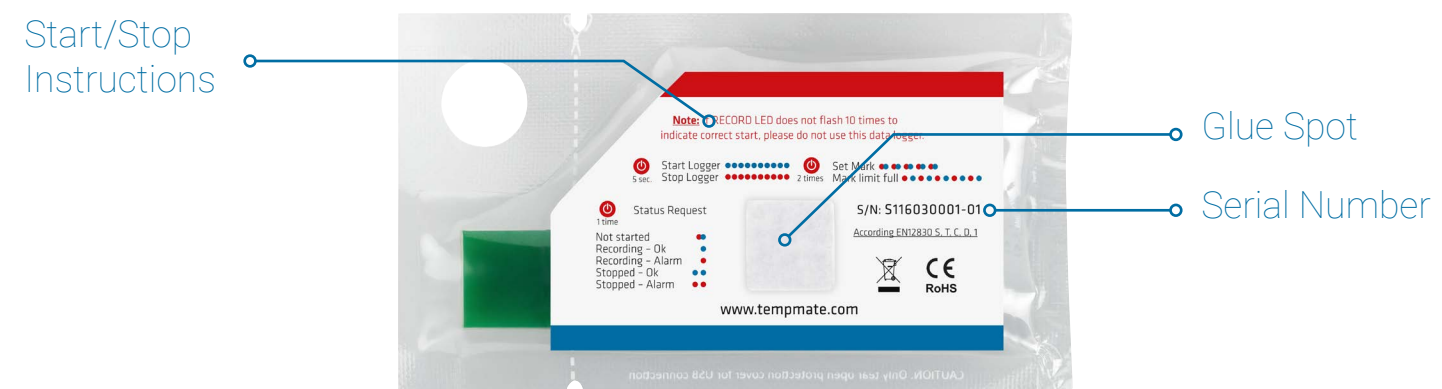
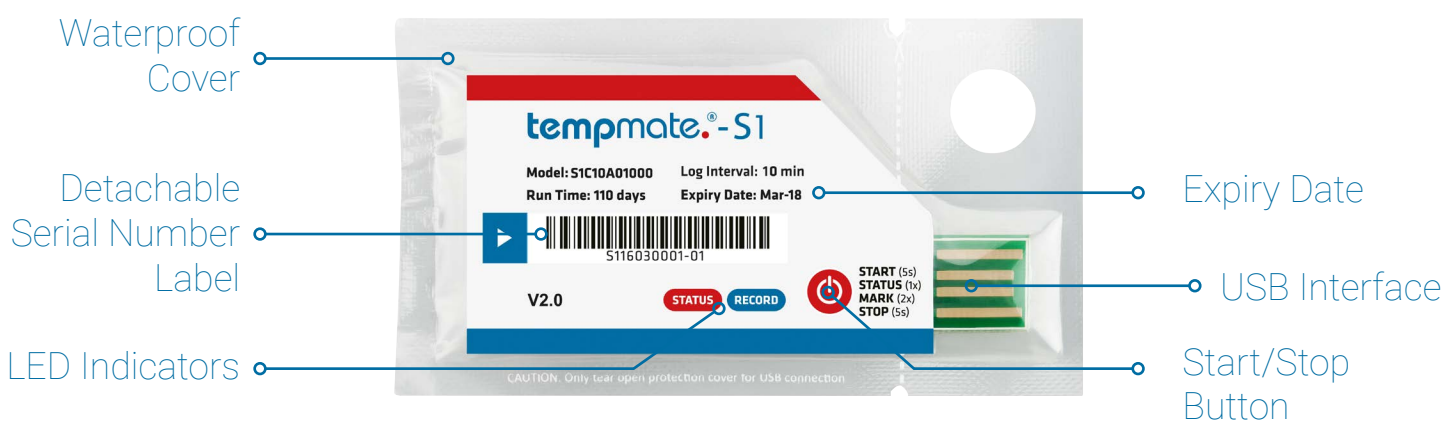
A full data report will be created once the data logger has been stopped and plugged in through USB. It is possible to create a temporary report while the data logger is active; while the data logger is connected, no data points are recorded.

