



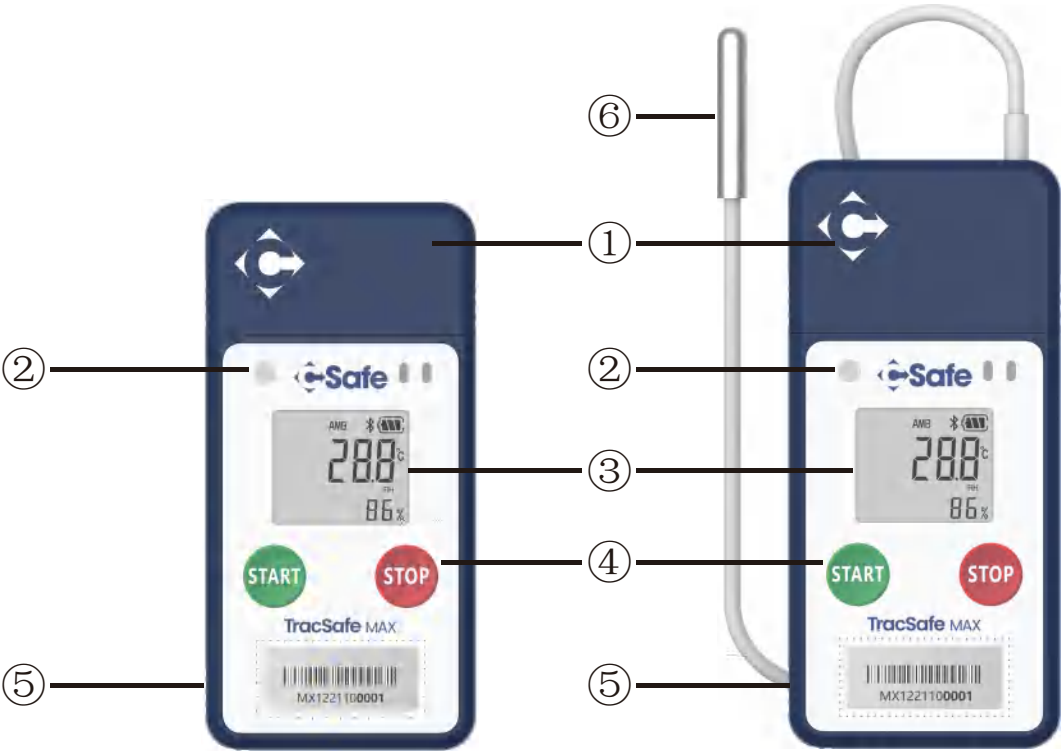
TracSafe MAX User Manual

Multi-use Data Logger

Summary

The CSafe TracSafe MAX Shipment monitor is used to monitor and record temperature and location data associated with temperature sensitive product shipments. The data can be viewed without disturbing the protective thermal packaging by employing Bluetooth Low Energy technology, that allows touchless temperature checks of in-transit shipments using a smart phone or tablet via the CSafe TracSafe app (iOS or Android). It enables direct monitoring of the temperature-sensitive products during the shipment or storage phases and can easily identify if the temperatures have been maintained at the end destination.

The TrcaSafe MAX also has integral LCD display to view the temperature status and notifications via the recessed function buttons. The device also includes a USB port that can be used to directly download the shipment data or configure the shipment alarm limits prior to the shipment using a PC, for users without access to a smart phone or tablet.



① USB cap ② Light Sensor ③ LCD Screen ④ Start / Stop Button ⑤ Internal Sensor ⑥ External Probe

Specification

1.Measurement range:

Internal temperature: -30℃~70℃

Internal humidity: 0%RH~100%RH

External temperature: -200℃~150℃

Shock: 0g~16g

Light: >80Lux

2.Accuracy arrange:

Temperature: $\pm 0.3^{\circ}\text{C}$ (-20℃~40℃) $\pm 0.5^{\circ}\text{C}$ (50℃~85℃) $\pm 1^{\circ}\text{C}$ (-100℃~150℃) $\pm 2^{\circ}\text{C}$ (others)

Humidity: $\pm 3\%$ RH (25℃, 20%RH~80%RH) $\pm 5\%$ RH (others)

