

# USB Humidity & Temperature Sensor 8871 Manuel



## Introduction

USB Humidity & Temperature Sensor 8871 is a handy and economical Sensor.

NO need any external power source, simply connect USB 8871 to USB port of PC then you can start to record the value in PC and evaluate the data . USB 8871 also support USB CDC emulation mode – through command line to receive the data for many different application .

## Features :

- Measure the value of Humidity and Temperature and record in PC by USB connection .
- No need connect to any external power source . Easy & Convenience – plug & play .
- For recording long period of time through PC
- Measure range : Temperature : - 20 ~ 80°C / - 5 ~ 176°F  
Humidity : 0 ~ 100% RH
- E-mail function : Support send by @gmail.com & @hotmail.com
  - Sending e-mail from the recorded data in past 24 hours .
  - Sending e-mail as warning while the setting of temperature or humidity over the value your previous setting.
- With LOG function and the recorded history can be saved as XML file automatically , this XML file can be opened to view through Web Browser anytime , anywhere. .
- Support USB CDC emulation mode - Command line to receive data by Hyper terminal .
- One PC can support multiple units of USB 8871 devices .
- Support SDK - VB.NET for 2<sup>nd</sup> development purpose.

Notice : If user is interested to receive the detected information of USB 8871 or USB e-Meter 8870 through **Internet** for remote monitoring , please contact with us for further information.

SPEC:	
Interface:	USB port : connect to PC .
	Stick Sensor : for detecting humidity & temperature
Range :	Humidity : 0 ~ 100% RH Temperature: : - 20 ~ 80°C / - 5 ~ 176°F
Power :	Standard USB 5V
Rate	Detect 7 seconds per time by software
System	Windows OS : WIN 7 ( 32 bit & 64bit ) , WIN Vista 或 XP
Inquires :	USB 2.0 / 1.1 * Microsoft .NET Framework Version 3.5
Package	USB 8871 , CD- Include driver, software , QI & manual and SDK
Length & Weight	150cm & 50g

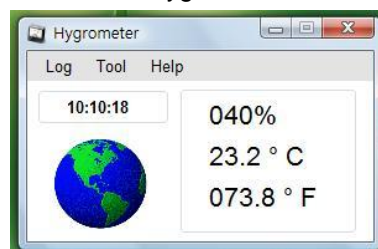
## Installation Procedure

1. Please make sure that the PC had installed .NET . Or download here before install USB 8871. : <http://www.microsoft.com/en-us/download/details.aspx?id=21>
2. After install .NET, please put the CD in your CD ROM and it will execute AUTORUN. file or you can open by Windows . Please use web browser “ IE “ to open the CD.
3. Then go to Manual → USB Series → USB Power 8871 to Download the driver “ USB 8871 Driver” and the software “ Current meter.exe “ into your hard disk .
4. Plug in the USB 8871 device to your PC , then PC monitor will show up “ Detect New Hardware” and then select the driver in CD suggest to save into your desktop to install the USB driver of USB 8871.
5. After installed the driver, you can get “8871 (COM X)” in Ports (COM& LPT) device manager as following .

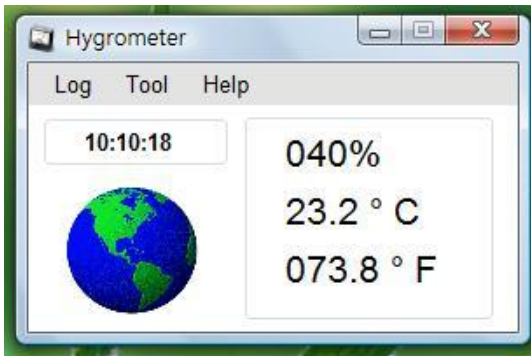
Control Panel → System → Device manager → Ports(COM& LPT) → 8871 (COM X)



6. After install the driver, please execute software “Hygrometer.exe “



## Software



There are Six sections in software “ Hygrometer.exe “

1. LOG : User can see the log here. **LOG will be clear as software turn off .**

To change the record time period , please go to Tool → History .

