

Installing the drivers for the Current Cost Data Cable



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Introduction

Current Cost monitors have a serial port and output live and historical XML data.

About Current Cost Monitors

Current Cost monitors are built on open standards, meaning software developers and integrators can easily create applications to work with the suite of Current Cost products.

About the XML

Every six seconds, the Current Cost meter spits out XML data of live temperature and energy readings like such:

```
<msg><src>CC128-  
v1.11</src><dsb>00037</dsb><time>12:03:51</time><tmpr>18.4</tmpr><sensor>0<  
/sensor><id>02723</id><type>1</type><ch1><watts>00396</watts></ch1><ch2><  
watts>00296</watts></ch2><ch3><watts>00256</watts></ch3></msg>
```

The full XML specification can be viewed here:

<http://www.currentcost.com/cc128/xml.htm>

The Envi meter can have a main reading of the overall energy usage (single phase or 3 phase) plus 9 further appliances.

The Historical XML Feed

There is an historical XML feed that occurs one minute past every odd hour that contains details of historical energy usage. See the XML specification for more details

Forcing the History to Download

You can also force the history to Download by pressing the centre and right button down at the same time for about 3 seconds until the light flashes on the front of the Envi.

About the Data Cable

The data cable is an USB to RJ45 cable that takes serial output from the Current Cost monitor and uses the Prolific PL-2303 chip to convert serial to USB.

Therefore it is necessary to install drivers for the PL-2303 chipset so the USB cable works correctly.

Installing the Data Cable

Drivers are available for Windows, Mac and Linux. Please visit the Current Cost website and download the drivers according to your operating system.

1. Download the drivers from the Current Cost website <http://currentcost.com/software-downloads.html>
2. Extract the zip file, then double click the .exe installer
3. Follow the wizard.

Installing the Data Cable on Windows 7

It is not necessary to install the drivers for the Data Cable for Windows 7. Simply connect the Data Cable and the drivers should be located and installed automatically.

If you have previously installed the Data Cable drivers and cannot get the Data Cable working correctly, please follow the instructions for “Uninstalling the Drivers”.

RS-232 Cable

If you wish to connect using a serial port to the current cost monitor, then we do have an RS232 cable available, please contact us for more details or look on the shops at Amazon or Ebay.

This cable connects a serial port on the PC to the Current Cost monitor.

Download the drivers for the RS-232 cable on the Current Cost website: <http://currentcost.com/software-downloads.html>

Post Installation Checks

Once you have installed the drivers, connect the data cable from your Current Cost monitor to your PC.

Check that the drivers have installed correctly by viewing the ports in Device Manager.

Go to Control Panel -> Device Manager. Expand the Ports Node and verify that you have a Port listed as below in Figure 1.

