

DPM-3332, DPM-3321

Software Manual

1. Introduction

DPM-3332 and DPM-3321 can store 3600 sets of data inside the unit. The data can be downloaded to a PC through a USB connection or Bluetooth* connection. The PC software can be used to do real-time monitoring and download the data from the unit.

The DPM PC software is remote monitoring software for the DPM series. It can be used to download stored data in

*For Bluetooth model only.

Supported OS System

Windows 7 (32-bit and 64-bit),
Windows Vista
Windows 8, Windows 8.1
Windows 10

Bluetooth support

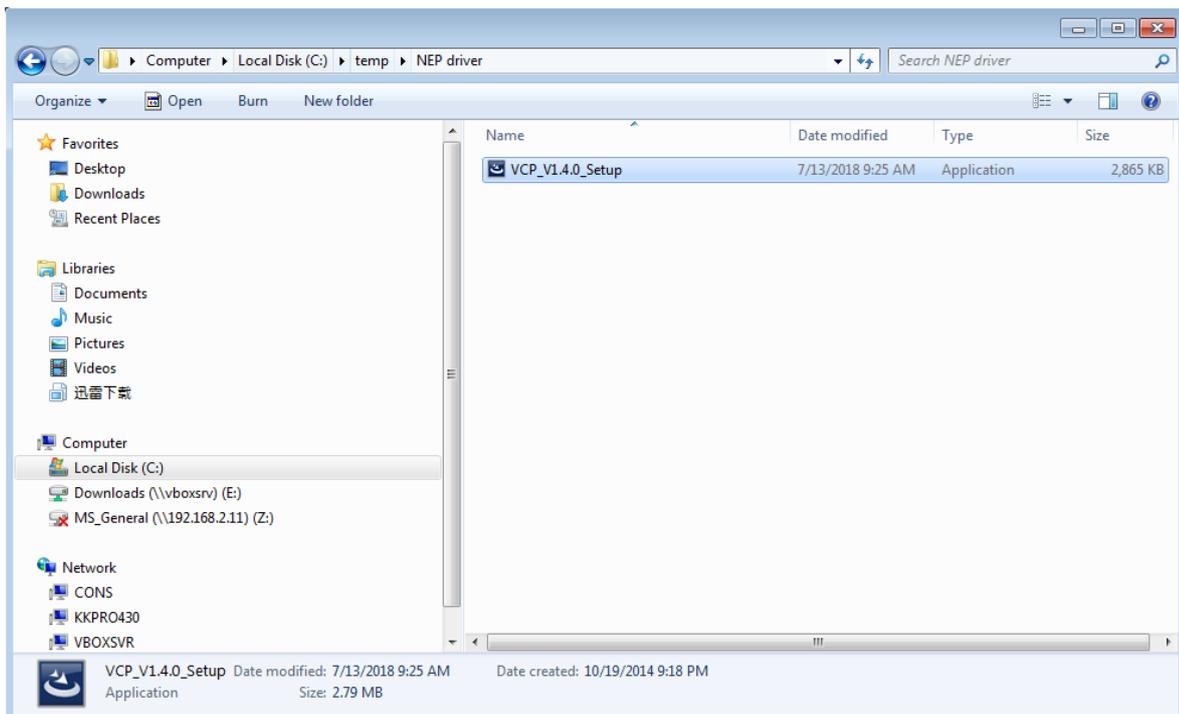
Bluetooth 4.0 LE (BLE)

2. USB Driver installation

Please download the USB driver from the following link

<http://www.manson.com.hk/wp-content/uploads/2018/10/VCP-usb-driver.zip>

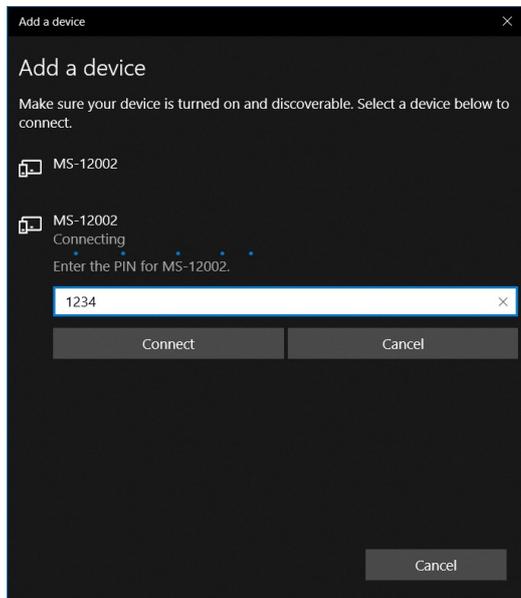
Unzip the download file and run "VCP_V1.4.0_Setup.exe" to install the USB driver.



