tempmate®

tempmate®-GS2 User Manual

Table of Contents

1. Introduction

The tempmate.®-GS2 is designed and developed to attach to a shipment to measure relevant parameters like temperature, Humidity, light and location. The device records and sends data to the tempmate Cloud based on the transmission interval. The device provides real time visibility to the shipment and traceability.

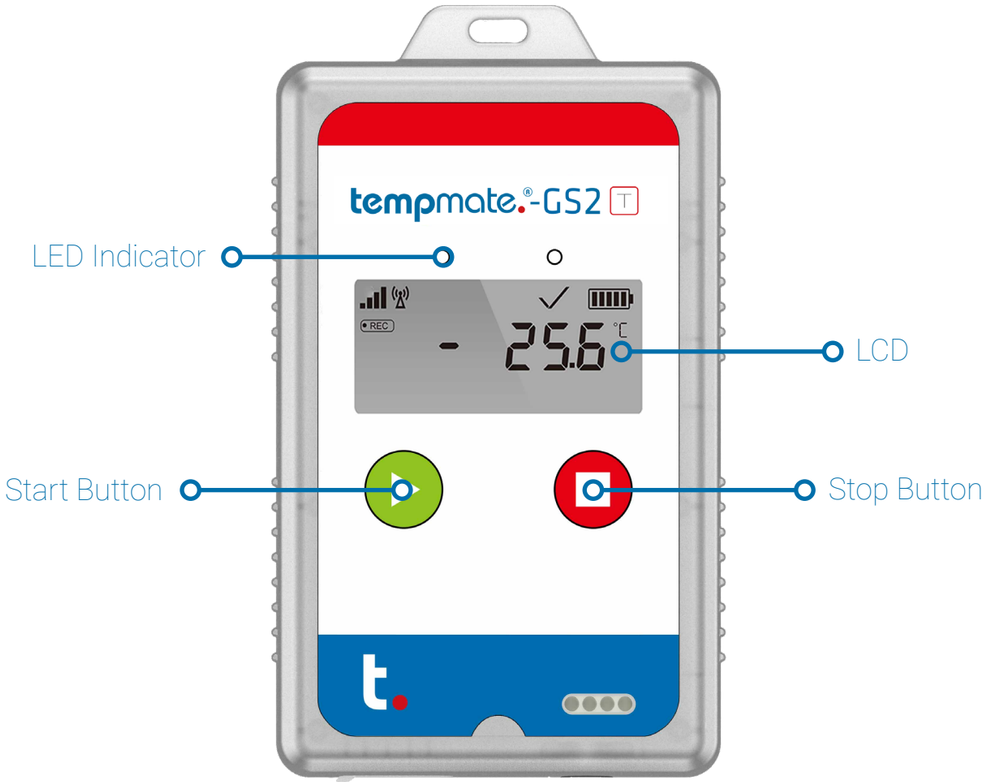
2. Intended Use

The tempmate.®-GS2 is designed to be attached to shipments and record relevant parameters as mentioned in the Data Sheet. Any use or operation which requires specific requirements and standards which aren't explicitly mentioned in the data sheet must be validated and tested on customer's own responsibility.