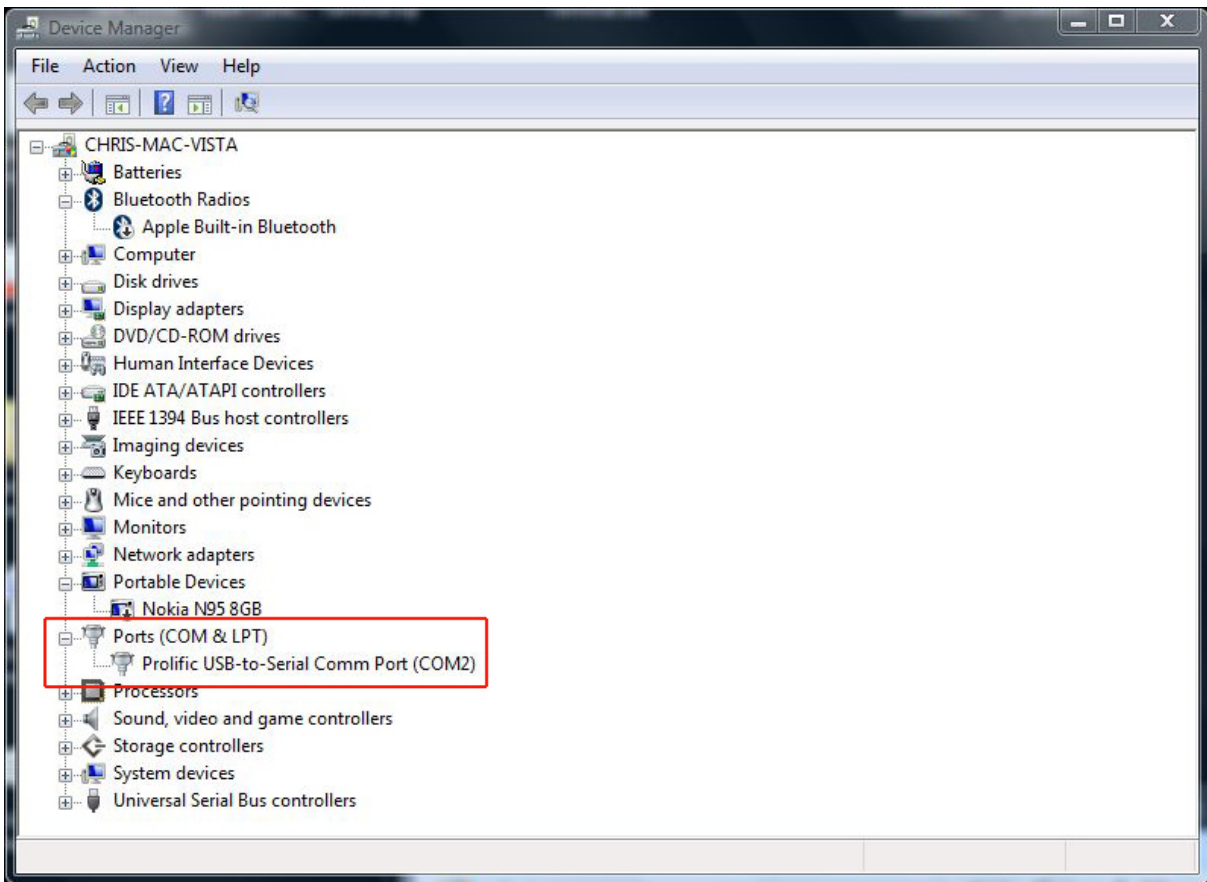
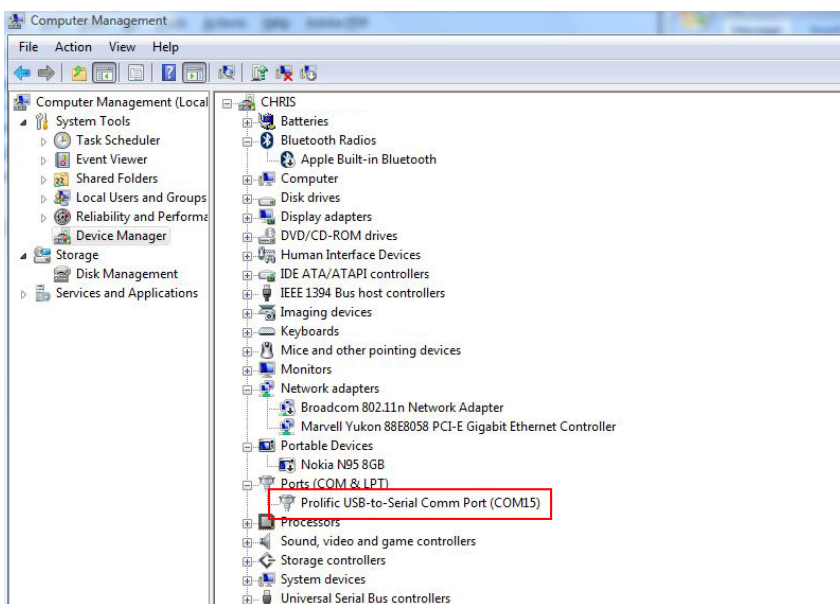


Figure 1 – Verify the port is installed

Uninstalling the Drivers

With the Data Cable plugged in to the PC, go to Control Panel -> Device Manager. Expand the Ports node. Select the "Prolific USB-to-Serial Comm Port". Right click - uninstall.



