

**Elitech**<sup>®</sup>

*Innovation Preceding All*

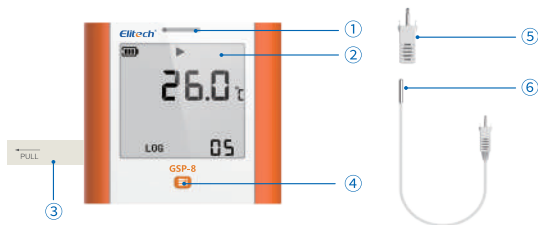
# GSP-8

# User Manual

## Overview

GSP-8 data logger is used to record the temperature/humidity of foods, medicines, chemicals and other goods during storage, transportation and in each stage of the cold chain including cooler bags, cooling cabinets, refrigerators, medicine cabinets, laboratories, reefer containers, and trucks.

The logger features a large LCD screen, one button for operation, an internal temperature sensor, and an external temperature-humidity-combined probe (optional). It supports audible-visual alarm, two storage modes, and auto shortens logging interval function during alarms. also for wall mounting through the holes at the back of logger.



① LED Indicator

② LCD Screen

③ Insulator Strip

④ Button

⑤ Short External Temperature-humidity Probe (optional)

⑥ Long External Temperature-humidity Probe (2m, optional)

## Specifications

<b>Sensor</b>	Digital temperature humidity sensor
<b>Temperature Measurement Range</b>	Internal sensor: -20~60°C (-4°F~140°F); External probe: -40~85°C (-40°F~185°F) *
<b>Humidity Measurement Range</b>	External probe: 1~99%RH
<b>Temperature Accuracy</b>	±0.3°C/±0.6°F (-20~40°C), ±0.5°C/±0.9°F (others)
<b>Humidity Accuracy</b>	±3%RH (25°C) ±5%RH (others)
<b>Operating Temperature Range</b>	-20~60°C (-4°F~140°F)
<b>Ambient Temperature during power charging</b>	0~40°C (32°F~104°F)
<b>Resolution</b>	0.1°C/°F; 0.1%RH
<b>Memory</b>	Maximum 100,000 points
<b>Logging Interval</b>	10 seconds to 24 hours
<b>LCD ON</b>	15/30/45/60 seconds; always on
<b>Backlight ON</b>	15/30/45/60 seconds; always on
<b>Start Mode</b>	Press button; auto start; timed start

<b>Stop Mode</b>	Press button; use software; auto stop
<b>Alarm Thresholds</b>	Configurable, temperature: up to 3 high limits and 2 low limits; humidity: 1 high limit and 1 low limit
<b>Alarm Type</b>	Single; cumulative
<b>Alarm Delay</b>	10 seconds to 24 hours
<b>Data Interface</b>	USB
<b>Report Format</b>	Auto PDF report; PDF/EXCEL/TXT** by ElitechLog software
<b>Battery</b>	Rechargeable 18650 lithium battery
<b>Battery Life</b>	Store and use for 2 years (@25°C and 15 minutes logging interval)
<b>Dimensions</b>	94 x 90 x 29 mm
<b>Weight</b>	173g

\* At ultralow temperature, the LCD is slow but does not affect normal logging. It will be back to normal after the temperature rises.

\*\*TXT for Windows ONLY.

# Operation


## 1. Activate Logger

Pull out the insulator strip from the side of the logger to activate the battery.

## 2. Install Software

Please download and install the free ElitechLog software (macOS and Windows) via [www.elitechlog.com](http://www.elitechlog.com).

## 3. Configure Parameters

First, connect the data logger to the computer via USB cable, wait until the  icon shows on the LCD, then configure via:

### ElitechLog software:

- If you do not need to change the default parameters (in Appendix); please click **Quick Reset** under **Summary** menu to synchronize local time before usage;
- If you need to change the parameters, please click the **Parameter** menu, enter your preferred values, and click the **Save Parameter** button to complete the configuration.

### **Warning! For first time user or after battery replacement:**

*To avoid time or time zone errors, please make sure you click **Quick Reset** or **Save Parameter** before usage to sync and configure your local time into the logger.*

## 4. Start Logging

### **Press Button:**

Press and hold the button for 5 seconds until the ► icon shows on the LCD, indicating the logger starts logging.

### **Auto Start:**

**Immediate Start:** The logger starts logging after remove it from the computer.

**Timed Start:** The logger starts counting after being removed from the computer; it will start logging automatically after the set date/time.

**Note:** If the ► icon keeps flashing, it means the logger configured with start delay; it will start logging after the set delay time elapses.

## 5. Mark Events

Double click the button to mark current temperature and time, up to 10 groups of data. After marked, it will be indicated by Log X and SUC on the LCD screen (X means the marked group).

## 6. Stop Logging

**Press Button\*:** Press and hold the button for 5 seconds until the ■ icon shows on the LCD, indicating the logger stops logging.

**Auto Stop\*\*:** When the logging points reach the maximum memory, the logger will stop automatically.

**Use Software:** Open ElitechLog software, click **Summary** menu, and **Stop Logging** button.

**Note:** \*Default stop method is **Press Button**. If you disabled it, the button operation would be invalid; please open the ElitechLog software and click **Stop Logging** button to stop it.