Shock: $\pm 0.5\text{g}$

Light: $\pm 5\%$

3.Resolution: Temperature: 0.1℃, humidity: 1%RH, shock: 0.1g

4.Memory Storage Capacity: 32,000 data points (MAX)

5.Logging interval: 3min~60min

6.Start mode: Button push, immediate start, or start delay, use TracSafe APP or CSafe pc software

7.Stop mode: Button push, stop when inserted into pc, stop when memory is full, use TracSafe APP or CSafe pc software

8.Alarm Limits: 1 high and 1 low limit for temperature/ 1 high and 1 low limit for humidity Alarm type: Single, cumulative

9.Alarm type: Single, cumulative

10.Alarm delay time: 10s~24H

11.Connection: USB, Bluetooth

12.Battery Life / Type: 12 month operating life, Lithium replaceable battery, VCC:3.6VDC

13.Environmental Protection: IP65 (non probe version), IP54 (probed version)

14.Dimensions: 96.3 mm(L) x 47.5 mm(W) x 19 mm(H) (non probe version)
103.3mm(L) x 47.5 mm(W) x 19 mm(H) (probe version)

15.Weight: 68g

16.Bluetooth: Operating Frequency: 2402MHz~2480MHz
Rated Output Power: 0dBm

Operation Instructions for PC

1.Download CSafe software

(In this part, we need to add the website which can download CSafe software)

2.Configure Parameter

- Plug the device into the computer, until “USB” symbol is shown on the LCD screen.
- Using CSafe software to configure parameter:
 - If users don’t need to change the default parameter, you can click “Summary” and then click “Quick Reset” to synchronize time.
 - If use need to change the parameter, you can click “Parameter”, click “Save Parameter” after configuration.

Notice:

To avoid time/time zone errors, please click Quick Reset or Save Parameters before the first use or after replacing the battery to ensure that the local time is configured into the recorder.

3.Start Modes

- Press button:
- Press START button for 3 seconds, ► shows on the LCD screen.
- Use CSafe APP/software to start.

Notice:

►symbol blinks continuously, it indicates start delay has been set.

4.Stop Modes

- Press button: Press STOP button for 3 seconds, ■ shows on the LCD screen;
- Auto stop: Stop when memory is full;
- USB stop: Stop after plugging the device into computer;
- Using CSafe APP or software to stop.

Notice:

Press button to stop is default option, this function can be changed if necessary.

5.Download Data

- Plug device into computer and wait until USB symbol shows on the LCD screen:
 1. User can review the PDF and CSV report in the drive which is generated by the device.
 2. Using CSafe software to download the data: the data will be uploaded to CSafe’s platform automatically after downloaded via software. If it fails to upload data automatically, please click "Loading" to upload manually.

6. Reuse


- User can re-configure and start logging after stop device or export the complete data.

Notice:

The history data will be cleared about saving parameter. User can click “History” in CSafe to review the history data if user forget to save/download data.

Operation Instruction for CSafe APP

1. Turn on Bluetooth

- Press START and STOP buttons simultaneously for 3 seconds until the two LED lights blink at the same time and  shows on the LCD screen.

2. Download CSafe APP

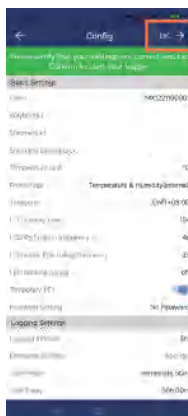
- The user can download the CSafe TracSafe APP in iOS APP store or Google Play for Android
- User needs to register according to the prompts.

3. Configuration and logging


- Click “Loggers” tab to review the device list that are within range.
- Press the stop button then the device will be moved to the top of the device list and the background would become orange.