When the uninstall is complete, unplug the Data Cable from the PC.

Go back to Control Panel -> Programs and Features.

Select the item called "PL-2303 USB-to-Serial" and click "Uninstall"

Follow the wizard to complete the uninstall process.

Reboot the computer.

So the driver is installed, can I talk to the monitor?

Windows XP

Windows XP has Hyper Terminal which can talk to the range of Current Cost monitors. Connect the Current Cost monitor to your PC using the data cable.

Launch hyper-terminal. Go to Start -> All Programs -> Accessories -> Communications -> Hyper Terminal.

Enter a name of your choice in the box and click OK.

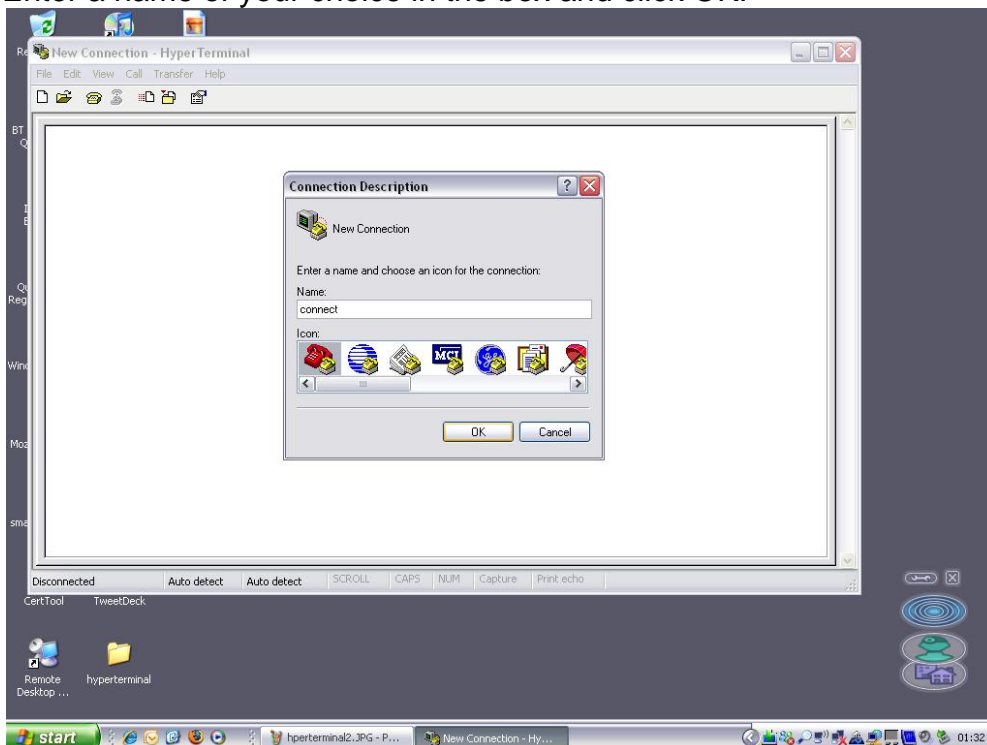


Figure 2 – Com Port

In the Connect Using drop down box, select your port as confirmed in Post Installation Checks above.