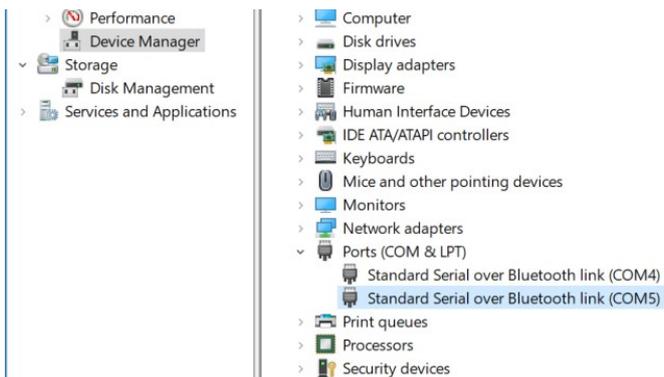
3. Bluetooth connect (For Bluetooth model only)

The Bluetooth model of DPM allow to connect to PC through USB connection. The Bluetooth connected DPM will create a virtual COM port. Then you can select the related COM port to remote the DPM.

- Open Windows Bluetooth manager and add a device. It will find device named as “MS-XXXX”. If you find two devices with such name, use the second one. Enter PIN 1234 and click connect to DPM.



If the connection success, you will find COM port in device manager. In the DPM software, please select the larger number COM port to connect.



4. Using PC software

The application software is be used to retrieving data from DPM-3332 and DPM-3321. It displays the data in graphical view. It allows you to zoom in a specific data range for detail analysis. The retrieved data can be saved into CSV file. This saved file can be load to this application software for review.

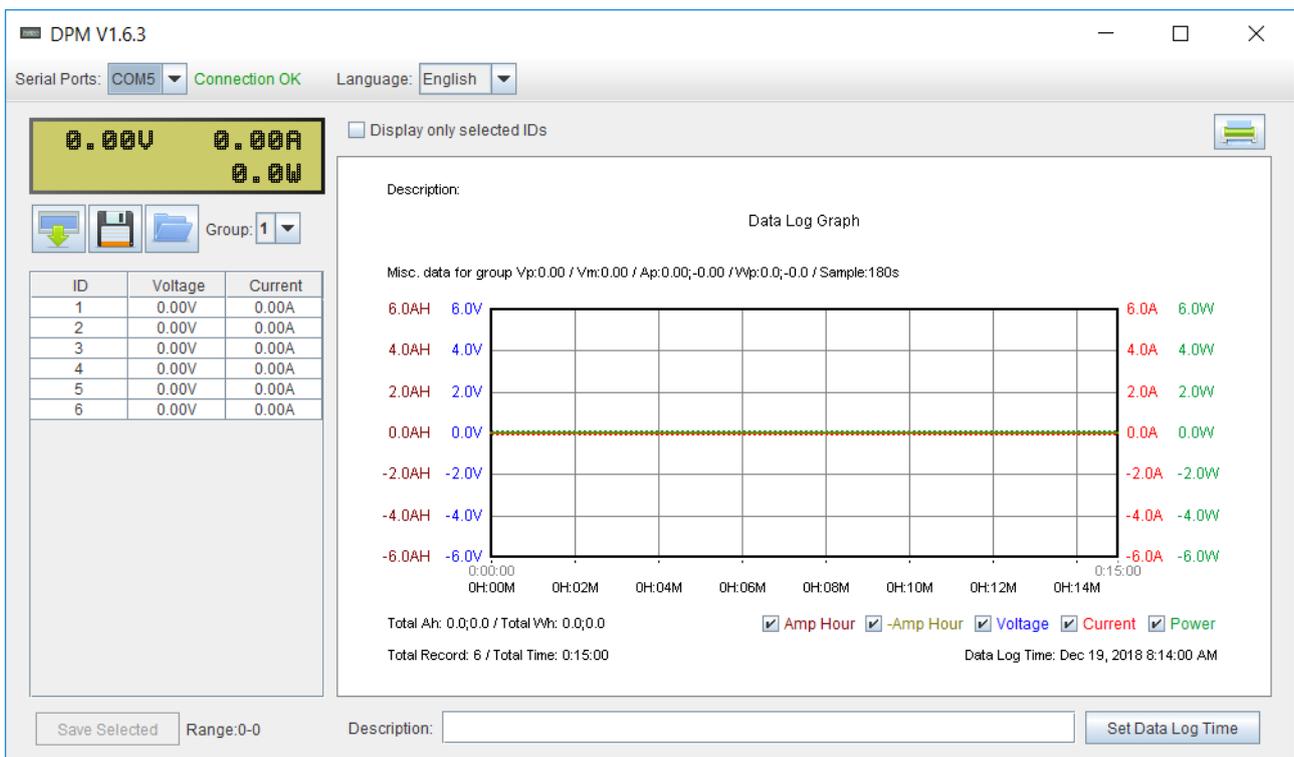
1. Retrieving data from DPM.
2. Display data in graphical view
3. Zoom in selected range of data.
4. Saving data in to CSV format file.
5. Print out to printer.

