**Product Overview**

Whether in the storage or transportation, the GSP-6 is mainly used to record temperature and humidity of food, pharmaceutical and chemical products, along with others...

The device is widely applicable to each stage of the logistic process, such as refeer containers and trucks, cooling bags and cabinets, medical and laboratory cold storage, among others...

The GSP-6 counts with a big LCD screen, a menu button, an external temperature sensor and an external temperature-humidity combined sensor.

There are two ways to store data on the unit: stop when the memory is full or continue recording over the existing data. The GSP-6 also has a sound-light alarm and the record interval will automatically be shorten in case the temperature goes over limit. Additionally, two magnets on the back of the device make it convenient to attach the logger to any metal surface.

**Specification**

Dimensions: 118 (length) * 61.5 (width) * 19 (height) (mm)

**Technical Parameters**

- **Temperature measuring range:** -40°C ~ +60°C (Note: Cryogenic probe measuring range: -80°C ~ 150°C)
- **Temperature accuracy:** ±0.5°C (between -40°C and 40°C) ±1.2°C (others)
- **Humidity accuracy:** ±3%RH (25°C, 20% ~ 80%RH); ±5%RH (others)
- **Resolution:** temperature 0.1°C, humidity 0.1%RH
- **Record capacity:** 16000 points (MAX)
- **Record interval:** 10 sec ~ 24 hour continuously set
- **Data interface:** USB
- **Power supply:** single-use 3.6V lithium battery or powered via USB
- **Battery life:** two years at room temperature with 15 minute record interval and buzzer alarm disabled
- **Ambient temperature:** -30°C ~ 70°C. At low temperature environment, the LCD screen displays normal readings but slower. It will display data normally when the ambient temperature returns to normal.

**Use the Data Logger for the First Time**

1. Install the data management software for GSP-6 data logger (Using an USB port connect the logger to a computer and install the software).
2. After connected to the computer, the software will automatically upload the information from this logger.
3. To configure the settings, go to "Parameter", after the changes have been made, click "Save Parameter" and exit the program. The date and time will automatically synchronize with your computer after the parameters was successfully saved.
4. Press and hold the left button for more than 4 seconds, the logger will start recording when the symbol flashes out. Click the icon "upload data" to view the data.
5. Log out the data management software.

**Obtain Recorded Data**

The data recorded will not be cleared from the unit after the data was transferred. The data can also be extracted when the data logger is currently in use and it will not affect its recording performance.

1. Insert the data logger to a USB port, the icon and a green light LED will flash out in the screen when connected.
2. Open the data management software, the data logger will connect automatically and upload data.

Note: the parameters should be set on the computer. Please refer to the additional support file of the management software.

**Functions**

- **Button:** switch interfaces, start/stop recording.

  - The data logger displays the following interfaces: display status, Max, Min, upper limit setpoint, lower limit setpoint and average value.

  If the display status is off, press the button to enter. (See Fig.1)

  ![Fig.1](image)

  - Click at the menu button to switch the screen. The data logger will display the current measured temperature and humidity values.

**Symbol**

<table>
<thead>
<tr>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Lights up" /></td>
<td>The data logger is recording.</td>
</tr>
<tr>
<td><img src="image" alt="Lights out" /></td>
<td>The data logger is in start delay status.</td>
</tr>
<tr>
<td><img src="image" alt="Lights on" /></td>
<td>The data logger stops recording.</td>
</tr>
<tr>
<td><img src="image" alt="Both do not light" /></td>
<td>The data logger is not turned on.</td>
</tr>
<tr>
<td><img src="image" alt="Lights up" /></td>
<td>The measured temperature/humidity value is over the upper limit setpoint.</td>
</tr>
<tr>
<td><img src="image" alt="Lights down" /></td>
<td>The measured temperature/humidity value is over the lower limit setpoint.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>The data logger is in cyclic record mode.</td>
</tr>
<tr>
<td><img src="image" alt="Lights not" /></td>
<td>The data logger is in full record stop mode.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>Receiver alarm is enabled.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>The data logger is connected to a computer.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>The figure in the third line indicates the record points.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>The figure in the third line indicates the current time.</td>
</tr>
</tbody>
</table>

**Operation Instruction**

1. **Start recording**

   Open the data management software and set the parameters, the data logger stays unstarted. Press and hold the button in status display interface for more than 4 seconds until the symbol lights up, the data logger starts recording. It displays starting when flashes out.

   Note: The history data will be cleared after setting parameters by the data management software. Please read and save the history data before parameter settings.

