tempmate.®

tempmate.®-C1
User Manual
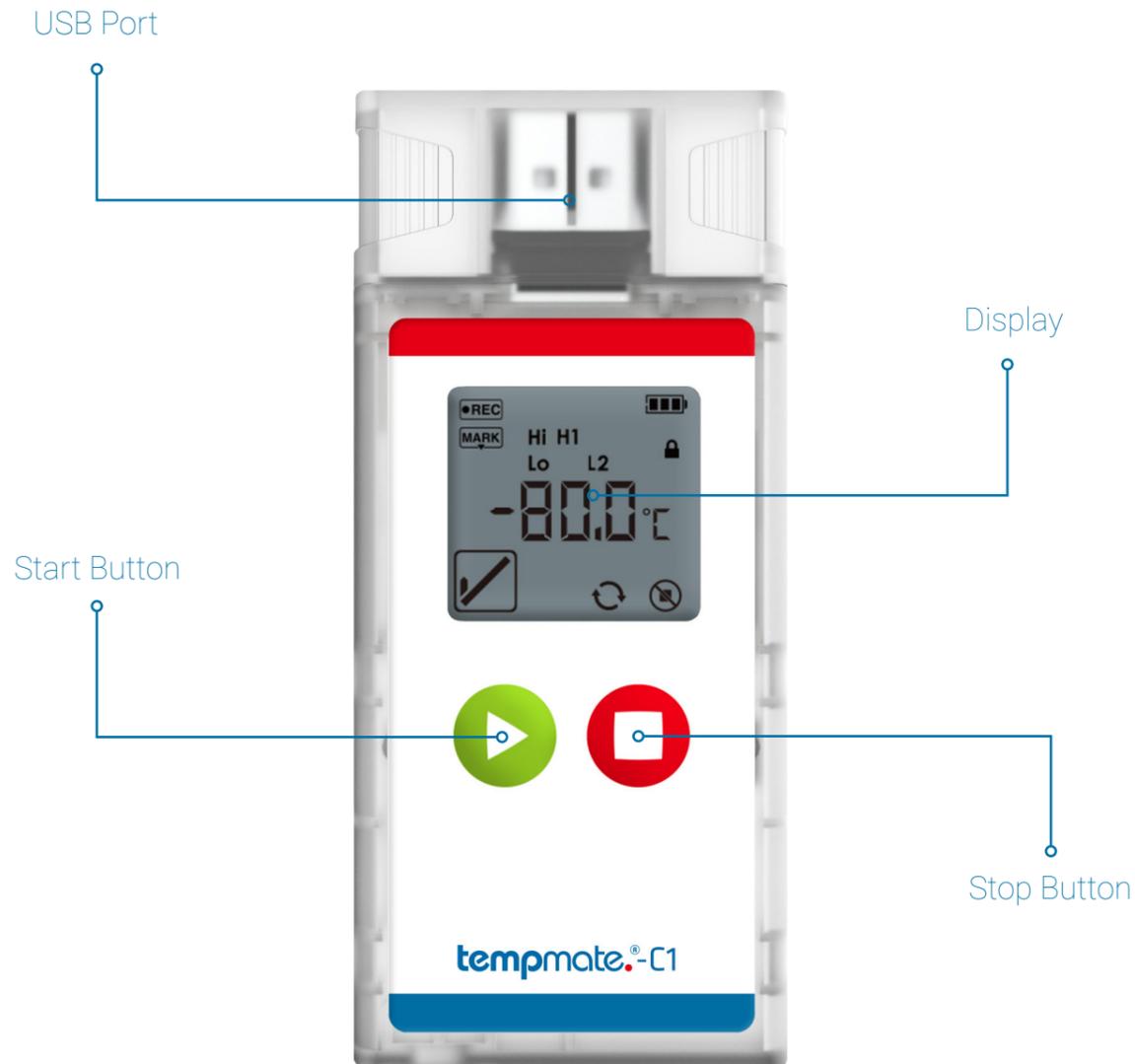
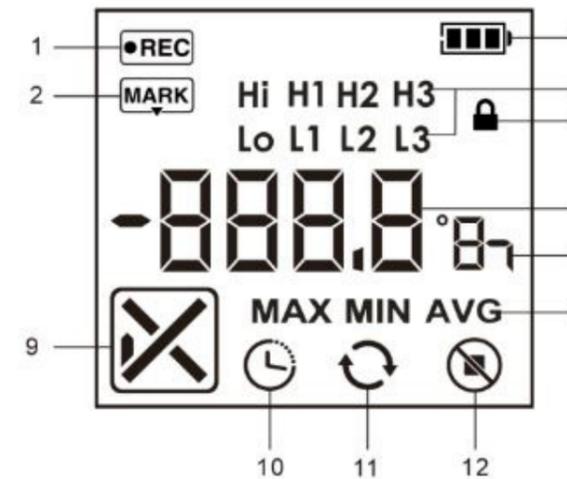# Contents