Please download DPM software from following link

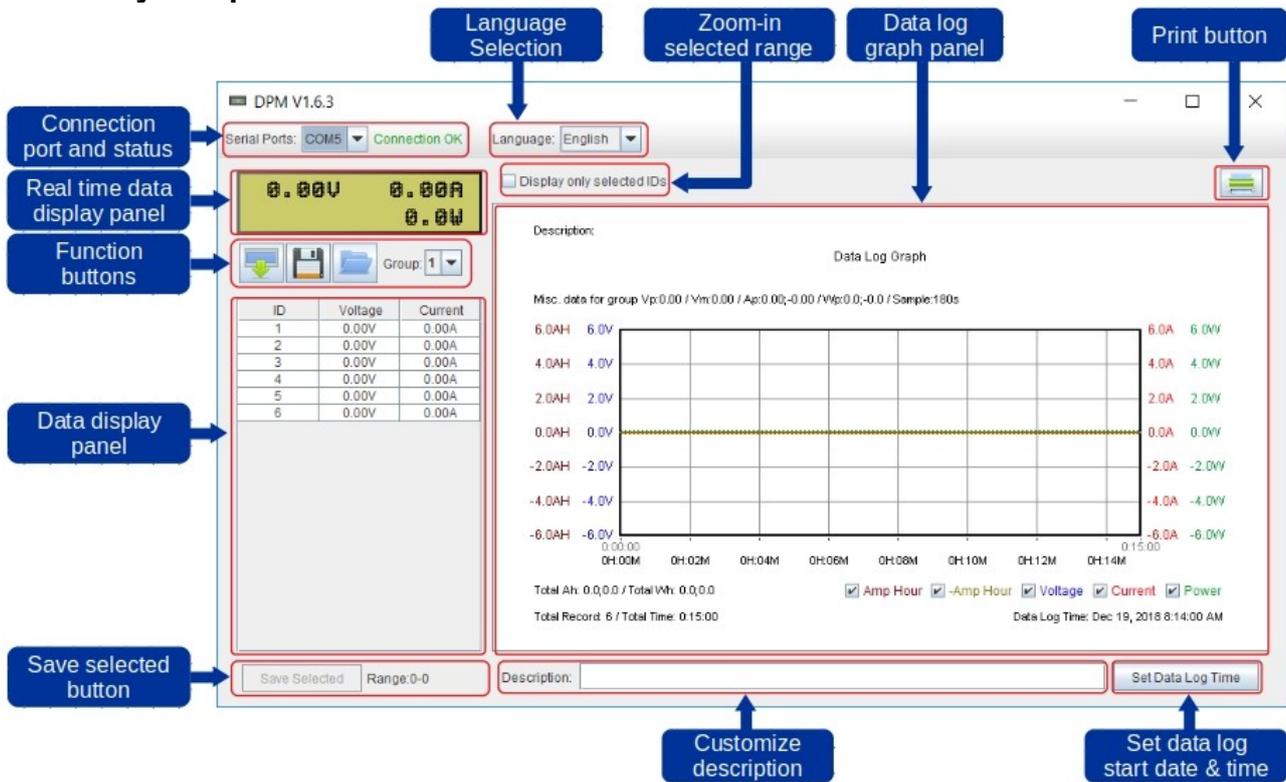
http://www.manson.com.hk/wp-content/uploads/2018/12/DPM_Rev1.6.3181013.zip

a. Start DPM application software

- Run "dpm.bat" in DPM_Rev1.6.3(181013) folder. The following main screen coming up.



b. Identify components on main screen



c. Select serial ports connecting to DPA and interface language

- At the top of main screen, there are serial ports selection and interface language selection menu. Whenever the serial port selected is right connecting to DPM, connection status show "Connection OK".



d. Display real time data of connected DPM

- The real time data display panel is located below Serial Ports selection menu. It is used to show real time Voltage, Current and Power of connected DPM.



e. Data download

Use software to download data from DPM and analysis in software with graphic.

- Click  button to download data from DPM.

