

# 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)

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## Specifications

<b>Sensor</b>	Digital temperature humidity sensor
<b>Temperature</b>	Internal sensor: -20~60°C (-4°F~140°F); External probe: -60~85°C (-40°F~185°F)*
<b>Measurement Range</b>	
<b>Humidity</b>	External probe: 1~99%RH
<b>Measurement Accuracy</b>	±0.2°C/±0.6°F (-20~40°C), ±0.2°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>	0.2°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

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<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 (825°C and 15 minutes logging interval)
<b>Dimensions</b>	94 × 90 × 29 mm
<b>Weight</b>	173g

\* At ultimate 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.

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## 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 (Mac OS and Windows) from Elitech US: [www.elitechusa.com](http://www.elitechusa.com) or Elitech UK: [www.elitechuk.com](http://www.elitechuk.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.

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#### 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 AUC 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 EliteTechLog 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 EliteTechLog software and click **Stop Logging** button to stop it.  
\*\*The **Auto Stop** function will be disabled automatically if you enabled the **Circular Logging**.

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#### 7. Download Data

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

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

**With EliteTechLog software:** After the logger auto-upload its data to the EliteTechLog 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 EliteTechLog 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 forget to save/export data, please try to locate the logger in the **History** menu of EliteTechLog 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**.

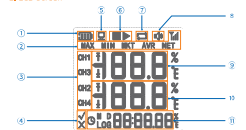
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#### Status Indication

##### 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	6. Temperature
2. Functions	6. Stopped/Logging	7. Humidity
3. Channel Selection	7. Circular Logging	8. Logging Interval
4. Over Limit Alarm	8. (Enabled)	Date or Time

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#### 3. LCD Interface

Net Start:	Maximum:
Delay/Timed Start (► flash):	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 15 seconds	/	Charging
always on, and then off	/	Charged

\*The buzzer beeps if audible alarm is enabled.

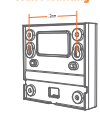
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#### Battery Charging



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

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#### Warning!

- 1. If you use the logger for the first time, please use EliteTechLog software to synchronize system time and configure parameters.
- 2. Any parameter configuration on EliteTechLog software will delete all original data inside the logger. Please save data before you apply new configurations.
- 3. The LCD screen will auto off after 15 seconds of inactivity (by default). Press the button again to turn on the screen. The background ON time is configurable via EliteTechLog software.
- 4. 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 ketone, acetone, ethanol, isopropanol, toluene, etc.
- 5. Recommended to remove the battery from the + side (L-shaped).

#### Appendix

##### Default Parameters:

Logging Interval	15 minutes
High Temperature Limit	60°C
Low Temperature Limit	-20°C
Button Tone	Enable
Audible Alarm	Disable
Logging interval shortened in alarm	Disable
LCD ON	15 seconds
Backlight ON	OFF

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