The expiry date of each unit is printed on the front label; it is recommended to use the data logger as soon as possible and only within their shelf life.

2. Disposal Instructions

The tempmate-S1 V2 has a built-in CR2450 Lithium metal button cell next to electronic parts and raw materials, and therefore requires the data logger to be disposed of by a waste or recycling service provider.

3. Device Description



LED Indication

The built-in LEDs on the front, inform the user about every activity of the data logger. The status can always be requested by pushing the start/stop button once (one short click). Depending on the status, the LEDs blink in a certain way:

STATUS	ACTION	LED CONFIRMATION
Not Started	push button 1 time	STATUS LED + RECORD LED flashing 1 time ●●
Recording – OK	push button 1 time	RECORD LED flashing 1 time ●
Recording – Alarm	push button 1 time	STATUS LED flashing 1 time ●
Active Start Delay	push button 1 time	RECORD LED + STATUS LED flashing 1 time alternately ●●
Stopped – OK	push button 1 time	RECORD LED flashing 2 times ●●
Stopped – Alarm	push button 1 time	STATUS LED flashing 2 times ●●

While the data logger is actively recording, the RECORD LED will flash every 5 seconds automatically.

A successful start, stop, or set mark are confirmed by the LEDs too:

STATUS	ACTION	LED CONFIRMATION
Start Logger	5 sec pushing button	RECORD LED flashing 10 times ●●●●●●●●●●
Set Mark	double-click button	STATUS LED + RECORD LED flashing 5 times ●●●●●
Stop Logger	5 sec pushing button	STATUS LED flashing 10 times ●●●●●●●●●●

