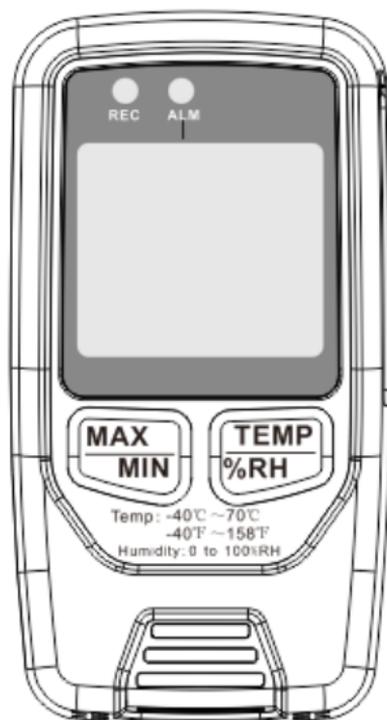


User's Manual

Temperature and Humidity Data logger



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1. Introduction

This data logger is designed with a high accuracy Temperature & Humidity Sensor, providing fast response and stability. It is used for monitoring and collecting data of environment temperature and ambient humidity.

It is most commonly used for indoor temperature measuring, warehouse environment monitoring, logistics transportation, telecommunication rooms, department stores, libraries, etc.

2. Features:

- Memory for 32700 readings
- LCD to show logging information easily
- User selectable logging intervals from 1 sec to 24 hours
- Battery life is over 2 years with the LEDs, back light & alarms turned off and used at 22°C
- LEDs to indicate the meter is recording and when alarms are exceeded
- Alarm display on graph if user-defined max/min values are exceeded
- Analysis software used to view logged results graphically or by text

- USB Computer Interface to set up the data logger and download results

3. Technical Data

Temp. range	-40°C~70°C(-40°F~158°F)
Temp. Accuracy	-40°C~40°C/-40°F~104°F :±1.0°C/1.8°F 40°C~70°C/104°F~158°F) :±2.0°C/3.6°F
Humidity range	0 ~ 100%RH
Humidity Accuracy	35 ~ 80%RH: ±3.0%RH 0 ~ 35%RH & 80~100%RH: <±5%RH
Resolution	0.1%RH, 0.1°C
Memory	32700 readings (16350 each for temperature and humidity)
Measuring rate	1 sec. to 24hrs
Analysis software	Windows 98/2000/XP, Win 7 and Win 8
Accessories	3.6V Lithium battery, software, wall holder, padlock, USB cable, manual & box

4. Meter Description

1 REC LED indicator

2 Alarm LED indicator

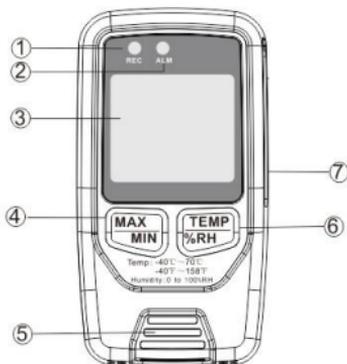
3 LCD display

4 MAX/MIN button

5 Humidity and Temperature sensor

6 Temperature and Humidity button (to change which one is viewed on the display)

7 USB interface



Note: 1) The alarm LED flashes about one time per second

5. LCD Display Description



- ① Battery level indication icon
- ② MAX/MIN icon
- ③ REC icon
- ④ Temp./Humidity reading display area
- ⑤ TIME/DATE icon
TIME and DATE icon alternates every 10 seconds
- ⑥ FULL icon
FULL icon appears, which indicates the memory is full, the data logger will stop recording.
- ⑦ → Single record icon
While selecting Single record mode, the data logger will stop recording when the memory is full.

- ⑧  Cycle record icon
While selecting Cycle record mode, the data logger will continue logging data to overwrite the earlier data if the memory is full.
- ⑨ Time/Date
- ⑩ %RH icon
- ⑪ °C/°F icon