1. Intended Use

The tempmate.®-C1 is a single-use temperature data logger specifically designed to monitor temperature during transportation of products that must be stored at extremely low temperatures. Any use or operation that requires specific requirements and standards not specifically mentioned in the data sheet must be validated and tested at the customer's own responsibility.

2. Device Description

USB Port

Display

Start Button

Stop Button

tempmate.®-C1

3. Display

1 Recording Status

2 Mark

3 Battery Level

4 Alarm Level

5 Password Protection

6 Measurement Value

7 Temperature Unit, Time Unit

8 Max. Value, Min. Value, Average Value

9 Alarm Status

10 Start Delay

11 Reuse – can be used for several campaigns

12 Stop Button Invalid

Menu navigation

- To scroll through the menu, press the green start button ▶ several times in quick succession.
- The display changes from the current temperature display first to the maximum recorded temperature value, then to the minimum and finally to the average value of the current recording.
- Pressing the button again takes you back to the current temperature display.
- To display the remaining usage time of the device, press the red stop button. The effective recording time depends on the selected measuring interval.
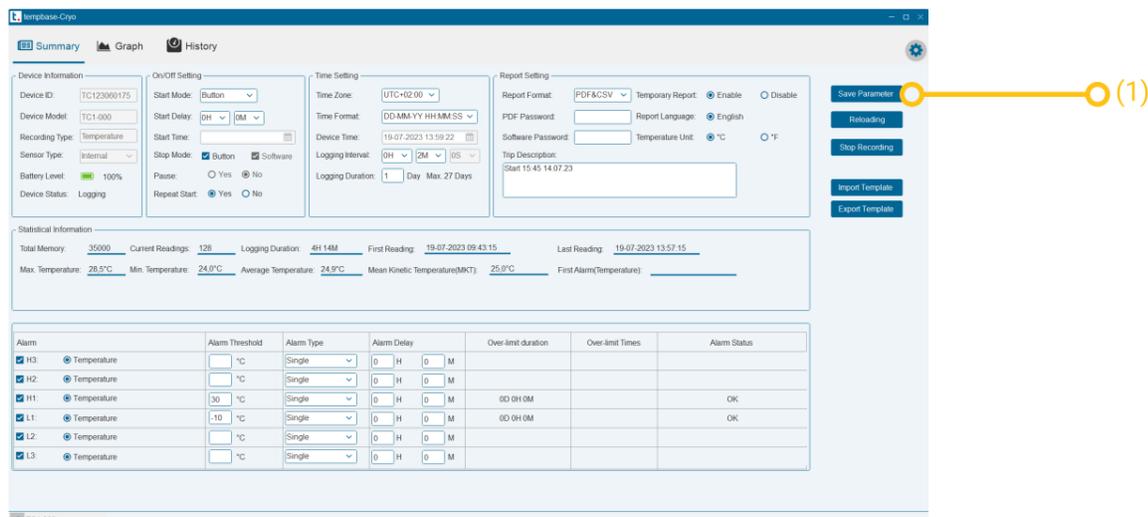
Important: The total running time of 90 days with 24 hours each will be deducted per hour after the start

4. Operation and Use

STEP 1 Configuration *optional

This step is only necessary if you want to adjust the pre-installed configuration to your application.