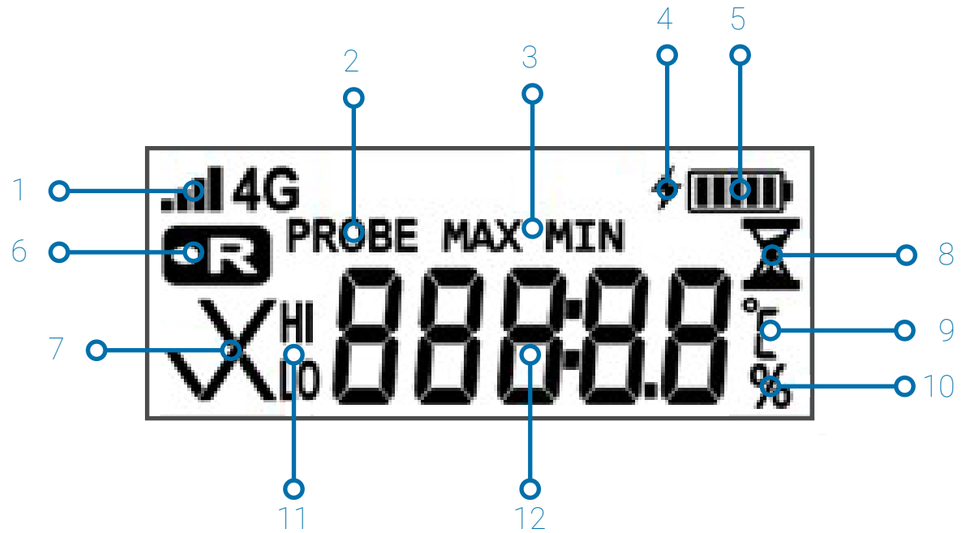
3. tempmate.®-GS2 Models

	T	TH	TE
One-way	●	●	●
Temperature	●	●	●
Rel. humidity		●	
Localisation	●	●	●
Light	●	●	
Extended measuring range			●

4. Device Description



5. Display Descriprion



1.Signal icon
2. Probe mark
3.MAX&MIN
4.Charging icon
5.Battery icon
6.Record icon
7. Alarm status
8. Start-up delay
9. Temperature unit
10. Humidity unit
11. Alarm type
12. Temperature value

6. Quick Start Guide

The tempmate.®-GS2 comes with a bundled package of hardware, connectivity and cloud access. A user can easily start using the device and access the measured report in cloud by following these simple steps.

STEP 1 Create a tempmate cloud account

To configure and access the device the user need a tempmate cloud account. The tempmate cloud account is free of cost and any user can create one. The only prerequisite required to creating an account is a valid email id. The user can create a tempmate cloud account by clicking on this link

https://web.tempmate.cloud/login

and following the instructions.

STEP 2 Add device to tempmate cloud account

The user can add new device in the tempmate cloud platform by clicking on "Add New Device" and custom configure the device by following the instructions in the cloud platform. To add the device to the account, the user should have access to the 14 character serial number of the device (mentioned on the backside of the device, e.g.: GS2XXXXXXXXXX).

STEP 3 Start the device

The tempmate.®-GS2 device can be started by pressing the left green button continuously for more than 5 sec. The start of the device is confirmed by 10 times flashing of Blue LED, additionally the start can be confirmed by the record sign ●R on the display screen.

STEP 4 Attach the device to the shipment

Once the device is started it can be placed in the shipment. Additionally the device can be attached to the shipment using the "3M sticker" on the back side of the device.

STEP 5 Track the shipment

The shipment can be tracked and monitored through the tempmate cloud platform. Additionally, reports can be viewed and exported in PDF and CSV format from the cloud platform.

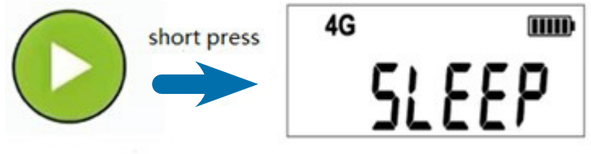
STEP 6 Stopping the device

Once the shipment arrives the destination the device can be stopped by pressing continuously the red stop button for more than 5 sec. The stop of the device is confirmed by 10 times flashing of Red LED, additionally the stop can be confirmed by the record sign ●R NOT visible on the display screen. Optionally, the device can be configured for stop from the cloud platform remotely or by connecting to the USB port.

7. Operation and Usage

STEP 1 Status Check for not started device

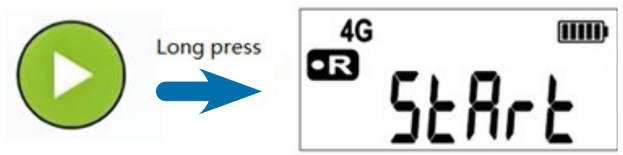
Press once the green "START" button and the screen will display the word "SLEEP" indicating that the logger is currently in not started state.



STEP 2 Starting the device

Continuously press the green "START" button for more than 5 sec.

The screen starts flashing the word "START" indicating the logger start. At this time, the icon R is displayed on the left side of the screen, indicating that the logger has been turned on.

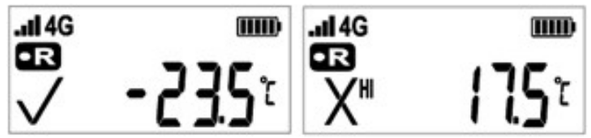


STEP 3 Start-up delay

If "Startup delay" is set, once the logger is turned on it enters the start-up delay phase. The icon ⌛ is displayed on the right side, indicating that the logger is in the start-up delay phase.