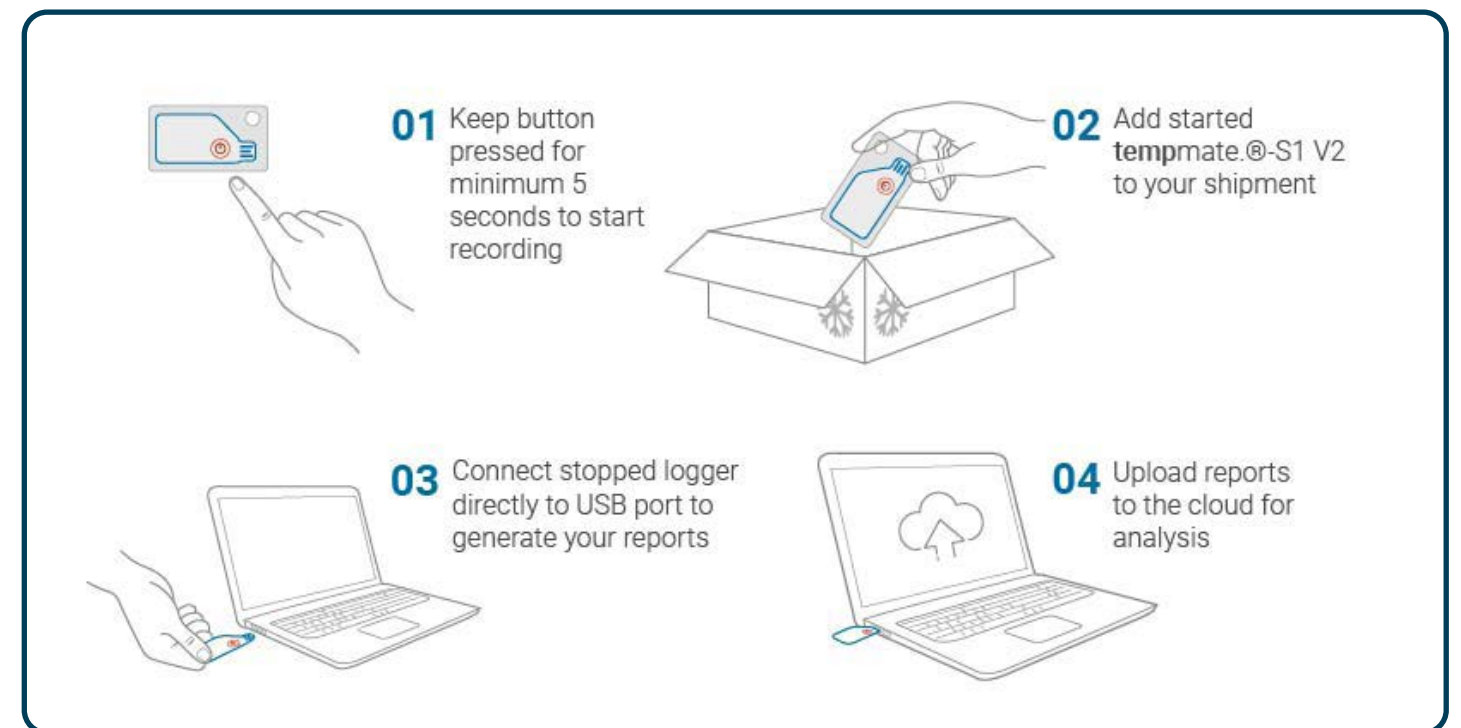
4. Equipment & Software

The tempmate-S1V2 is provided ready-to-use in packing units of 20 single units (if not sold otherwise), including a full set of 20 shipping documents and 20 ZIP-bags. Further external equipment is not available.

Optionally, the tempmate-S1V2 can be configured and evaluated through tempbase-2, which allows the user to change every setting and adapt it to their application as well as comprehensive possibilities to archive and work with recorded data.

Tempbase-2 can be downloaded for free on www.tempmate.com

5. Quick Start Guide



- 1.** To start, keep the Start/Stop Button pushed for minimum 5 seconds, until the RECORD LED blinks 10 times
- 2.** Place the data logger and record the ambient temperature
- 3.** To stop, keep the Start/Stop Button pushed for minimum 5 seconds, until the STATUS LED blinks 10 times
- 4.** Plug in the data logger via USB and receive the full report as PDF & CSV file

6. Operation Instructions

1st STEP PREPARATION

- no further preparation is necessary, as the data logger is provided ready-to-use;
- optionally, the user can configure the data logger through tempbase-2 before it is started;
- the tempmate-S1 V2 can be kept outside of room temperature conditions (~21°C / 70°F), but this can potentially have an impact on the shelf life.

We recommend conditioning the data logger only shortly before the usage.

2nd STEP START, USAGE, STOP

Starting the data logger

- To start the data logger, keep the Start/Stop Button  pushed for a minimum of 5 seconds
- A successful start is indicated by the LEDs on the front side, the blue RECORD LED  will blink 10 times in a row
- The data logger is now activated and will record the near ambient temperature
- If no start delay was set, the first temperature data point will be saved after the first measurement interval is due
- If a start delay was set, the first data point will be recorded after the delay is due, and then follow the set measurement interval

The label with the printed serial number can be detached optionally

Important: if the red STATUS LED  flashes for 3 seconds while the data logger is started, a problem with the installed battery is indicated and the unit should not be used.

Usage while active

- Once the data logger is started, the RECORD LED  will blink every 5 seconds to indicate its activity
- The data logger should be placed as close as possible to the place of use; it should not be placed in-between
- To fix the data logger on a surface, a strong glue spot on the back of each unit can be used

Stopping the data logger

- To stop the data logger, keep the start/ stop button pushed for a minimum of 5 seconds
- A successful stop is indicated by the LEDs on the front side, the red STATUS LED will blink 10 times in a row
- The data logger is now stopped

Important:

- once stopped, the data logger cannot be started anymore
- but the data logger continues recording in the background and creates a shadow-log, which can only be exported through tempbase-2

2nd EVALUATION

Evaluation on device level

Per status request (see "Usage") the user can check if an alarm threshold has been breached during the recording:

- If no alarm has been triggered, the blue RECORD LED will blink 2 times 
- If an alarm has been triggered, the red STATUS LED will blink 2 times 

This gives an easy first information about the status of the whole recording.

Creating PDF or CSV report

The recorded data are primarily presented as PDF report, which lists all important information about the measurement.

- Plug-in the data logger via USB
- Once plugged in, the STATUS and RECORD LED will start blinking alternately; during this, all recorded data is processed into a readable format and depending on the number of data points, this process can take up to 2 minutes.

