

## Use Batteryview upgrade and acquire system information Pylontech Low Voltage Product

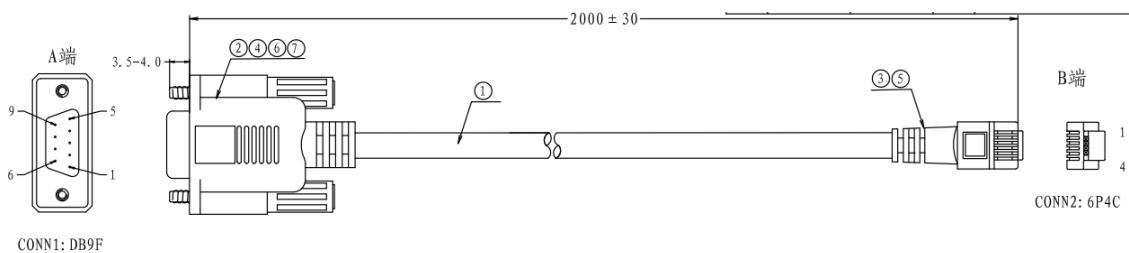
***This SOP is for Pylontech authorized software engineer and field application engineer to upgrade and acquire system information of Pylontech Powercube product. To avoid misoperation or commands lead to system failure, please contact Pylontech first before using any of the command not listed in this SOP; Otherwise the product will be out of Pylontech warranty scope.***

### Section A: Battery Firmware Upgrade

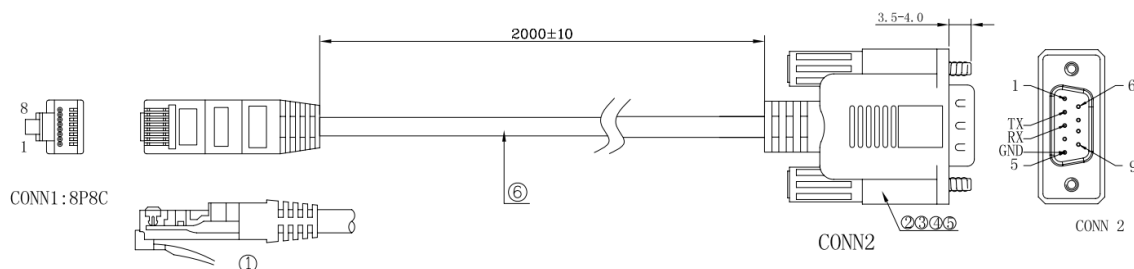
1. Connect from Battery RS232/Console port to laptop USB:  
R232 cable sample



For US2000/US3000/Phantom-S/UP2500, the RS232 cable type is RJ11 – DB9 – USB:



For Force L1/L2, the RS232 cable type is RJ45 – DB9 – USB:

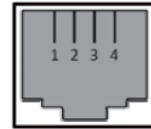


Please re-wire the PIN OUT on RJ11/RJ45 side as below:

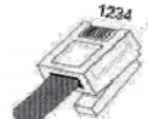
For RJ11 cable:

**Definition of RJ11 Port Pin**

| No. | RS232 Pin |
|-----|-----------|
| 1   | GND       |
| 2   | TXD       |
| 3   | RXD       |
| 4   | GND       |



RJ11 Port



RJ11 Plug

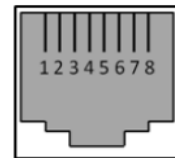
For RJ45 cable:

**Console**

For manufacturer or professional engineer to debug or service.

|       |                     |
|-------|---------------------|
| Pin3  | 232-TX              |
| Pin4* | +5~+12V for wake up |
| Pin5* | GND for wake up     |
| Pin6  | 232-RX              |
| Pin8  | 232-GND             |

\*Wake up signal shall  $\geq 0.5$ Sec, current between 5~15mA. After send wake up signal, the voltage shall disappear for normal operation.