STEP 4 Recording information

After entering the recording state, the ⌛ icon will no longer be displayed, and the alarm status will be displayed in the lower left corner of the screen:



✓ the temperature is normal.

X the threshold has been exceeded.

HI the high threshold has been exceeded.

LO the low threshold has been exceeded.

7. Operation and Usage

STEP 5 How to stop recording

Continuously press the red "STOP" button for more than 5 sec.

When the screen starts flashing 88888 please release the button and the logger stops.

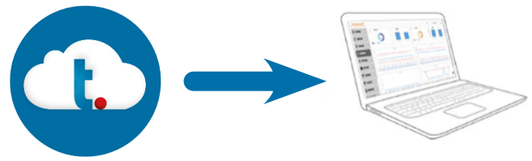
Optionally, the logger can be configured for stop from the cloud platform remotely or by connecting to the USB port.

STEP 6 View final information

After stopping, press once the "START" button to view local time of the device, the MAX and the MIN temperature data recorded.

STEP 7 Get PDF report

PDF data report can also be obtained anytime, anywhere on tempmate cloud platform.

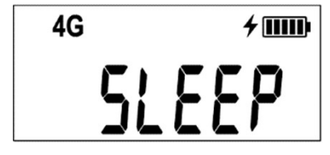


Optionally the PDF report can be downloaded locally by connecting the logger to the computer using a USB cable* (*not supplied with the logger).

STEP 8 Charging

The battery of the tempmate GS2 can be charged.

If the battery is low before use, it can be directly connected to the micro USB interface for charging (Please use 5V charger). When charging, the charging icon will be displayed.



8. FAQ

How can I start the tempmate.®-GS2 device?
The device can be started with the green start button by pressing it continuously for more than 5 sec.

I have pressed the start button but still the device is not started. What should I do?
The device is configured to start when the start button is pressed more than 5 sec and less than 40 sec. So, the button press time should be "5 sec < button press time < 40 sec". The upper limit of 40 sec has been set to prevent accidental start of the device during transportation.

How can I know that the device is started and recording parameters?
The proper start of the device is confirmed by 10 times flashing of Blue LED, additionally the start can be confirmed by the record sign ●R on the display screen.

I am not able to see the data in cloud what should I do?
The recorded data will be transmitted to the tempmate cloud based on the "Transmission Interval" set by the user while configuring the device. Additionally the device uses GSM SIM connectivity to send data to the cloud platform and in case the device is operated wherein there is no network connectivity then no data will be uploaded to the cloud platform.

My shipment has reached the destination but still I do not see any data in the cloud.
The transmitting of data to the cloud depends on the GSM connectivity and in case there was no connectivity established then data will not be transmitted but the user has the possibility to locally download the report from the device using the USB port (but please note that the latest 24200 data points will be locally available on the device).

Can I reconfigure the parameters after the device is started?
Yes, the user can reconfigure or change the device configuration anytime from the cloud portal by clicking the "Edit" tab against a specific device.

How can I receive alarm threshold alerts?
The user can configure to receive alarm alerts through Email and/or SMS in the tempmate cloud portal.

Will I receive the real time alerts for an alarm threshold breach?
Yes, the first alarm threshold breach is triggered on real time.

Can I start and stop the device more than once?
Yes, the tempmate.®-GS2 can be started and stopped 3 times or record for a maximum of 90 days from the first start, whichever comes first.

What does the recording duration of the device mean?
Recording duration or run time is the duration for which the device can continuously operate and record parameters. The standard recording duration for tempmate GS2 Lithium variant is 90 days (with standard log interval of 10 min. and transmission interval of 240 min) and for Non Lithium Battery is 60 days (with standard log interval of 10 min. and transmission interval of 240 min.)

What does the shelf life mean?
The tempmate GS2 Lithium variant has a shelf life of 12 months and non-Lithium variant has a shelf life of 6 months from the date of production. It is mentioned as the Expiry date "EXP" on the back side of the device. That means that the user can start and use the device anytime before the mentioned Expiry date.

