

USB Humidity & Temperature Sensor 8871

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Introduction

USB Humidity & Temperature Sensor 8871 is a very convenient and economical sensor.

Without extra power , Just connect USB 8871 to PC then you can start record the value in PC and evaluate the data . USB 8871 also support USB CDC Emulation model – through command line to get the data for many different supplication .

Features :

- Measure the value of Humidity and Temperature and record in PC by USB connection .
- No need extra Power . Easy & Convenience .
- For long time record by PC
- Measure range : Temperature : - 20 ~ 80°C / - 5 ~ 176°F
Humidity : 0 ~ 100% RH
- Email function : Support send by Gmail & Hotmail
 - Send email of record in past 24 hours .
 - Send Email as over setting of temperature or humidity
- With LOG function & Auto -Save History as XML file - open by most web browser .
- Support USB CDC emulation mode – Command line to get data by Hyper terminal .
- One PC can use multiple USB 8871 devices .
- Support SDK - VB.NET for 2nd developing purpose.

Notice : If user would like to get the detect information of USB 8871 or USB e-Meter 8870 through Internet for remote monitoring , please contact with us.

SPEC:	
Interface:	USB port : connect to PC .
	Sensor : for detect humidity & temperature
Range :	Humidity : 0 ~ 100% RH Temperature: : - 20 ~ 80°C / - 5 ~ 176°F
Power :	Standard USB 5V
Current usage :	Under 50 mA
Rate	Detect 7 seconds per time by software
System	Windows OS : WIN 11/ 10 / 8/ 7 (32 bit & 64bit)
Inquires :	USB 2.0 / 1.1 * Microsoft .NET Framework Version 3.5
Package	USB 8871 . Online CD note – Software & manual (with SDK information)
Length & Weight	150cm & 50g

Installation Procedure

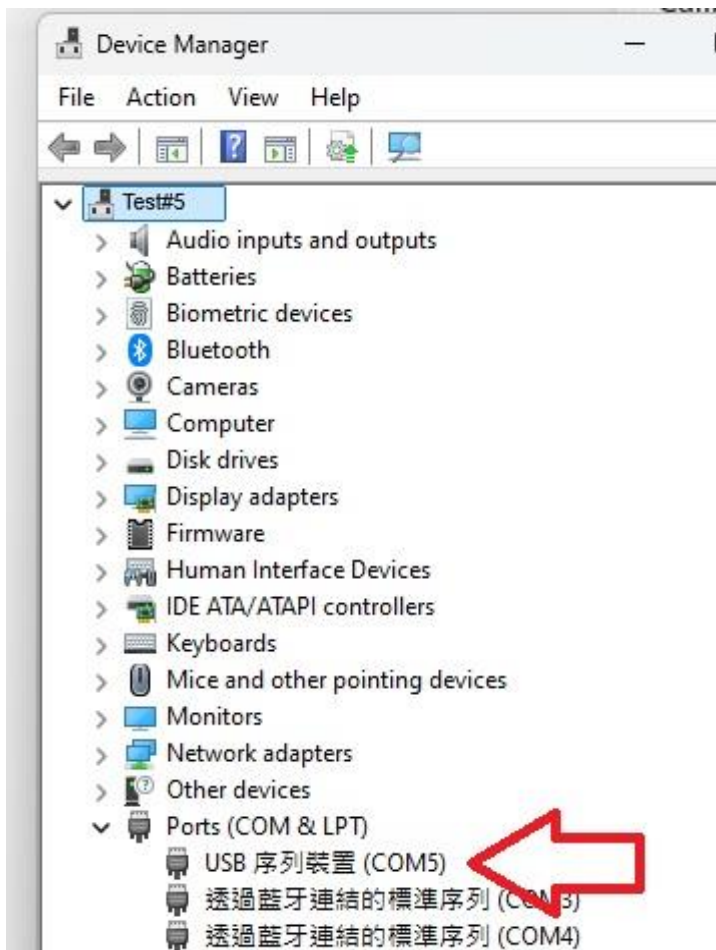
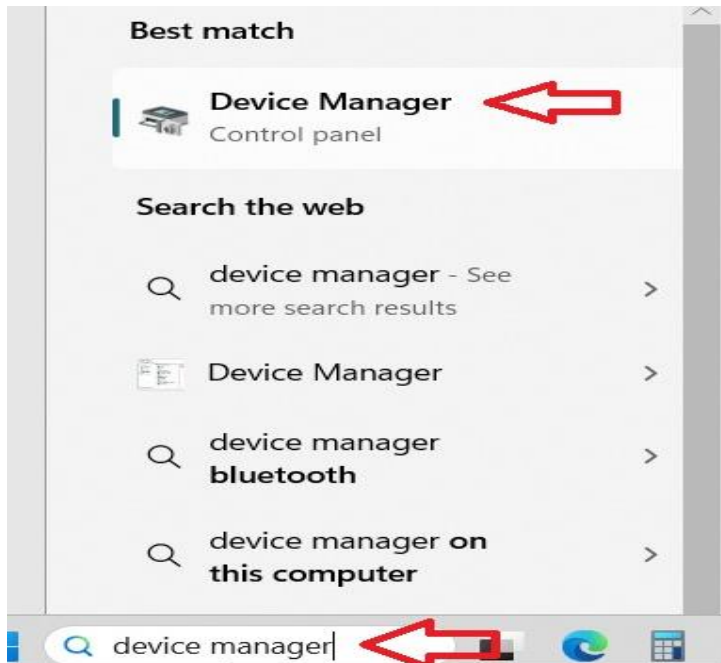
1. Please make sure that the PC had install .NET . Or download here before install USB 8871. : <http://www.microsoft.com/en-us/download/details.aspx?id=21>
2. After install .NET, please download the 8871 software in our website here: <https://www.aviosys.com/cd/>