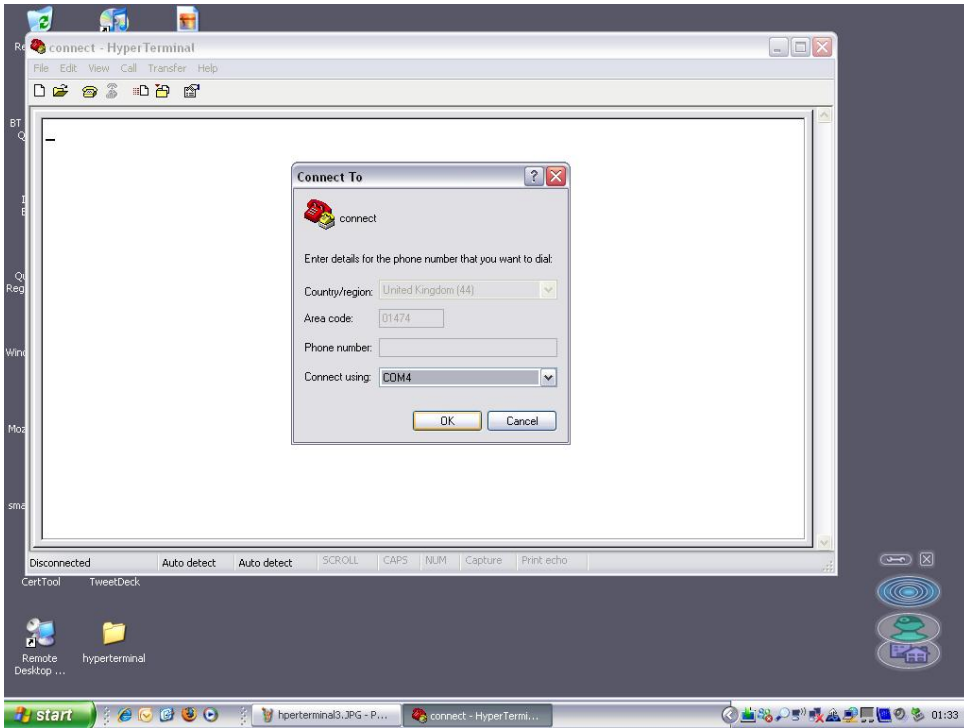


Figure 3 - Com Port

In the properties box, enter the baud rate and click OK as per **Appendix 1 – Current Cost Monitors and Baud Rates.**