Can I connect an external sensor to the tempmate.®-GS2 T and TH model?
No, presently there is no possibility to connect an external sensor to the tempmate.®-GS2 T and TH model. The tempmate.®-GS2 TE comes with an inbuilt external sensor which can be used for different applications.

Can I remove the external sensor?
The tempmate.®-GS2 TE comes with an external sensor and it is firmly fixed into the device and can not be removed or replaced.

How can a device be stopped?
The device can be stopped by continuously pressing the red stop button for more than 5 sec. Optionally, the device can be configured for stop from the cloud platform remotely or by connecting to the USB port.

Can I recharge the battery?
The device battery is fully charged and ready to use but in case because of longer storage of the device if the battery is showing low before use, it can be charged by connecting it to the micro USB port (Please use 5V charger).

Can the battery be replaced?
The device battery is inbuilt and cannot be replaced.

9. Main Technical Specifications **temp**mate.®-GS2 T

Battery type	All the variation available in Lithium and Non-Lithium option
Temperature Range	-30°C to +70°C
Temperature Accuracy	±0.3°C (-10°C ~ 45°C) , ±0.5°C (Other)
Temperature Resolution	0.1°C
Humidity Range	Available with the TH Model
Humidity Accuracy	Available with the TH Model
Resolution Humidity	Available with the TH Model
Ambient Light	0 to 10000lx / Accuracy 0.01lx
Resolution Ambient Light	0.01 lx
Local Data Storage Capacity	24,200 values for Temperature and Light
Shelf-Life	Lithium Battery devices : 12 months shelf life Non-Lithium Battery devices: 6 months shelf life
Battery	Lithium Battery: Li-ion Polymer Battery 2400mAh Non-Lithium Battery: Ni-MH Battery 2000 mAh
External Sensor	Available with the TE Model
Log Interval	User defined: 1 min. to 60 min. (10 min. as standard setting preconfigured)
Transmission Interval	User defined: 10 min. to 1440 min. (240 min. as standard setting preconfigured)
Recording Duration	Lithium Battery: 90 days (with standard log interval of 10 min. and transmission interval of 240 min.) Non Lithium Battery: 60 days (with standard log interval of 10 min. and transmission interval of 240 min.)
Startup Mode	By default start by button
Stop Mode	By default stop by button (optionally via the USB port or the cloud platform)
Start Delay	User defined: 0 min. to 1440 min. (No start delay as standard setting preconfigured)
Protection Class	IP65
Display	Multifunction Display
Dimensions	103 x 64 x 23 mm for Lithium and 103 x 64 x 30 mm for Non-Lithium
Weight	130 g for Lithium and 175 g for Non-Lithium
Certifications	CE, EN12830, EMC, RoHS, FCC
Validation Certificate	Available as PDF in the Cloud
Software	tempmate.®-Cloud
Report Generation	Readable in the Cloud and locally in the device through the USB 2.0 interface
Password Protection	Cloud Password Protection
Connectivity	LTE 4G cat 1 with 2G Fallback
Location	LBS - GSM Localization
Alarm Configuration	Up to 6 Alarm for temperature + up to 3 Alarm for light, Alarm Delay Programmable
Programmable	Via Cloud
Alarm Type	Single / Cumulative
Recommended Storage Temperature	+15°C to + 25°C
Case Material	Polycarbonate