6. Operation Instruction

6.1 Software Installation

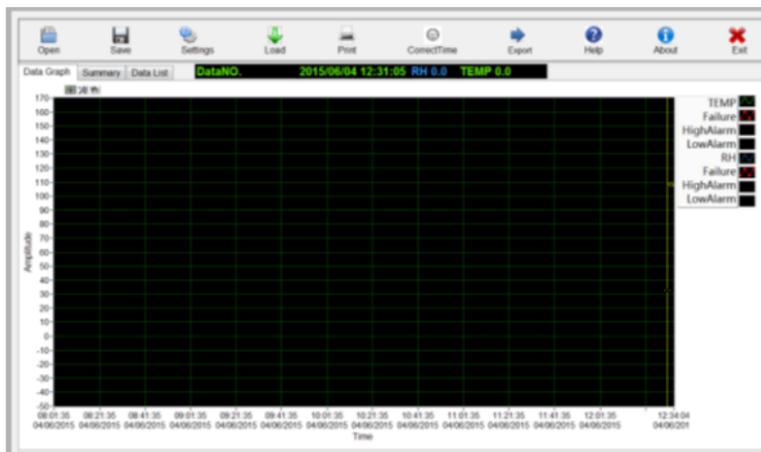
6.1.1 Put the CD into the CD-ROM, an installation interface will pop-up after a moment, double click the “” icon

to install the software (including “CP210X” driver) to your PC accordingly. After finishing the software installation, the

shortcut icon “” will appear on your desktop.

6.1.2 Connect the meter to your PC via the USB cable.

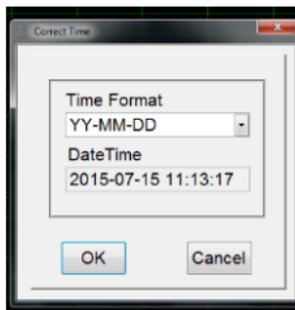
6.1.3 Double click the shortcut icon “” to run the software, the interface on the following page will appear.



6.2 Software instructions

6.2.1 Setting Time and Date

Left click “” icon, the setting interface will appear the same as below:



Select the desired date format, date and time, then press “OK” button to confirm and save the settings.

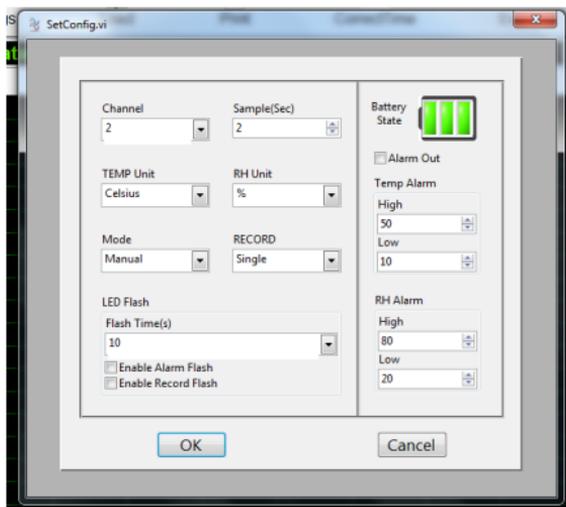
Note: All the logged data will be cleared while confirming

the new settings. Please pay attention to download and save the data before applying new settings to the meter.

6.2.2 Data logger Setup



Left click " " icon, the setting interface will be appear the same as below:



Channel – Must stay as 2, because this data logger can only log two things (humidity and temperature)

Sample(Sec) – select your logging interval from 1 sec to 86400secs (which is 24hrs)

TEMP Unit – select Celsius or Fahrenheit

RH Unit – will stay as %

Mode – select **Instant** for the meter to start logging as soon as you press OK on the configuration window on the software. Select **Manual** to start the logging by pressing the **TEMP/%RH** button when you are ready to start logging.

RECORD – Select **Single** so the meter stops recording when the memory is full. Select **Cycle** for the meter to overwrite the previous data (previous data will be lost in this mode if not downloaded before the memory is full)

LED Flash – select 10, 20 or 30 secs for the flash times if you wish to use the REC and Alarm LEDs.

Put ticks in the boxes next to '**Enable Alarm Flash**' and '**Enable Record Flash**' if you want to use the LED lights on the meter. Leave them unticked if you do not wish to use the LED lights.

Battery State – Indicates how full or low the battery is

Alarm Out – Put a tick in this box if you want to set alarms and view them on the graph when your results are downloaded

Temp Alarm – set a high and low alarm in whole numbers

(you cannot use decimal places)

RH Alarm – set a high and low alarm in whole numbers

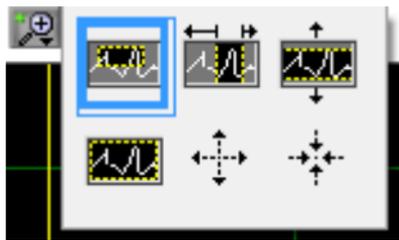
(you cannot use decimal places)

After finishing the settings, press “OK” button to confirm and save it.

Note: All the logged data will be cleared while confirming the new settings. Please pay attention to download and save the data before applying new settings.