- Please do not unplug the data logger during this process!
- Once all data is processed, the data logger will be recognized as flash-drive and will list all available files, including the report as PDF file.
- The report(s) can be saved locally via drag & drop, or by opening up the file and save them through their application (Adobe Acrobat Reader recommended)

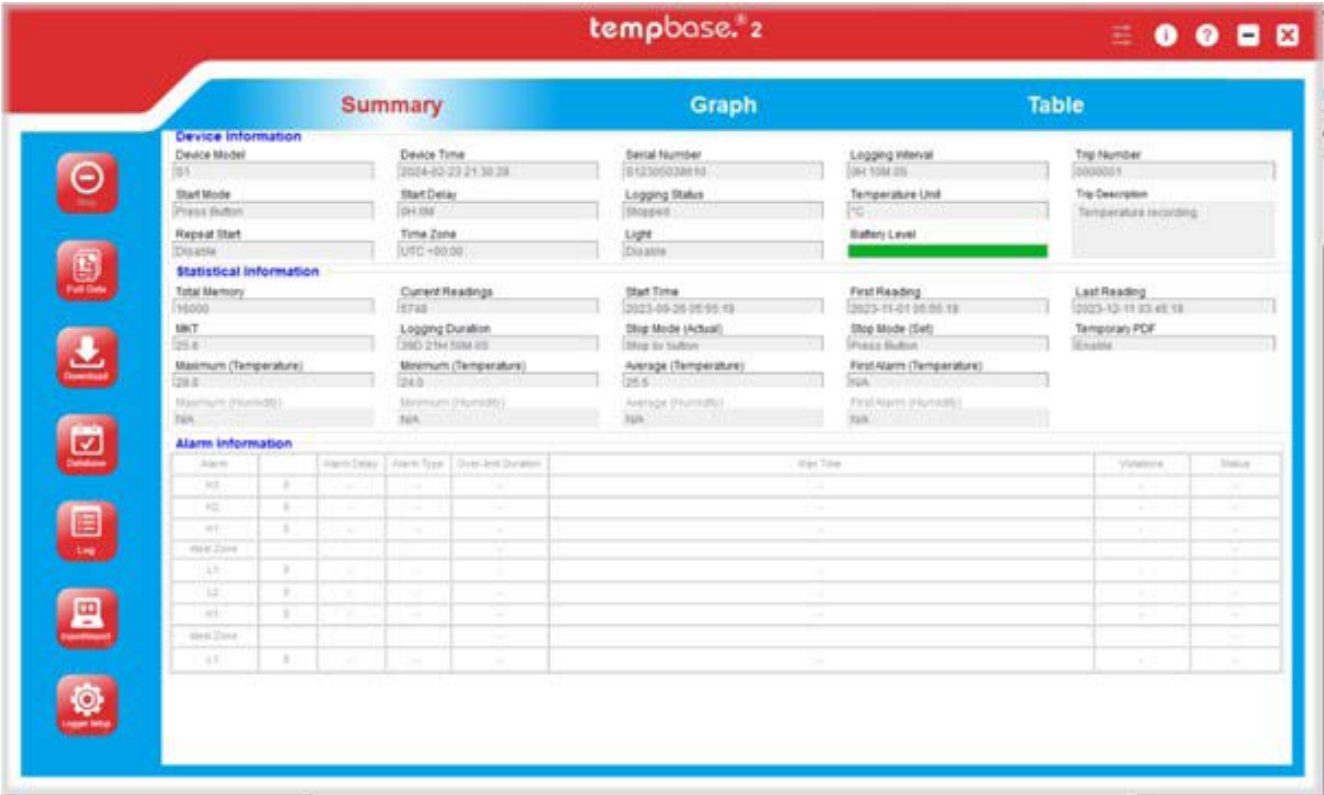
Important:

- The PDF/CSV reports are only created momentarily; once the data logger is unplugged, they must be created again
- The files on the data logger cannot be deleted completely, and deletion is not recommended; if they were deleted by the user on the device, they could be re-created by connecting them to USB again

