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℃~85℃
Temperature accuracy: ±0.5℃(-20℃~40℃); ±1℃ (others)
Humidity range: 10%~99%
Humidity accuracy: ±3%RH (25℃,20% ~ 90%RH); ±5%RH (others)
Resolution: temperature 0.1℃, 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℃~70℃. At low temperature environment, the LCD screen displays normal record but a little 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)

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
▶	It lights.	The data logger is recording.
	It flashes.	The data logger is in start delay status.
■	It lights.	The data logger stops recording.
▶ ■	Both do not light.	The data logger is not turned on.
⬆	It lights.	The measured temperature/humidity value is over the upper limit setpoint.
⬇	It lights.	The measured temperature/humidity value is over the lower limit setpoint.
⇄	It lights.	The data logger is in cyclic record mode.
	It does not light.	The data logger is in full record stop mode.
🔊	It lights.	Buzzer alarm is enabled.
🖵	It lights.	The data logger is connected to a computer.
LOG	It lights.	The figure in the third line indicates the record points.
⊘	It lights.	The figure in the third line indicates the current time.

The figure in the first line indicates the current temperature, the figure in the second line indicates the current humidity.
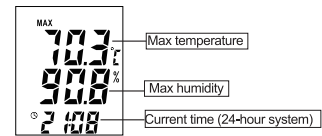
Max value interface. See Fig.2.

Max temperature
Max humidity
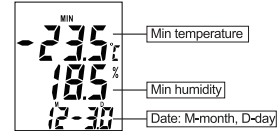Current time (24-hour system)
Fig.2

Min value interface. See Fig.3.

Min temperature
Min humidity
Date: M-month, D-day
Fig.3

Upper limit setpoint interface. See Fig.4.

Upper limit setpoint of temperature
Upper limit setpoint of humidity

Fig.4

Lower limit setpoint interface. See Fig.5.

Lower limit setpoint of temperature
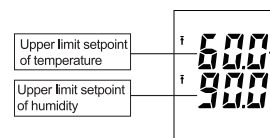Lower limit setpoint of humidity

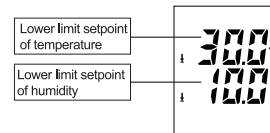Fig.5

Average value interface, indicating the average value of all the temperature and humidity data measured. See Fig.6.
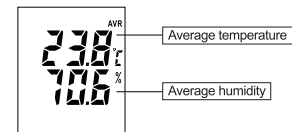

Average temperature
Average humidity
Fig.6

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, the data logger starts recording. It delays starting when ▶ flashes.
Note: The historical data will be cleared after setting parameters by the data management software. Please read and save the historical data before parameter settings.
2. Stop recording:
1)In full record stop mode, 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, 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.
It is not permitted to start the data logger again after the logger has been stopped.You should firstly set the parameters of the logger through the data management software ,then start it again.
3. Switch interfaces:
Press and release the button to switch the interfaces in order and cycle.
4. Alarm status:
In recording, ⬆ lights to indicate the measured temperature/humidity value is over the upper limit setpoint. ⬇ lights to indicate 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 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, "Err" 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 (℃/℉) with ℃ 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.

Battery indicator	Capacity
	25%～100%
	10%～25%
	< 10%

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 minute)
Data logger ID (1)
Stop by button(Disabled)
Temperature unit (℃)
Upper temperature limit (60℃)
Lower temperature limit (-30℃)
Temperature calibration (0℃)
Upper humidity limit (90%)
Lower humidity limit (10%)
Humidity calibration (0%)
Button tone (disabled)
Buzzer alarm (disabled)
Buzzer alarm interval (disabled)
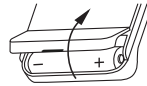Auto turn-off time of the screen (15 sec)
Saving mode: (full record stop)

Auto shortening of record interval in case of over limit (disabled)
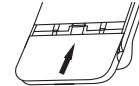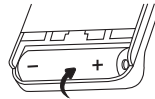Set clock (current time)
Set user info (GSP-6 Temperature & Humidity Data Logger)

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:

Name	QTY
GSP-6 Temperature and Humidity Data Logger	1
External humidity sensor	1 (2m)
External temperature sensor	1 (2m)
Micro USB data cable	1
User manual	1

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

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

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www.elitechlog.com
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6. Record duration:
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7. Clear the recorded data:
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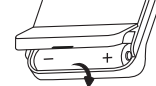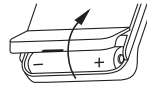Auto turn-off time of the screen (15 sec)
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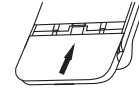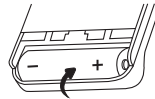Set clock (current time)
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