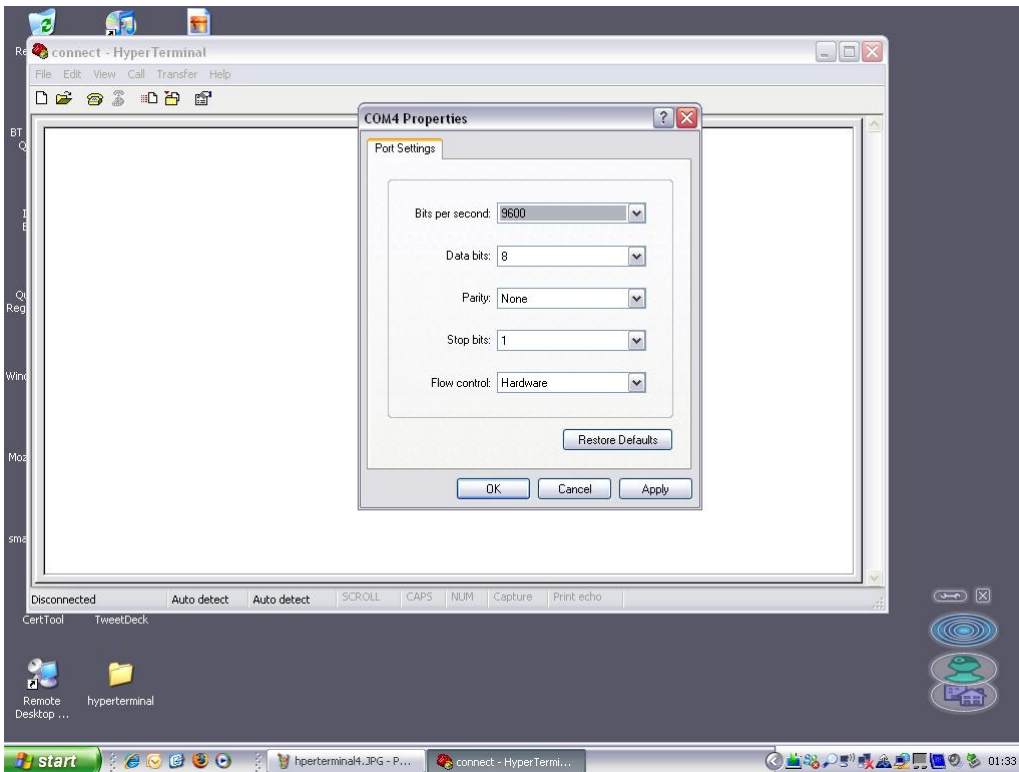


Figure 4 – Baud Rate

You will now see the raw data from the Current Cost Monitor

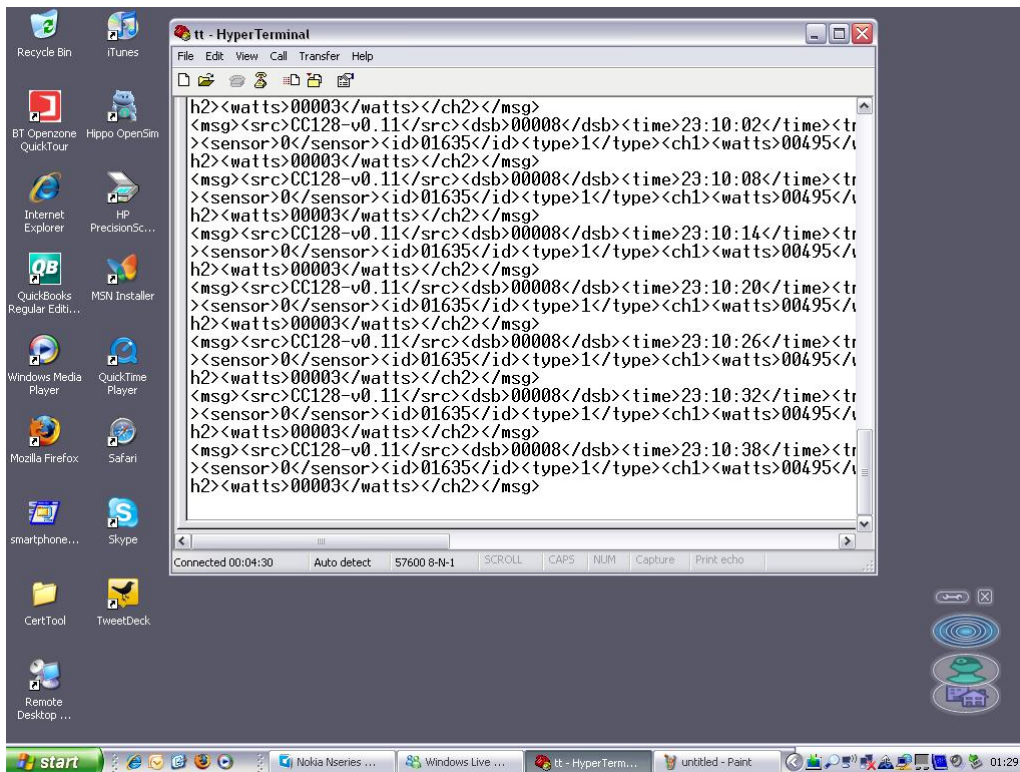


Figure 5 – Raw Data Output

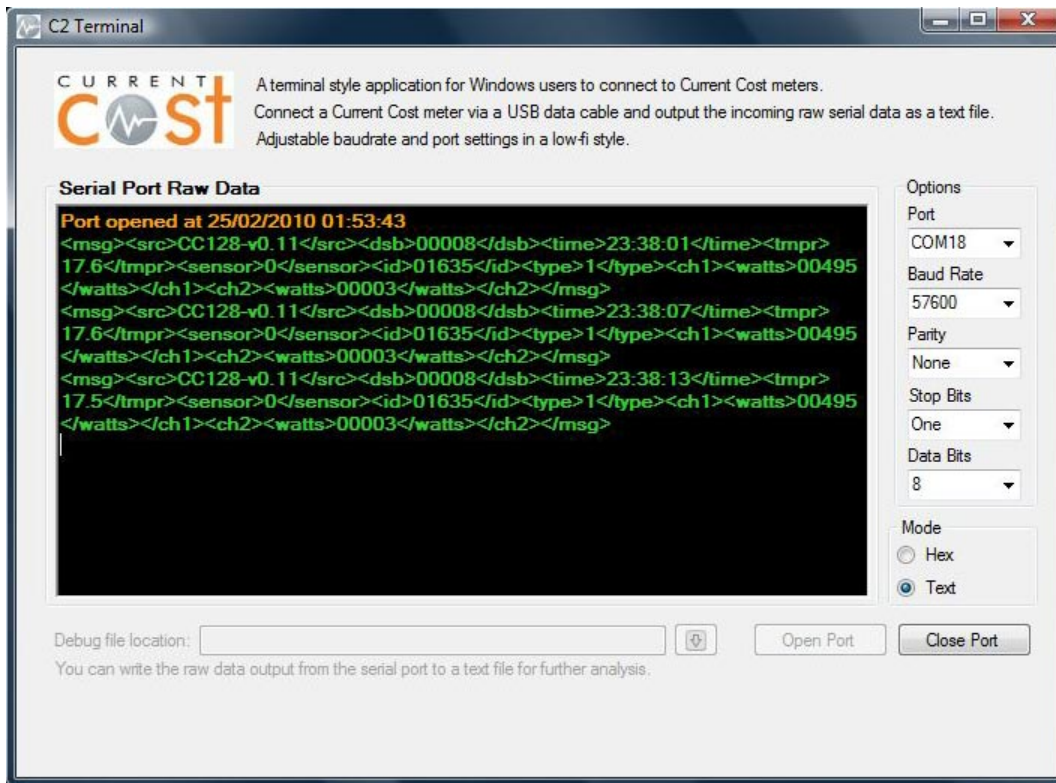
If you are unable to see the raw data output, please check your cable connection and reinstall the drivers as above.

Windows Vista and Windows 7

To output the raw data in Windows Vista or Windows 7m download the C2 Terminal from the Current Cost website:

<http://currentcost.com/software-downloads.html>

Open the C2 Terminal, make sure your options are selected according to your Current Cost monitor and click **Open Port**.



If you are unable to see the raw data output, please check your cable connection and reinstall the drivers as above.

Please note that the C2 Terminal requires .NET 3.5 to be installed. See **Appendix 2** for details.

You can also use the C2 Terminal on Windows XP. However Hyper Terminal is installed by default on XP but not Windows Vista or Windows 7.

So the C2 Terminal is a convenient way of connecting to the raw output of Current Cost monitors.

Trouble Shooting

If you have been using a data cable with software and monitoring successfully for a few months, if you suddenly cannot connect using the data cable then the drivers need reinstalling.

To reinstall the drivers, firstly uninstall any existing Current Cost driver installations. To uninstall, go to Control Panel -> Add Remove Programs. Follow the wizard.

If reinstalling the drivers does not work, then please contact us.

Appendix 1 - Current Cost Monitors and Baud Rates



Current Cost Classic Gen1

The first generation of Current Cost monitors, uses a 2400 baud rate and only includes live data in the XML. No historical data.



Current Cost Classic Gen 2

The second generation monitor, uses a 9600 baud rate and includes live and historical XML data as per the CC128 XML specification.