9. Main Technical Specifications **temp**mate.®-GS2 TH

Battery type	All the variation available in Lithium and Non-Lithium option
Temperature Range	-30°C to +70°C
Temperature Accuracy	±0.3°C (-10°C ~ 45°C) , ±0.5°C (Other)
Temperature Resolution	0.1°C
Humidity Range	0% to 100%rH
Humidity Accuracy	±3% (20% ~ 80%) , ±5% (Other)
Resolution Humidity	1%
Ambient Light	0 to 10000lx / Accuracy 0.01lx
Resolution Ambient Light	0.01 lx
Local Data Storage Capacity	24,200 values for Temperature, Humidity and Light
Shelf-Life	Lithium Battery devices : 12 months shelf life Non-Lithium Battery devices: 6 months shelf life
Battery	Lithium Battery: Li-ion Polymer Battery 2400mAh Non-Lithium Battery: Ni-MH Battery 2000 mAh
External Sensor	Available with the TE Model
Log Interval	User defined: 1 min. to 60 min. (10 min. as standard setting preconfigured)
Transmission Interval	User defined: 10 min. to 1440 min. (240 min. as standard setting preconfigured)
Recording Duration	Lithium Battery: 90 days (with standard log interval of 10 min. and transmission interval of 240 min.) Non Lithium Battery: 60 days (with standard log interval of 10 min. and transmission interval of 240 min.)
Startup Mode	By default start by button
Stop Mode	By default stop by button (optionally via the USB port or the cloud platform)
Start Delay	User defined: 0 min. to 1440 min. (No start delay as standard setting preconfigured)
Protection Class	IP65
Display	Multifunction Display
Dimensions	103 x 64 x 23 mm for Lithium and 103 x 64 x 30 mm for Non-Lithium
Weight	130 g for Lithium and 175 g for Non-Lithium
Certifications	CE, EN12830, EMC, RoHS, FCC
Validation Certificate	Available as PDF in the Cloud
Software	tempmate.®-Cloud
Report Generation	Readable in the Cloud and locally in the device through the USB 2.0 interface
Password Protection	Cloud Password Protection
Connectivity	LTE 4G cat 1 with 2G Fallback
Location	LBS - GSM Localization
Alarm Configuration	Up to 6 Alarm for temperature + up to 6 Alarm for Humidity + up to 3 Alarm for light, Alarm Delay Programmable
Programmable	Via Cloud
Alarm Type	Single / Cumulative
Recommended Storage Temperature	+15°C to + 25°C
Case Material	Polycarbonate

9. Main Technical Specifications **temp**mate.®-GS2 TE

Battery type	All the variation available in Lithium and Non-Lithium option
Temperature Range	-200°C to +100°C
Temperature Accuracy	±0.5°C (-10°C ~ 45°C) , ±1°C (Other)
Temperature Resolution	0.1°C
Humidity Range	Available with the TH Model
Humidity Accuracy	Available with the TH Model
Resolution Humidity	Available with the TH Model
Ambient Light	Available with the T and TH Model
Resolution Ambient Light	Available with the T and TH Model
Local Data Storage Capacity	24,200 values for Temperature
Shelf-Life	Lithium Battery devices : 12 months shelf life Non-Lithium Battery devices: 6 months shelf life
Battery	Lithium Battery: Li-ion Polymer Battery 2400mAh Non-Lithium Battery: Ni-MH Battery 2000 mAh
External Sensor	PT100 (cable length: 1m, length of probe is 6cm length, 4 mm in diameter, sensor tip: stainless steel)
Log Interval	User defined: 1 min. to 60 min. (10 min. as standard setting preconfigured)
Transmission Interval	User defined: 10 min. to 1440 min. (240 min. as standard setting preconfigured)
Recording Duration	Lithium Battery: 90 days (with standard log interval of 10 min. and transmission interval of 240 min.) Non Lithium Battery: 60 days (with standard log interval of 10 min. and transmission interval of 240 min.)
Startup Mode	By default start by button
Stop Mode	By default stop by button (optionally via the USB port or the cloud platform)
Start Delay	User defined: 0 min. to 1440 min. (No start delay as standard setting preconfigured)
Protection Class	IP65
Display	Multifunction Display
Dimensions	103 x 64 x 23 mm for Lithium and 103 x 64 x 30 mm for Non-Lithium
Weight	130 g for Lithium and 175 g for Non-Lithium
Certifications	CE, EN12830, EMC, RoHS, FCC
Validation Certificate	Available as PDF in the Cloud
Software	tempmate.®-Cloud
Report Generation	Readable in the Cloud and locally in the device through the USB 2.0 interface
Password Protection	Cloud Password Protection
Connectivity	LTE 4G cat 1 with 2G Fallback
Location	LBS - GSM Localization
Alarm Configuration	Up to 6 Alarm for temperature, Alarm Delay Programmable
Programmable	Via Cloud
Alarm Type	Single / Cumulative
Recommended Storage Temperature	+15°C to + 25°C
Case Material	Polycarbonate

CONTACT INFORMATION

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

sales@tempmate.com

+49 7131 6354 0

tempmate GmbH
Wannenäckerstr. 41
74078 Heilbronn, Germany

Tel. +49-7131-6354-0
sales@tempmate.com
www.tempmate.com