6.2.3 Zoom In and Zoom Out

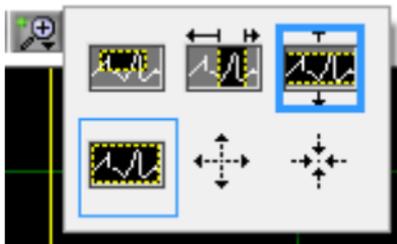
(1). Zoom In: Click the zoom icon just above the graph and select the first icon on the top left (see image below)



This will allow you to zoom in on any part of the graph.

The other icons allow you to zoom left to right or up and down.

(2). Zoom out: Press the bottom left icon (see image on page 10)



6.2.5 Download Data

After connecting the meter to your PC press “” button to download the recorded data.

6.2.6 File save and open

(1). After downloading the data, click “” button, pick a location, name the file and then click save to finish file save.



Or click **Export** to export the readings to EXCEL and to save the file in an excel format.

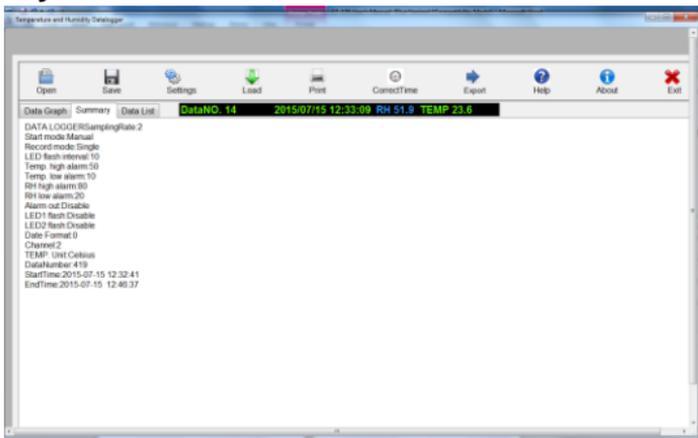


(2). Click “” button to open and view saved files

6.2.7 View saved files

After opening the desired saved files, click **Summary** or **Data List** to view the information and results on the meter at that time.

Summary:



Data List:

Open Save Settings Load Print ConnectTime Export Help About Exit

Data Graph Summary Data List **DataNO. 14 2015/07/15 12:33:09 RH 51.9 TEMP 23.6**

ID	Date/Time	RH	Temp
0	2015-07-15 12:32:41	52.1	23.6
1	2015-07-15 12:32:43	52.1	23.6
2	2015-07-15 12:32:45	52.4	23.6
3	2015-07-15 12:32:47	52.7	23.6
4	2015-07-15 12:32:49	52.9	23.6
5	2015-07-15 12:32:51	52.8	23.6
6	2015-07-15 12:32:53	52.6	23.6
7	2015-07-15 12:32:55	52.4	23.6
8	2015-07-15 12:32:57	52.3	23.6
9	2015-07-15 12:32:59	52.2	23.6
10	2015-07-15 12:33:01	52.1	23.6
11	2015-07-15 12:33:03	52.0	23.6
12	2015-07-15 12:33:05	52.0	23.6
13	2015-07-15 12:33:07	51.9	23.6
14	2015-07-15 12:33:09	51.9	23.6
15	2015-07-15 12:33:11	51.8	23.6
16	2015-07-15 12:33:13	51.8	23.6
17	2015-07-15 12:33:15	51.8	23.6
18	2015-07-15 12:33:17	51.8	23.6
19	2015-07-15 12:33:19	51.8	23.6
20	2015-07-15 12:33:21	51.7	23.6
21	2015-07-15 12:33:23	51.7	23.6
22	2015-07-15 12:33:25	51.7	23.6
23	2015-07-15 12:33:27	51.7	23.7
24	2015-07-15 12:33:29	51.7	23.7
25	2015-07-15 12:33:31	51.6	23.7
26	2015-07-15 12:33:33	51.6	23.7

6.3 How to Work a Combination Lock

- (1) Open the combination lock with the previous combination that the lock was set to. If you just bought the lock then the most likely combination will be all zeros.
- (2) Pull up on the lock latch to expose the opening.
- (3) Insert the combination-changing tool fully into the hole on the bottom of the lock.
- (4) Change the combination of the lock to one of your choice while the combination-changing tool is inserted into the lock, and then remove the tool.

7. Notes

- ② Repairs or servicing is not covered in this manual and should only be performed by qualified personnel.
- ③ Wipe the unit with a dry soft cloth. Do not use abrasives or solvents on this instrument.
- ④ Remove the battery when the meter is to be stored for long periods of time to avoid battery leakage.

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