2. **Stop recording:**

   - 1) The data logger stops recording automatically when the storage space is full. It stops recording when the symbol shows on the display interface.
   - 2) When "stop recording by button" is enabled in the parameters, press and hold the button for more than 4 seconds until the symbol shows, it stops recording.
   - 3) Stop recording by the data management software until the symbol shows on the display interface.

   When the data logger is paused, it will not be able to start the data logger again until the parameters are set in the data management software.

3. **Switch interfaces:**

   Click the button to switch the interfaces.

4. **Alarm status:**

   - ![Lights up](image) indicates the measured temperature/humidity value is over the upper limit setpoint. ![Lights down](image) indicates the measured temperature/humidity value is over the lower limit setpoint.

5. **Record interval**

   Set the record interval by the data management software, the data logger will save the record data accordingly. When the record interval is set, the software will automatically calculate the record duration.
6. Record duration:
The duration from the start point to a full capacity stop.
7. Clear the recorded data:
The recorded data can be cleared by the data management software by setting parameters.
8. Clock and calendar:
Set and adjust the clock and calendar by the data management software.
9. Sensor status:
On the display, "Er" indicates sensor fault or unconnected. "NC" in the data list of the software indicates sensor unconnected.
10. LED indicator and buzzer:
When the data is over the upper/lower limit of temperature/humidity, the red LED indicator will flash 8 times out every 15 seconds.
When the data logger is connected to a computer, the green LED indicator will light up normally.
When switching to a different mode:
- paused mode, buzzer beeps once and LED indicator flashes once.
- started mode, buzzer beeps twice and LED indicator flashes twice.
- stop mode, buzzer beeps 3 times and LED indicator flashes 3 times.
- start delay mode, buzzer beeps 4 times and LED indicator flashes 4 times.
11. Start delay:
In the Etechwin software parameters settings, set "start delay time"; keep pressing the button for about 4 seconds until the symbol flashes out. The LED indicator displays a solid light when recording.
12. Temperature unit:
Two units are optional (°C/°F) with °C as default.
13. Max/Min Display Setting:
In the Etechwin software parameters settings, select max/min recorded or by date.
14. Product serial number and user information:
Set it by the data management software.
15. Auto off time of the screen:
Set it by the data management software.
16. Alarm interval:
Set it by the data management software.
17. Recording and saving modes:
In the data management software, select the record and save mode preferred, full record stop or cyclic record.
18. Alarm shortening of record interval:
This function can be enabled in "full record stop" mode. If record interval is longer than 1 minute and over limit data is detected, the next record interval will be automatically shortened to 1 minute. When the data recovers to the normal range, the record interval returns to the set record interval.
19. Average temperature and humidity:
The average value refers to the average of all the stored temperature and humidity data since the data logger started.
20. Install Probe:
Please install the probes to the corresponding jacks of T and H, details are shown below:

21. Software Sensor Type:
Note: Temperature and humidity sensor should be installed in place. Select the desired mode from the parameters screen using Etechwin Data Management Software.

22. Model Selection:

23. Battery indications:
There is battery indication on the screen of the data logger.

Note: Please replace the battery ASAP when the battery capacity is less than or equals to 10%.

24. Etechwin Data Management Software:
All the data from the data logger will be converted into a graph when transferred to Etechwin software. The history data can be saved, analyzed, and exported into .xlsx or PDF file. In the Etechwin software, click in the "Graph" tab, "export data" and then select the file format preferred. Go to "Graph", click "Export Data" and select the file format that you'd like to be saved onto your computer.

25. Default parameters:
Note: In the brackets are default values.
Running status: unstarted
Record interval (15 minutes)
Start delay time (6 minutes)
Data logger ID (1)
Stop by button (Disabled)
Temperature unit (°C)
Upper temperature limit (60°C)
Lower temperature limit (-30°C)
Temperature calibration (0°C)
Upper humidity limit (90%)
Lower humidity limit (10%)
Humidity calibration (0%)
Button tone (disabled)
Buzzer alarm (disabled)
Buzzer alarm interval (disabled)
Auto turn-off time of the screen (15 sec)
Saving mode: (full record stop)
Auto shortening of record interval in case of over limit (disabled)
Set clock (current time)
Set user info (GSP-6 Temperature & Humidity Data Logger)

26. Steps to replace the battery:

1. Open the battery compartment.
2. Remove the old battery.
3. Put in the new battery.
4. Close the battery compartment.

Notice: Cathode is on the end with a spring in the battery jar.

Standard configuration:

To download software, please visit http://www.e-echtech.cn.
Optional accessory:
One piece of data management software setup disk (including the cabinet).

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