3. Plug in the USB 8871 device to your Windows PC and it will get 8871 automatically . Please go to device manager / type device manager in the search section of WIN desktop to check the COM number of the 8871. It will show the name " USB Serial Port " , " Aviosys port " or " 8871 (COM X) in the Ports (COM& LPT)

section of the device manager .

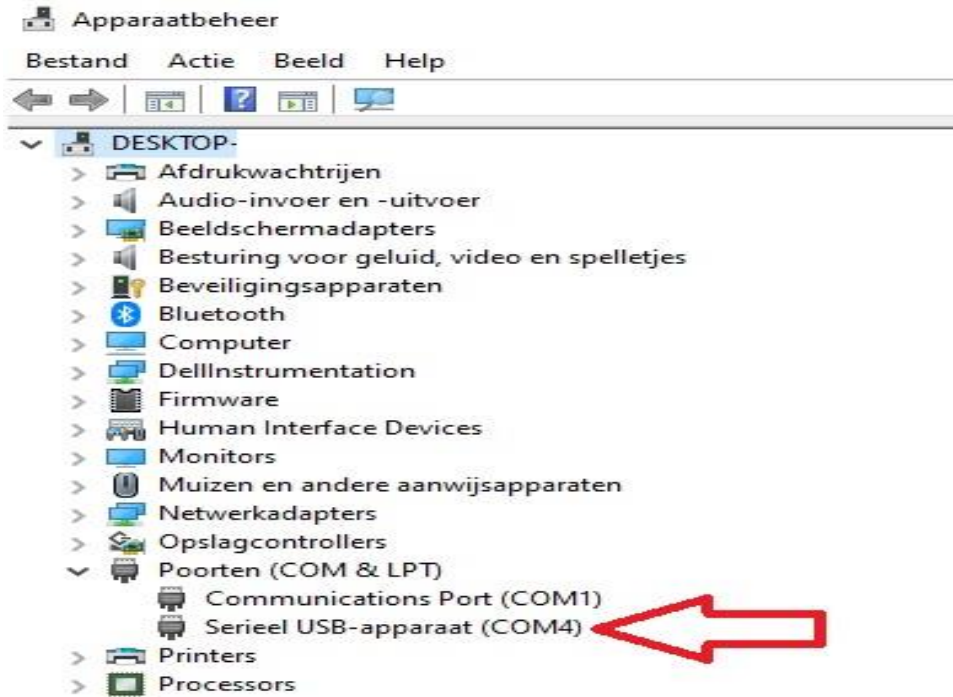
Or go to **Control Panel → System → Device manager → Ports(COM& LPT)**