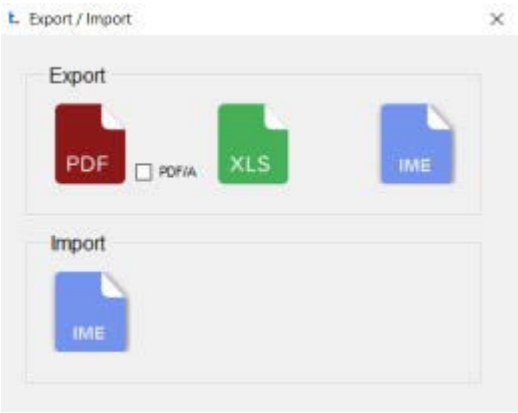
Evaluation on software level

Optionally or additionally to the PDF report, the recorded data can also be loaded into tempbase-2. This gives the user the ability to see the data of plugged-in devices, export them into different formats, create an archive of already installed devices, and more.

- Plug-in data logger via USB and wait until all data is processed
- Start tempbase-2
- tempbase-2 will load all data from the installed unit into its database and will open the “Summary”
- Graph will show the temperature process as graph
- Table will show all recorded data as list



- All data can optionally be exported as PDF or XLS file



- Each data logger plugged in will automatically create an entry in the local Database and can be accessed later

[1]	Status	Data ID	Start Time	Current Readings	S1 (Max)	S1 (Min)	S2 (Max)	S2 (Min)
▶	✓	M2T231000137_20240223122917	2024-02-08 09:40:49	2171	25.9 °C	21.8 °C	N/A	N/A
	✓	M2T231000137_20240222150134	2024-02-08 09:40:49	2043	25.9 °C	21.8 °C	N/A	N/A
✓	✓	S12305038610_20240220094513	2023-09-26 05:55:19	5748	28.0 °C	24.0 °C	N/A	N/A
	✓	S12305038610_20240220093633	2023-09-26 05:55:19	5663	44.9 °C	11.2 °C	N/A	N/A
	✓	M2T231000137_20240214110349	2024-02-08 09:40:49	867	25.5 °C	22.1 °C	N/A	N/A
	✓	S2T2301029002_20240202114812	2023-12-15 12:09:23	553	9.0 °C	5.0 °C	N/A	N/A
	✓	S2T2211024310_20240202114642	2024-01-25 07:26:48	12	21.1 °C	20.9 °C	N/A	N/A
	✓	S2T2301029001_20240202114332	2023-12-15 12:09:42	553	8.4 °C	5.0 °C	N/A	N/A
	✓	S12308008120_20240131102312	2023-10-05 07:14:20	16000	25.4 °C	17.7 °C	N/A	N/A
	✓	TMM230400666_20240130113258	2024-01-02 14:14:50	8044	27.9 °C	18.7 °C	N/A	N/A
	✓	TMM230400666_20240130113242	2024-01-02 14:14:50	8044	27.9 °C	18.7 °C	N/A	N/A
	✓	TMM230400666_20240130112815	2024-01-02 14:14:50	8043	27.9 °C	18.7 °C	N/A	N/A
	✓	TMM230400666_20240130110519	2024-01-02 14:14:50	8038	27.9 °C	18.7 °C	N/A	N/A

Please refer to the tempbase-2 manual for a full description of each function

7. FAQ – Frequently Asked Questions

Q: How can I restart the tempmate-S1 V2?

A: As a single-use device this data logger cannot be started again once it has been stopped; recorded data can always be accessed via USB connection.

Q: The data logger was accidentally stopped, what can be done?

A: the data logger continues recording after it was stopped. This data can only be accessed through tempbase-2, “Full Data” exports all recorded data points into the user’s data base, from where they can then be evaluated or exported.

Q: The expiry date is very near; when exactly is it due and can the data logger be used?

A: The printed expiry date starts the first day of the shown month and year; a start shortly before the EXP is due does not prolong the shelf life or the guaranteed functionality.

Q: I need the calibration certificate of this data logger, where can I receive it?

A: as batch-calibrated device each data logger comes with a permanently stored validation certificate in PDF format, which informs about the calibration process during the production.

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PLEASE, contact us for further questions.

