Product overview

This data logger is mainly used to record the temperature and humidity of food, pharmaceuticals and chemicals, etc. in the storage and transportation. It is widely applicable to each link in storage and logistics of cold chain, such as refrigerated container, refrigerator truck, cooler bag, cool cabinet, medicine cabinet, cold storage, laboratory, etc.

This data logger conforms to GSP standard of new edition. It has one big LCD screen, a button, an external temperature sensor, and an external humidity sensor. With two modes to save data: full record stop and cyclic record, the data logger has the functions of over limit sound-light alarm. It can also automatically shorten the record interval in case of over temperature and humidity limit. Two pieces of built-in magnets are convenient to fix the data logger onto metal material surface.

Specification

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

Technical parameters

Temperature measuring range: -40°C~85°C
Temperature accuracy: ±0.5°C (20°C~40°C); ±1°C (others)
Humidity range: 10%~99%
Humidity accuracy: ±3%RH (25°C, 20%~90%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 record but it will go slowly. 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 RC-61 data logger (referred to as the data management software). Insert the data logger to a computer USB port and install the setup software according to the prompt information.
2. Open the software, and the data logger will automatically upload information after connected to the computer.
3. Click the icon “set parameter” and set the parameters according to your desire. Click “save parameter” to exit from the setting interface.
4. Press and hold the left button for more than 4 seconds, the symbol lights to start recording. Click the icon “upload data” to view the data.
5. Log out the data management software.

Obtain recorded data

You can obtain the recorded data from the data logger and in this course it will not clear the stored data. If the data logger is recording data, the data extraction process will not influence the running status of the data logger.

1. Plug the data logger to a computer USB, the icon will light in the screen after connection. The green LED indicator will light at the same time.
2. Open the data management software, the data logger will connect automatically and upload data.

Note: The parameters are to be set on computer. Please refer to the help file of the data 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)

Press and release the button, the data logger enters display status and displays the currently measured temperature and humidity values.

Symbol  Status  Meaning
-------  -------  ---------------------
  lit  krys.  The data logger is recording,
  lit  kbees.  The data logger is in start delay status,
  lit  kyr.  The data logger stops recording,
  lit  kyr.  The data logger is not turned on,

  lit  kyr.  The measured temperature/humidity value is over the upper limit setpoint,
  lit  kyr.  The measured temperature/humidity value is over the lower limit setpoint,
  lit  kyr.  The data logger is in cyclic record mode,
  lit  kyr.  The data logger is in full record stop mode,
  lit  kyr.  Buzzer alarm is enabled,
  lit  kyr.  The data logger is connected to a computer,
  lit  kyr.  The figure in the third line indicates the record points,
  lit  kyr.  The figure in the third line indicates the current time,
6. Record duration:
The time the data logger takes from record start to record full 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:
In display interface, “Ern” 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 once every 15 seconds.
When the data logger is connected to a computer, the green LED indicator will light normally.
To change the running mode to:
- unstarted 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:
Set “start delay time” in the “set parameter” tab by the software, keep pressing the button for more than 4 seconds until the symbol flashes. lights normally when it starts recording.
12. Temperature unit:
Two units are optional (°C/°F) with °C as default.
13. Product serial number and user information:
Set it by the data management software.
14. Auto off time of the screen:
Set it by the data management software.
15. Buzzer alarm interval:
Set it by the data management software.
16. Recording and saving modes:
Set the two types of recording and saving modes, full record stop and cyclic record by the data management software.
17. Auto 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.
18. Average temperature and humidity:
The average value refers to the average of all the stored temperature and humidity data since the data logger started.
19. Install the external sensors:
Please make sure the external temperature and humidity sensors installed correctly.
20. Battery indications:
There is battery indication on the screen of the data logger.

<table>
<thead>
<tr>
<th>Battery Indicator</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25% ~ 100%</td>
</tr>
<tr>
<td></td>
<td>10% ~ 25%</td>
</tr>
<tr>
<td></td>
<td>&lt; 10%</td>
</tr>
</tbody>
</table>

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

21. Data management software:
The software can analyze data, display data sheet and draw curve graph. You can query, save, print and export historical data in excel and pdf. It supports Windows xp, Windows 7, Windows 8 and Windows 10 systems. Please refer to the help file for detailed use.
22. Default parameters:
Note: In the brackets are default values.
Running status: unstarted
Record interval (15 minutes)
Start delay time (0 minutes)
Data logger ID (1)
Stop by button (disabled)
Temperature unit (°C)
Upper temperature limit (60°C)
Lower temperature limit (-30°C)
Temperature calibration (°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)

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:

<table>
<thead>
<tr>
<th>Name</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSP-6 Temperature and Humidity Data Logger</td>
<td>1</td>
</tr>
<tr>
<td>External humidity sensor</td>
<td>1 (2m)</td>
</tr>
<tr>
<td>External temperature sensor</td>
<td>1 (2m)</td>
</tr>
<tr>
<td>Micro USB data cable</td>
<td>1</td>
</tr>
<tr>
<td>User manual</td>
<td>1</td>
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</table>

To download software, please visit http://www.e-elitech.cn.

Optional accessory:
One piece of data management software setup disk (including the cabinet).

Elitech Technology, Inc.
Tel:+1 408 899 3866
Email:sales@elitechus.com
www.elitechlog.com
addr:1551 McCarthy Blvd, Suite 112Milpitas, CA 95035 USA

ELITECH(UK) LIMITED
Tel:0044-203-645-1002
Email:info@elitech.co.uk
www.elitech.co.uk
addr:2 Chandlers Mews,London,E14 8LA
6. Record duration:
The time the data logger takes from record start to record full stop.

7. Clear the recorded data:
The recorded data can be cleared by the data management software by setting parameters.

8. Clock and calendar:
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<tr>
<td><img src="image" alt="Battery Indicator" /></td>
<td>10% - 25%</td>
</tr>
<tr>
<td><img src="image" alt="Battery Indicator" /></td>
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Start delay time (0 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 (9%)
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)

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Elitech Technology, Inc.
Tel:+1 408 889 3866
Email:sales@elitechus.com
www.elitechlog.com
addr:1551 McCarthy Blvd, Suite 112Milpitas, CA 95035 USA

ELITECH(UK)LIMITED
Tel:0044-203-645-1002
Email:info@elitech.uk.com
www.elitech.uk.com
addr:2 Chandlers Mews,London,E14 8LA

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