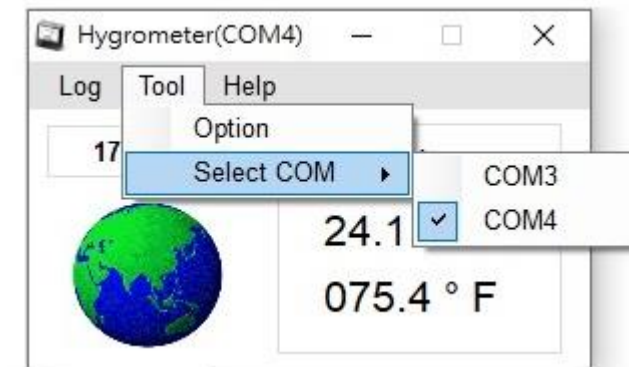
Then user can execute the 8871 software Hygrometer and select the COM number to get the value .

For example :

User get the COM 4 of 8871

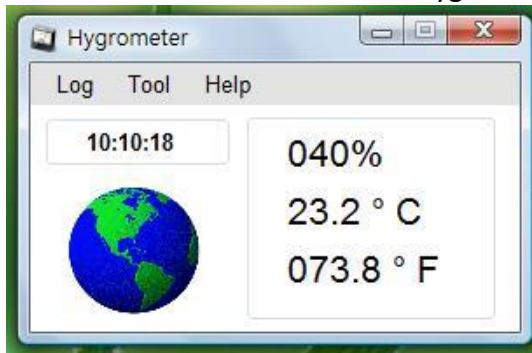


Execute the software Hygrometer and select the COM 4 .



Software

The software 8871 use named Hygrometer.



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 .

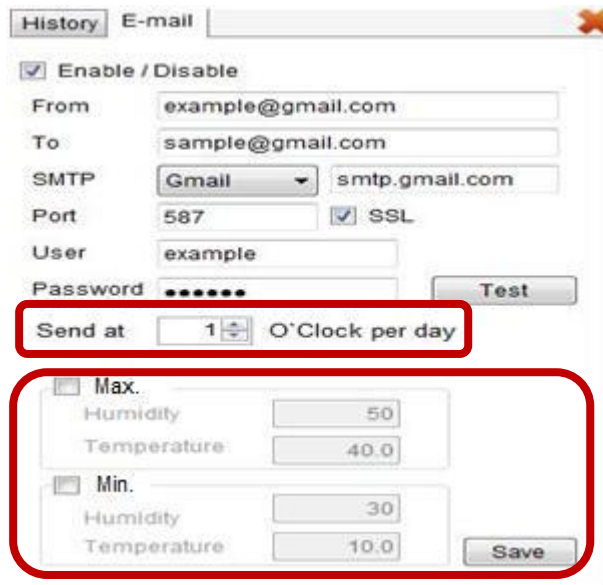
2-1 Option → History :

- 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 email as the following 2 situations :

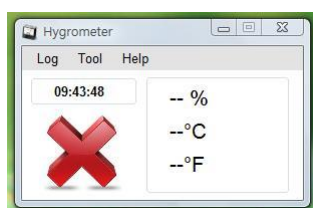
- A. On select certain hour per day for past 24hours data
- B. As the value of humidity or temperature over setting (Max. or Min.)

2-3 Select COM

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

3. Help : There is 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 rd 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 own development :

- Developing environment: :

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

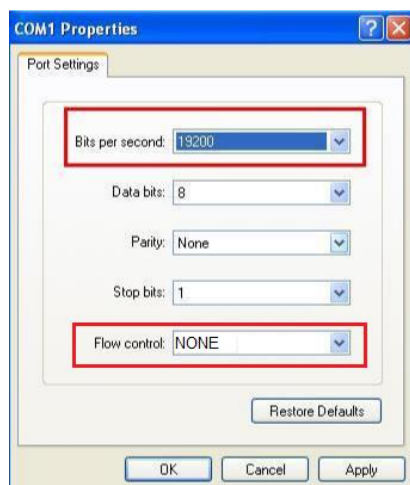
USB CDC series emulation model .

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

1. First , 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 / Serial Port command:

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

FAQ :

1. There is no temperature or humidity value of the 8871 in the 8871 software ?

A1: Please check if the WIN get the 8871 device by listing in the device manager . User can remove 8871 and plug back to check the correct COM number .

