

USB e-Meter 8870 Manuel

Non-Contact Current Meter Recorder



Introduction

USB e-Meter 88700 is a very convenient and economical “Non-Contact USB Current Meter”. Just open the meter and put the L or N cable then you can get and record the current value in PC. Support USB CDC Emulation model for wild supplication .

- * **Without having to make physical contact of power line , simply place around an electrical conductor.**
- * Safety measure the power current in “ Distribution Box” .
- * **Auto record the current value and save in PC for evaluation and application .**

Measure the current range of electricity device at 0A~ 10A, User do not need to search the metal part and can quick and safely get detect the value of current.

Features:

- Small size , light weight , convenient and safe.
- Fit for long time display record in PC
 - Support USB CDC emulation mode (RS232 control). Read the current in Hyper terminal. .
 - Support SDK for system integrator or hobbyist to make development

How to use the 8870 Current clamp ?

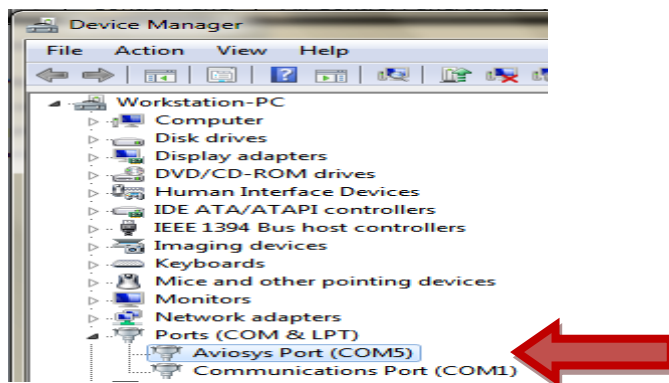
Open the clamp and put the L or N line of power line pass through .
Do not put more than ONE line .

SPEC:	
Interface	One side : USB jack (male) to connect to PC and get USB power in Another side : Current meter Ouch
For	L / N line of power line
Measure Current Range	40~66Hz, 0~10A (Accuracy: : $\pm 0.2A$).
Power Input	Standard USB 5V
Sampling Rate	Max. Software read : 2 times per second. 8870 output the value : 3 second. Response Time : 0.1 sec.
Power In	USB 5V standard
Operation Temperature	0 ~50° C
PC System inquire	<ul style="list-style-type: none"> Windows OS : WIN 7 (32 bit) , Vista or XP USB 2.0 / 1.1 * Microsoft .NET Framework Version 3.5 or above
Package	8870 device , CD- Include driver , driver , manual and SDK.
Length & Weight	111cm & 90g

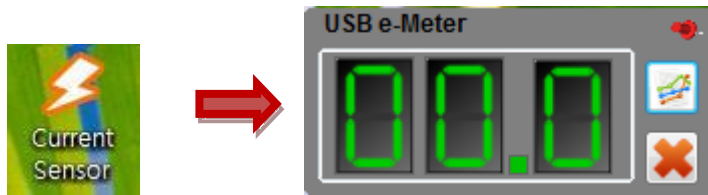
Installation Procedure

- 1.) Turn on your PC , put the CD in your CD ROM .
- 2.) Plug in the 8870 device to your PC , then PC would show out “ Detect New Hardware” and then select the driver in CD suggest to save into your desktop to install the USB driver of 8870.
- 3.) After install the driver, you can get “Aviosys Port (COM X) in Ports (COM& LPT) device manager as following .

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

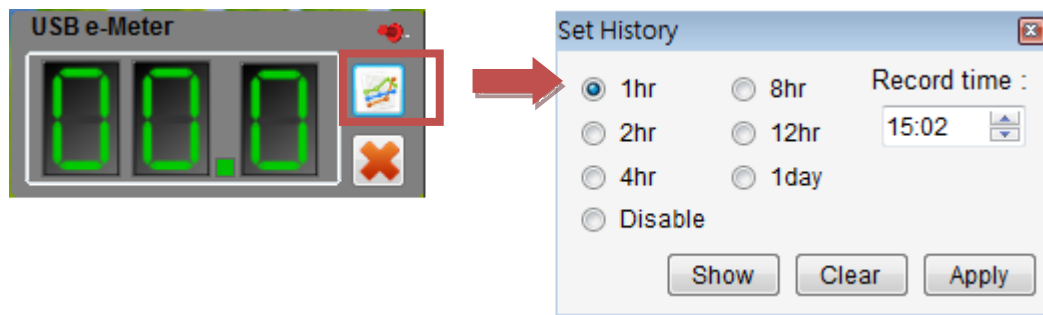


4.) After install the software “Current Sensor” , please execute it and you will get the software as following :



5.) User can record the current value (from 1 hour to 1day) into PC:

If need long time record please do keep PC awake and turn off the sleep function) .



- Record Time : the time start recording
- 1hr : record every hour . 1day : record every day
- Disable: disable record function (Default)
- Apply : Confirm setting
- Clear: remove all record
- Show: display all record

Example of Show record :

```
<?xml version="1.0" encoding="UTF-8" ?>
- <History>
  <Record Time="2013/5/30 11:19:30" Current="0.1" />
</History>
```

SDK

For user to arrange own development :

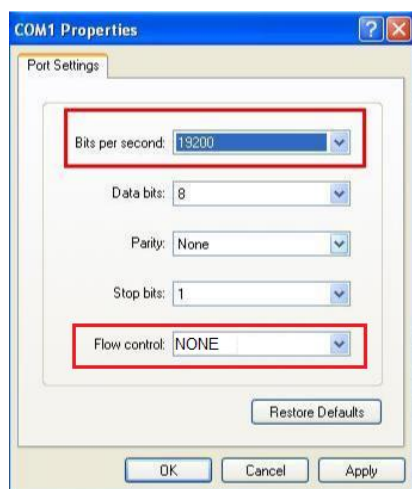
- Developing environment: :

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

USB CDC series emulation model .

USB e-Meter 8870 support USB CDC emulation model , Please refer the following :

1. First , make sure that the 8870 is connect with your PC. Please go to
Control Panel → System → Device manager → Ports(COM& LPT) → Aviosys Port (COM X)
2. Then open Hyper terminal to connect with 8870.
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 8870 use .
3. Setup “ Bits per second” as 19200 and “ Flow control” as NONE. Then press OK to log in .



RS232:

- Read Device model : Command is ~
- Read current : Command is @

Thank you for support Aviosys .

If any question please email to our Service Dep. : Service@Aviosys.com.