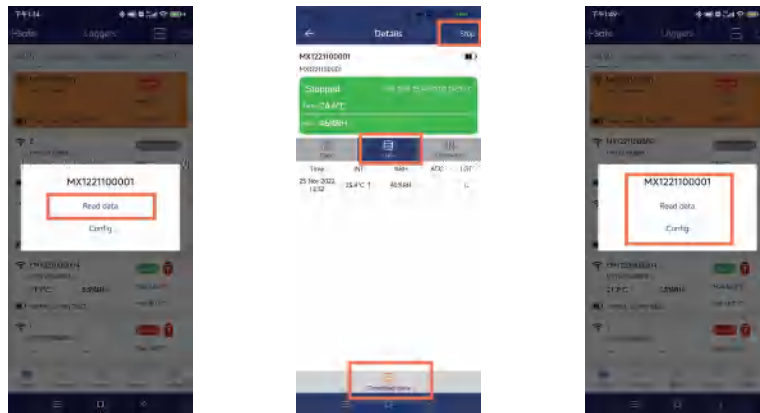


- Click “Config” to configure the parameters then click “Save”.
- Click “OK→” to finish configuration.
- After configuration, click the device and then click “Start” tab to start logging.




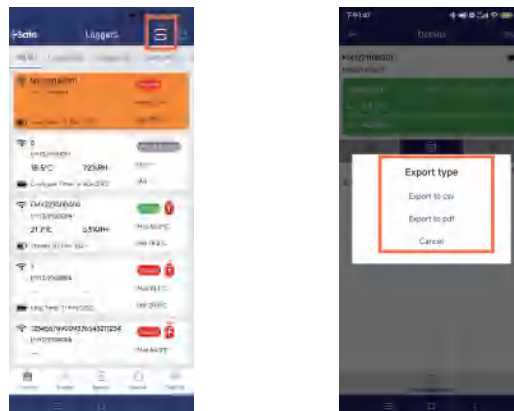
4. Read & download data

- Click  in Loggers page to refresh the device list and click “Read data”.
- After the data has been read completely user can click “stop” to stopping logging; Click “Data” tab to review the history data; user can download PDF and CSV reports via clicking “Download data” tab.



5. Quick operations via scanning the bar code on the device

- In “Loggers” page, click the  to scan the bar code on the device and then user can start quick operations (Start, Config, Read data)

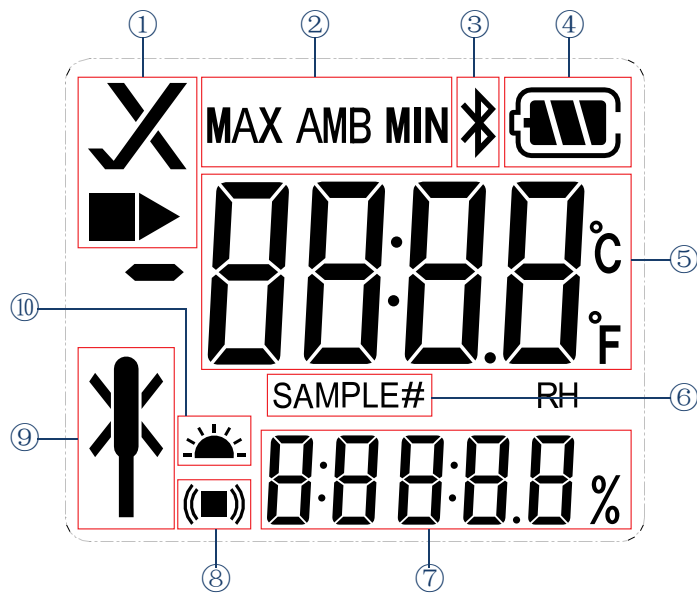


Status indication

1.Button functions

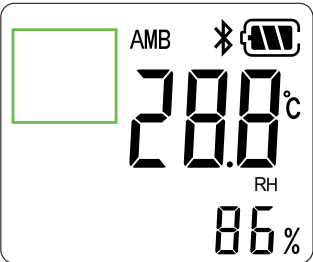
Function	Operation	LED
Start logging	Press START button for 3s	■ blink 5 times
Stop logging	Press STOP button simultaneously for 3s	■ blink 5 times
Turn on/off bluetooth	Press START and STOP button for 3s	■ ■ ■ ■ ■ red and green LED blink 5 times at the same time
Switching the LCD pages	Press START button	■ (or ■)blink once(or twice)
Back to LCD main page	Press STOP button	■ (or ■)blink once(or twice)

2.LCD screen



- ① Status of logging ② MAX, AMB, MIN ③ Bluetooth ④ Battery
⑤ Temperature value ⑥ Sample # ⑦ Humidity value/total sampling points ⑧ Shock
⑨ Status of external probe ⑩ Light