Current Cost Envi (CC-128)

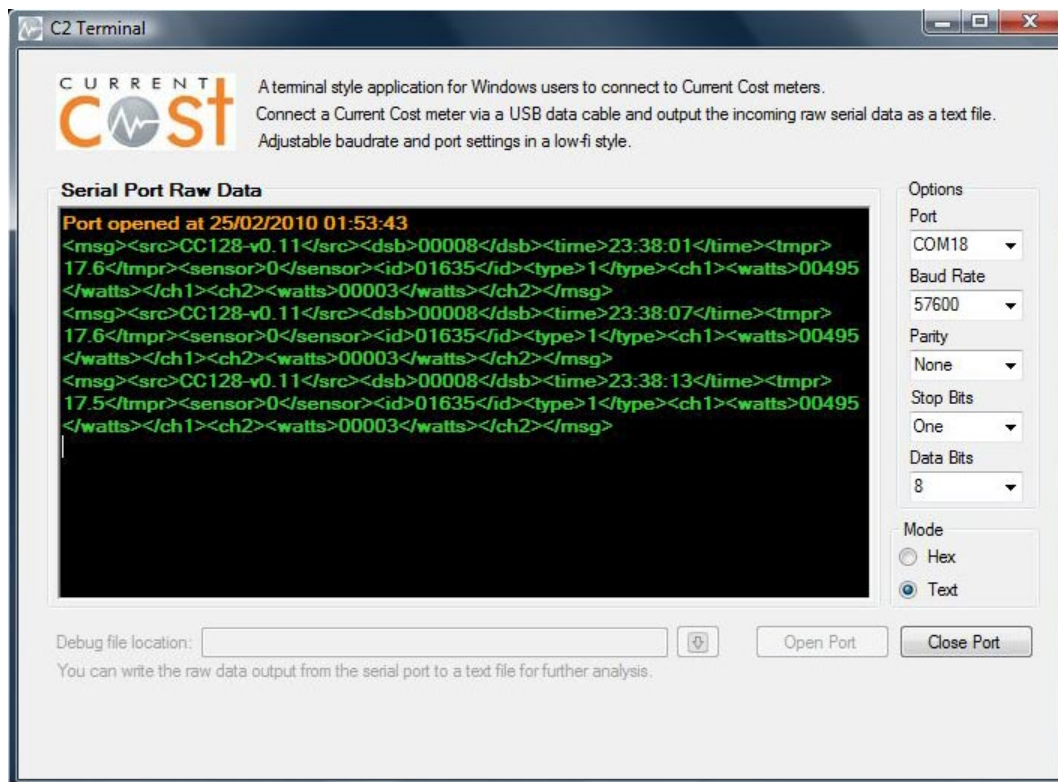
The latest Current Cost monitor, uses a 57600 baud rate and includes live and historical XML data.

Appendix 2 - C2 Terminal

The C2 Terminal is a convenient way of connecting to the raw output of Current Cost monitors.

Download the C2 Terminal: <http://currentcost.com/software-downloads.html>

Once downloaded, simply double click to launch the application.



The C2 Terminal requires .NET 3.5 to be installed. If you are on Windows 7 then you are probably OK, otherwise you can download .NET 3.5 from the Microsoft website here:

<http://www.microsoft.com/downloads/details.aspx?FamilyId=333325FD-AE52-4E35-B531-508D977D32A6&displaylang=en>

Appendix 3 - Driver Downloads

Drivers for the Current Cost data cables are available on the website:

<http://currentcost.com/software-downloads.html>

For the full range of drivers for the Current Cost data cables, please visit the Prolific website:

<http://www.prolific.com.tw/Eng/downloads.asp?ID=31>

For the Serial to Current Cost data cable, download the RS-232 driver from here:

http://serialio.com/products/adaptors/usb_serial_WinDesk.php

3rd Party Software

We have been extremely blessed with a wonderful community that has literally pounced upon the serial XML data and developed software.

You will find a list of software downloads for Current Cost monitors on the website here:

<http://currentcost.com/software-downloads.html>