- Download the free tempbase.-Cryo software.
  https://www.tempmate.com/de/download/
- Install the tempbase.-Cryo software on your PC.
- Remove the cap and connect the unbooted logger to your PC.
- Open the tempbase.-Cryo software. The configuration screen is displayed directly.
- Make the desired settings and save them via the menu item „Save Parameter" **(1)** onto your device.
- Remove the logger from your PC and replace the cap securely.

STEP 2 Start logger (manually)

- Press and hold the green start button ▶ for 5 seconds.
- A successful start is indicated by *bEGn* on your device display.

Important: If a different signal or no signal appears, do not use the logger and contact our support via support@tempmate.com. The device display is disabled until the device has been successfully started.

Alternative start modes

Start via software (optional)

- o This setting can be made in the tempbase.-Cryo software. (see STEP 1)
- o The start is triggered automatically as soon as the device is disconnected from the PC.

Important: A manual start is not possible with this configuration.

Timed start: (optional)

- o This setting can be made in the tempbase.-Cryo software. (see STEP 1)
- o The device will start according to the time set in the configuration software.

Important: A manual start is not possible in this configuration.

Important: When setting a start delay, the display shows a countdown of the selected time period.

 *Example

STEP 3 Set mark

- Press the green start button ▶ twice in quick succession .
- As soon as the device records the marking, the symbol **MARK** appears. .
- Once the symbol **MARK** disappears, the marking process is completed.

Important: Only one mark is possible per measuring interval.

STEP 4 Temporary Evaluation

- Connect your started or paused device to your PC.
- A temporary report will be generated automatically .
- Save your report and remove the logger from your PC again.

Important: If you connect the logger to your PC in the started mode, the recording will continue also in this moment. In order to be able to assign any fluctuations in your measurement results, we advise you to set a mark before and after the temporary readout (see STEP 3).

STEP 5 Stop Logger (manual)

- Press and hold the red stop button ⬛ for 5 seconds.
- The display switches off after a successful stop.

Important: In the stopped state, a short press of any key is sufficient to view the max., min. and average value of the last recording.

Important: The device stops automatically when the memory is full.

Alternative stop modes

Stop by Software (optional)
o Open the tempbase.-Cryo software and connect your unstopped tempmate.®-C1 to your PC.
(see STEP 1)
o Select the „Stop recording" menu item to stop the device.

STEP 6 Evaluation

- Connect the stopped logger to your PC.
- The display will show *PdF* and/or *CSu* to indicate that the respective reports are being generated.
- Once the report is generated, the display will show *USb* .
- The logger can now be disconnected from the PC.

Important: Always make sure that this step is performed before restarting the device. If the device is restarted, all old data will be overwritten.

5. Important Notes

- If the icon [SEt] is displayed on the screen, the logger needs to be reconfigured
- When [▭] is displayed on the screen, it means that the battery level of the logger is too low to record for more than another 10 days.
- If the icon [End] is displayed, the logger's battery is too low to record.
- The configuration of your device cannot be changed during recording.
- Always dispose of batteries according to your country's regulations.
- Do not place the device in corrosive liquids or expose it to direct heat.

Main Technical Specifications **temp**mate.®-C1

Model	Dry Ice / Low Temperature Data Logger
Part Number	TC1-000
Usage	Single-Use / Multi Start/Stop within 90 days possible
Temperature Range	-90°C to +70°C
Accuracy	±0.5°C (-30°C to +70°C) ±1.0°C (others)
Resolution	0.1°C
Memory Capacity	20.000 Readings using PDF & CSV (default) 35.000 Readings using PDF only (optional)
Connection	USB
Indication	LCD
Battery	3.6V Lithium Battery
Runtime	Max. 90 days
Dimensions	96mm(L) * 44mm(W) * 15mm(H)
IP Protection	IP65
Mark	Max. 9 points
Alarm	Max. 6 points
Logging Interval	1 minute - 24 hours
Start Delay	1 minute - 24 hours
Report Format	PDF/CSV
Software	Free tempbase-Cryo Software for Windows systems
Certifications	CE, RoHs, EN12830, RTC-DO160
Shelf-Life	2 Years

Contact Information

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

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