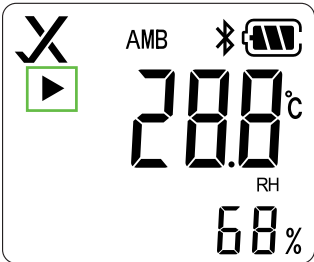
LCD interface



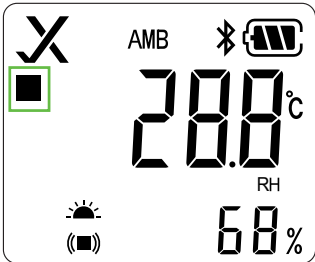
1. Not started



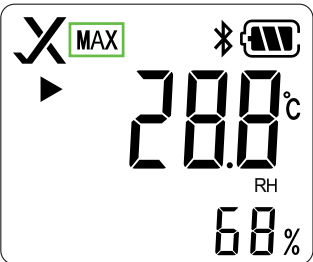
2. Start delay



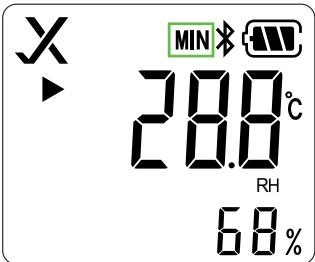
3. Started



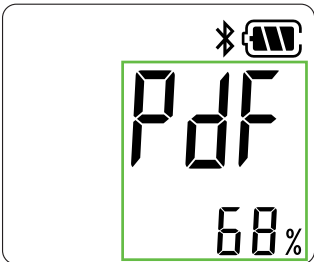
4. Stopped



5. MAX



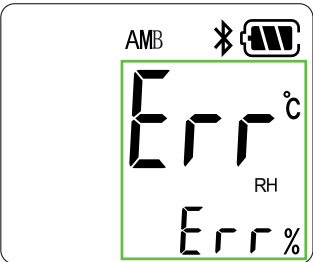
6. MIN



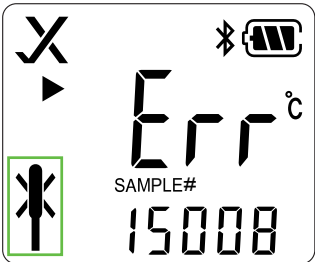
7. Generating reports



8. USB connected



9. Internal sensor error










10. External sensor error



11. Re-save parameters

LCD symbols

Function	
	Started
	Stopped
	No alarm
	Alarm
	External probe is connected.
	External probe error
	Bluetooth is turned on.

- Note:**
- 1. Please store the device in a room temperature environment.
 - 2. When using the device for the first time, be sure to connect the computer for parameter configuration to synchronize time.
 - 3. Please do not take out the battery when recording.
 - 4. If there is no button operation for 15 seconds, the LCD screen will automatically be off. Press any button to light up the screen again if necessary.
 - 5. After configuration, the history data will be cleared. Please read and save the historical data of the device before configuration.
 - 6. To ensure humidity accuracy, please avoid contacting unstable chemical solvents or other chemical compounds, especially avoid long-term storage or exposure to high concentration of ketene, acetone, ethanol, isopropanol, toluene and other environments.
 - 7. When the battery symbol on the LCD is less than two bars, please do not use it for long-distance transportation.
 - 8. Please enable the Bluetooth function before connecting the device via TracSafe APP.

Factory default parameters

Items	Default parameter	Note
Logging interval	5 min	
Start mode	Press button to start	
Start delay	No start delay	
Press button to stop	Enabled	
Temporary PDF	Enabled	
Temperature units	°C	
LCD display time	15s	
LCD main page display time	60s	
LCD other pages display time	3s	
LED blink	No blinking	
Time zone	UTC-05: 00	
Light sensor	Not enabled	
Shock sensor	Not enabled	
Probe type	Probe : External & Internal Temperature Device : Internal Temperature	
Alarm type	Single	
Alarm delay	No delay	
Temperature high limit H1	8°C	
Temperature low limitL1	2°C	
Humidity high limit	Not enabled	
Humidity low limit	Not enabled	

FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled Environment.

IC Caution

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) L'appareil ne doit pas produire de brouillage;
- (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.