DPM can store maximum 3600 set of data. Those 3600 set data can be store in single group or being separated into maximum 20 groups with different distribution of data.

A new group will be created when first data is recorded after DPM is power reset. Each group can have different sampling rate. For example, you can have 30 seconds sampling rate for group 1 and 180 seconds sampling for group 2. Please refer to DPM user manual for setting of sampling rate.

The group 1 is the latest group while group 20 is the oldest group. When the DPM has 20 groups of data stored, the oldest group when erase if new group is being created.

f. Save data to CSV file

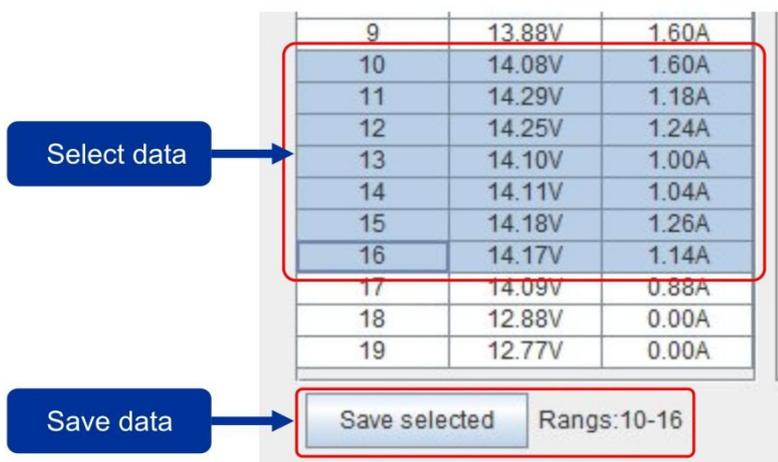
The downloaded data can be saved as CSV file for analysis later.

- Click  button to save data as CSV file.
- Select directory and input filename to save the data in CSV format.

g. Save selected data to CSV file

In addition to save all data, you can save only the selected data.

- Use mouse to select data in the group you would like to save.
- Click on  to save selected range of data to CSV file.



The screenshot shows a table with three columns and 10 rows. The first column contains group numbers from 9 to 19. The second column contains voltage values in Volts (V), and the third column contains current values in Amperes (A). Rows 10 through 16 are highlighted in blue, indicating they are selected. A red box highlights the selected rows. A blue arrow labeled 'Select data' points to the selected rows. Below the table, a 'Save selected' button is highlighted with a red box, and a blue arrow labeled 'Save data' points to it. To the right of the button, the text 'Rangs:10-16' is displayed.

9	13.88V	1.60A
10	14.08V	1.60A
11	14.29V	1.18A
12	14.25V	1.24A
13	14.10V	1.00A
14	14.11V	1.04A
15	14.18V	1.26A
16	14.17V	1.14A
17	14.09V	0.88A
18	12.88V	0.00A
19	12.77V	0.00A

h. Load data from CSV file

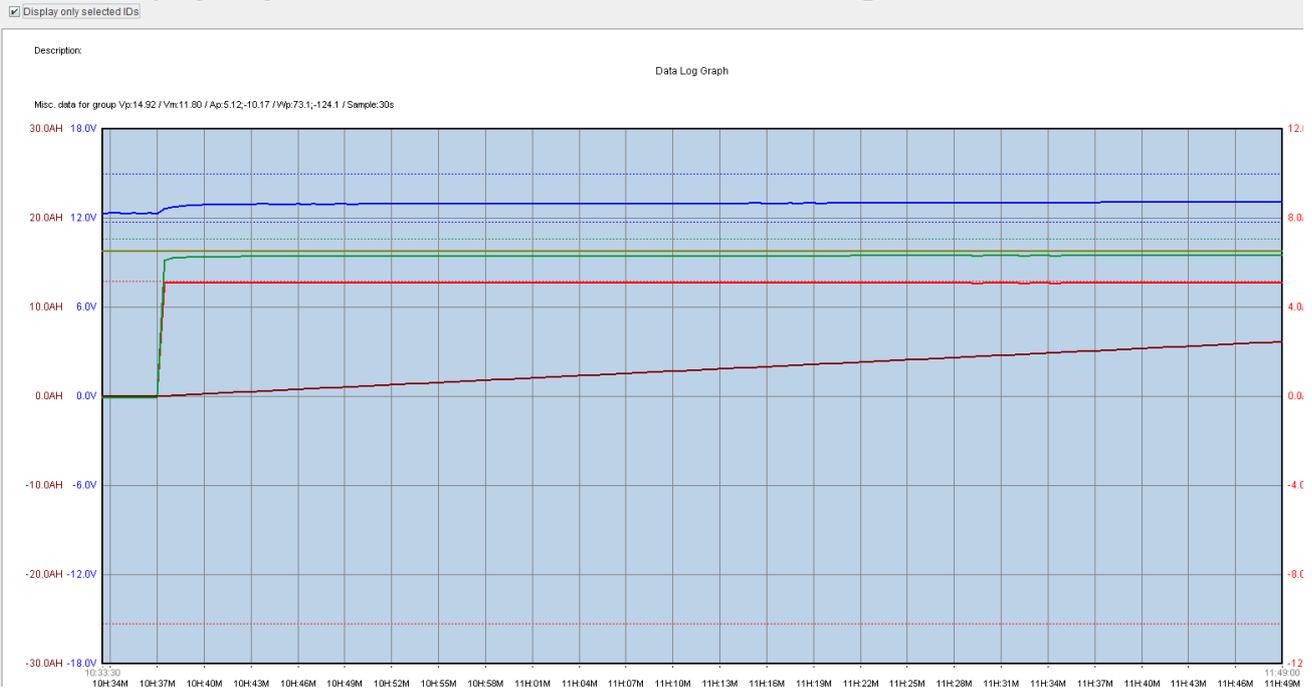
The save data can be reloaded to this PC software for offline analysis.