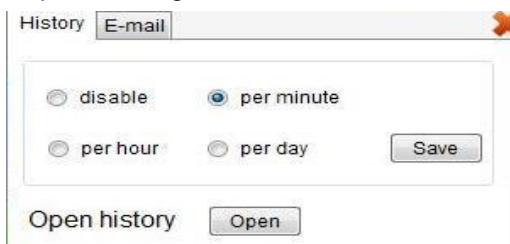
User can go to History →Open an find the History in XML file.

No.	COM	Humidity	Temperature	Time
2	COM9	033%	25.0 ° C / 077.0 ° F	2013/11/28 下午 01:25:01
1	COM9	033%	25.0 ° C / 077.0 ° F	2013/11/28 下午 01:24:01
0	COM9	036%	25.0 ° C / 077.0 ° F	2013/11/28 下午 01:23:01

2. Tool : Use can change the record time , setup email and the COM number .

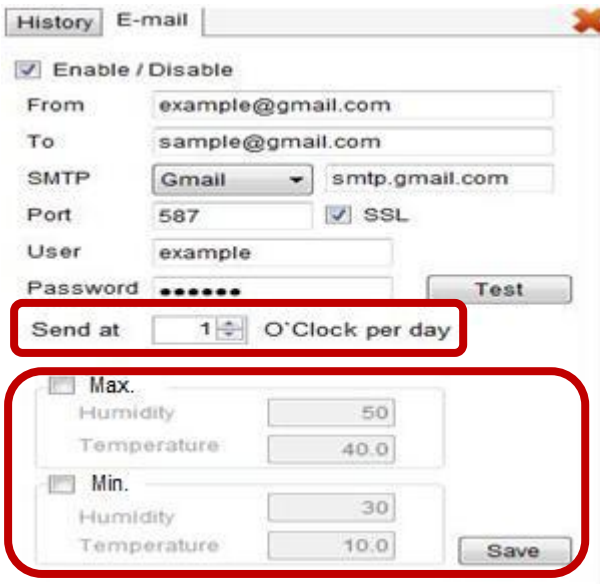
2-1 Option → History :

- Use can select “ Disable “ , Per minute , Per hour or Per day for recording data in LOG. Then click “ Save ‘ to keep the setting .



- Open History : Open the history file in XML format which save in hardware

2-2 Option → Email



User can receive e-mail as the following 2 situations :

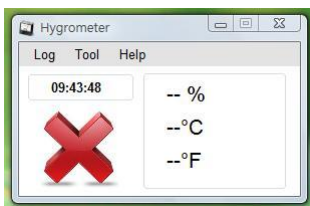
- A. On select certain hour per day for past 24hours data .
- B. As the value of humidity or temperature over setting ( Max. or Min. )

### 2-3 Select COM

User can select the COM number as use more than one USB 8871 on the same PC.

- 3. Help : There is a information of number and software version .
- 4. Time : Show the time .
- 5. Pictures of Global / X in Red : Show the connection status .

If see the X in red at left side , it means the software do not detect the hardware . Please re- plug the USB 8871 and re - execute the software .



- 6. Display the value of humidity and temperature

**Notice** : If need to record the data or keep receiving email for long time , please keep executing the software and turn off the sleep function to make the PC keep operating .

## SDK

For user to arrange its own development :

- Developing environment: :

VB.NET 2008 , Microsoft NET. Framework Version 3.5 , Microsoft office access 2007

USB CDC series emulation model .

USB Humidity & Temperature Sensor 8871 support USB CDC emulation model , Please refer the following :

1. First of all , make sure that the 8871 is connect with your PC. Please go to

Control Panel → System → Device manager → Ports(COM& LPT) → 8871 (COM X)

2. Then open Hyper terminal to connect with 8871.

Start → All programs→ Accessories → Communication → Hyper terminal

\* There is no Hyper terminal program in WIN 7. Please use other serial software like Putty .

Select the COM port 8871 use .

3. Setup “ Bits per second” as 19200 and “ Flow control” as NONE. Then press OK to log in .



RS232:

- Instruction: Press: Enter
- Read humidity & temperature values: Input: read
- Auto Display on / off : Input: auto on / off
- Device name and version Date: Input: ver

Thank you for support USB 8871 . If any question please contact with the distributor .