\*\*The **Auto Stop** function will be disabled automatically if you enabled the **Circular Logging**.

## 7. Download Data

Connect the data logger to the computer via USB cable, wait until  shows on the LCD screen, then download data:

**Without ElitechLog Software:** Simply find and open the removable storage device **ElitechLog**, save the auto generated PDF report to your computer for viewing.

**With ElitechLog software:** After the logger auto-upload its data to the ElitechLog software, click **Export** and select your preferred file format to export. If data failed to auto-upload, please manually click **Download** and then repeat above operation.

## 8. Reuse the Logger

To reuse a logger, please stopped it first; then connect it to your computer and use ElitechLog software to save or export the data.

Next, reconfigure the logger by repeating the operations in **3. Configure Parameters\***. After finished, follow **4. Start Logging** to restart the logger for new logging.

**Warning!** *\*To make space for the new loggings, All previous logging data inside the logger will be deleted after re-configuration, If you forgot to save/export data, please try to locate the logger in the **History** menu of ElitechLog software.*

## 9. Repeat Start:

If you have enabled **Repeat Start** function\*, simply press and hold the button for 5 seconds to quickly restart the stopped logger without any configuration.

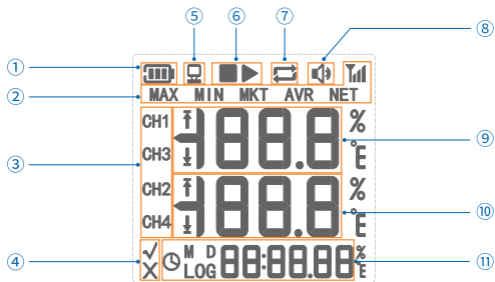
**Note:** *\*Repeat Start is disabled by default to prevent data loss caused by misoperation. Please backup data before **Repeat Start** by repeating **7. Download Data**.*

# Status Indication

## 1. Buttons

Operations	Function
Press and hold the button for 5 seconds	Start/Stop logging
Press and release the button	Check/Switch interfaces
Double click the button	Mark events









## 2. LCD Screen



① Battery Level	⑤ Connected to PC	⑨ Temperature
② Functions	⑥ Stopped/Logging	⑩ Humidity
③ Channel Selection	⑦ Circular Logging	⑪ Logging Interval/ Date or Time
④ Over Limit Alarm	⑧ Buzzer (Enabled)	



### 3. LCD Interface

Not Start:		Maximum:	
Delay/Timed Start (▶ flashes):		Minimum:	
Logging:		High Limit:	
Average:		Low Limit:	

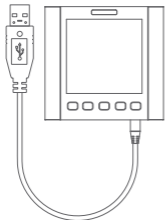
*Note: If configured to use the internal sensor (temp), the humidity will not display by default.*

### 4. LED & Buzzer Indication

LED Indicator	Buzzer*	Meaning...
■ flash once	🔊 beeps once	Configuration completed
■ flash twice	🔊 beeps twice	Started
■ flash 3 times	🔊 beeps 3 times	Stopped
■ flash 4 times	🔊 beeps 4 times	Timed/Delay start
■ flash once every 15 seconds	🔊 in alarm status*	
■ flashes once every 1 seconds	/	Charging
■ always on, and then off	/	Charged

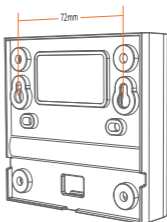
\* The buzzer beeps if audible alarm is enabled.

## Battery Charging



Connect the included USB cable into a computer or power adapter for battery charging.

## Wall Mounting








GSP-8 supports hanging-mount and stand (optional) only, please confirm the installation distance and preferred nail size before hanging the logger to wall (nail not included).

## What's Included

- GSP-8 Temperature (Humidity) Data Logger x 1
- Micro USB Cable x 1
- User Manual x 1
- Certificate of Verification x 1
- Long External Temperature-humidity Probe (2m) x 1 (Optional)
- Certificate of Verification (2m) x 1 (Optional)
- Short External Temperature-humidity Probe x 1 (Optional)
- Certificate of Verification (Short) x 1 (Optional)
- Stand x 1 (Optional)

## **Warning !**

-  If you use the logger for the first time, please use ElitechLog software to synchronize system time and configure parameters.
-  Any parameter configuration on ElitechLog software will delete all logged data inside the logger. Please save data before you apply new configurations.
-  The LCD screen will auto off after 15 seconds of inactivity (by default). Press the button again to turn on the screen. The backlight ON time is configurable via ElitechLog software.
-  To ensure the humidity accuracy, please avoid contact with unstable chemical solvents or compounds, especially avoid long-term storage or exposure to the environments with high concentrations of ketene, acetone, ethanol, isopropanol, toluene, etc.
-  Recommended to remove the battery from the - side (cathode).

## Appendix

### Default Parameters:

<b>Logging Interval</b>	15 minutes
<b>High Temperature Limit</b>	60°C
<b>Low Temperature Limit</b>	-30°C
<b>Button Tone</b>	Enable
<b>Audible Alarm</b>	Disable
<b>Logging interval shortened in alarm</b>	Disable
<b>LCD ON</b>	15 seconds
<b>Backlight ON</b>	OFF

**Elitech<sup>®</sup>**

*Innovation Preceding All*