- Click  button to load the saved CSV file. After load the data, the current data will be override.

i. Zoom in selected range of data

DPM can storage maximum 3600 set of data. This software let you zoom in the selected range of data for detail analysis.

- Use mouse to select range of data on graph
- Select Display only selected IDs to zoom in the selected range.



j. Select data curve to be showed

There are total 5 data curves can be showed in graph. The curve is named Amp Hour, -Amp Hour, Voltage, Current and Power.

Each curve represent different information collected.

- Amp Hour – Accumulated Ampere Hours for forward current flow
- Amp Hour – Accumulated Ampere Hours for reverse current flow
- Voltage – Voltage change across time
- Current – Current change across time
- Power – Power change across time

You can select which curves you would like to show in the graph by click the box of the related curve.

Amp Hour -Amp Hour Voltage Current Power

k. Enter customize description for your data

The description input box allow you to enter customized text for your data. The entered text will show on the description of graph.

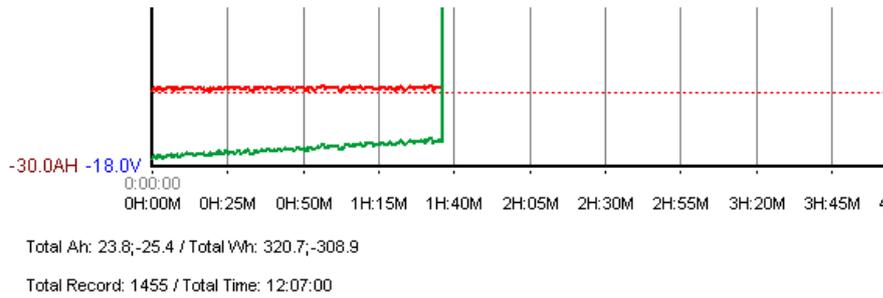
Description:

Description: Charging profile

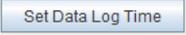
Misc. data for group Vp:14.92 / Vm:11.80 / Ap:
30.0AH 18.0V 0:00:00

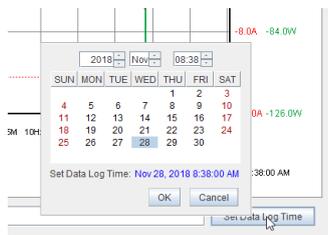
I. Set Data Log Time

The software will assume start time of each group of data is 00:00 if the start time does not been set. The time line on the bottom will show the operation time for that group.

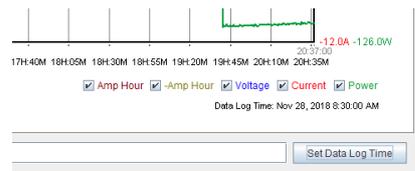
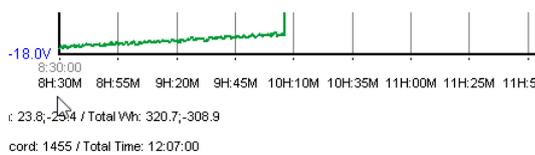


You can use  button to set the start time of your data.

The following date time set panel will come up by click on the  button. Then you can select data and time for the start time.



After date and time are set, the time line will change to match your set. For example set the start time to 8:30 of Nov 28, 2018, the time line will to follow.



m. Print Data log graph

- The graph can be print to printer direct by click on the  button. All the setting and description also printed on the print out.