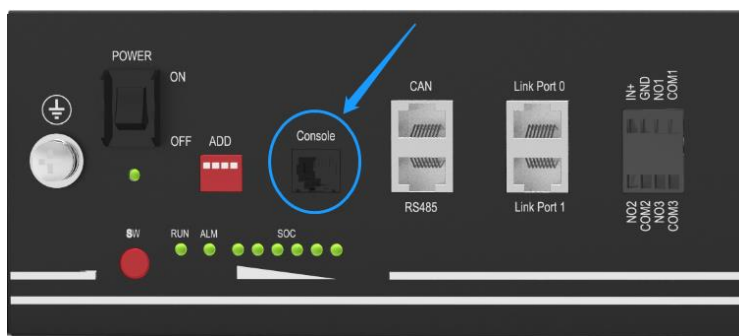


RJ45 Port

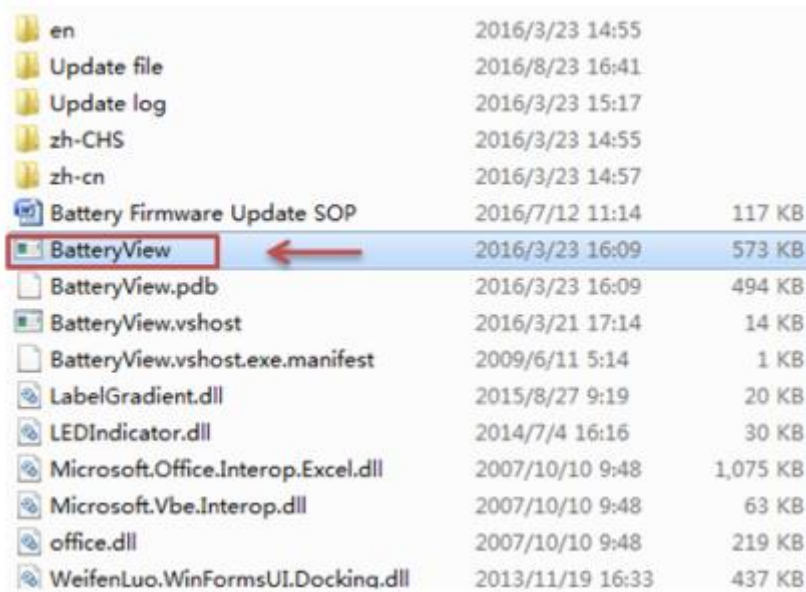


RJ45 Plug

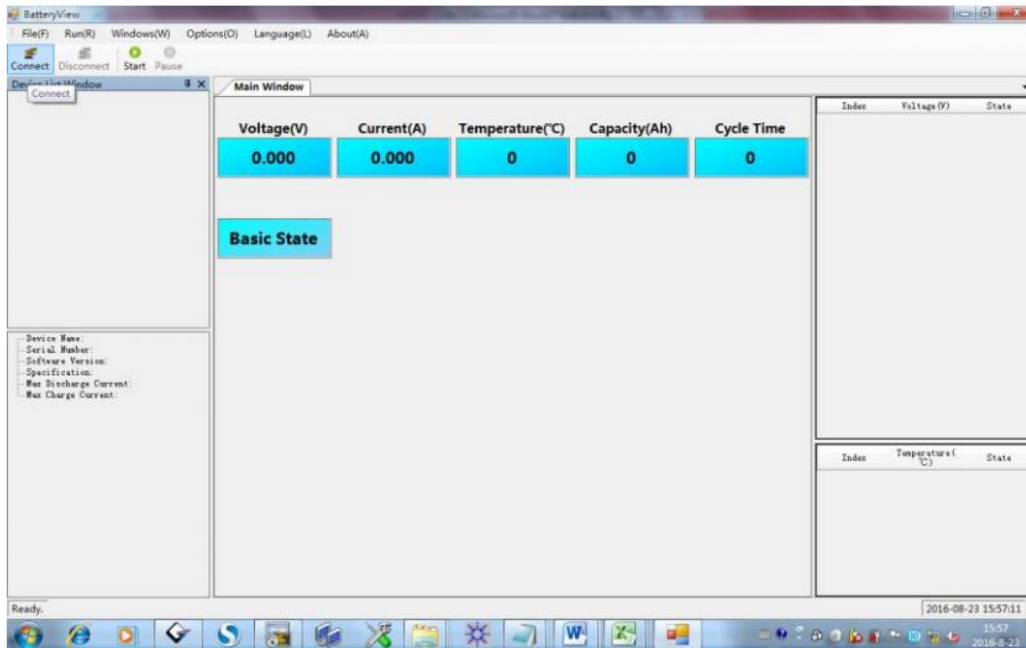
Connect to battery Console Port(as below **BLUE** circle):



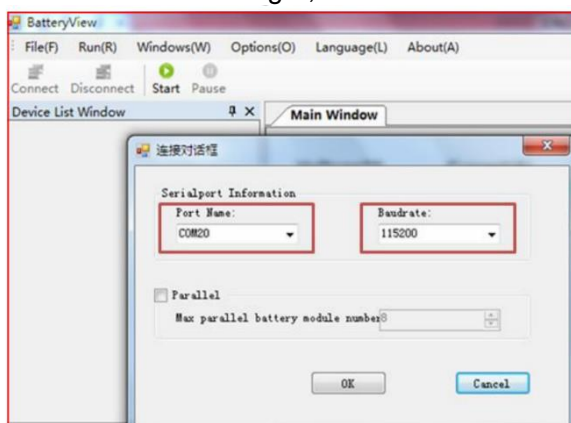
2. Open 'Batteryview.exe':



3. Connect to Battery:

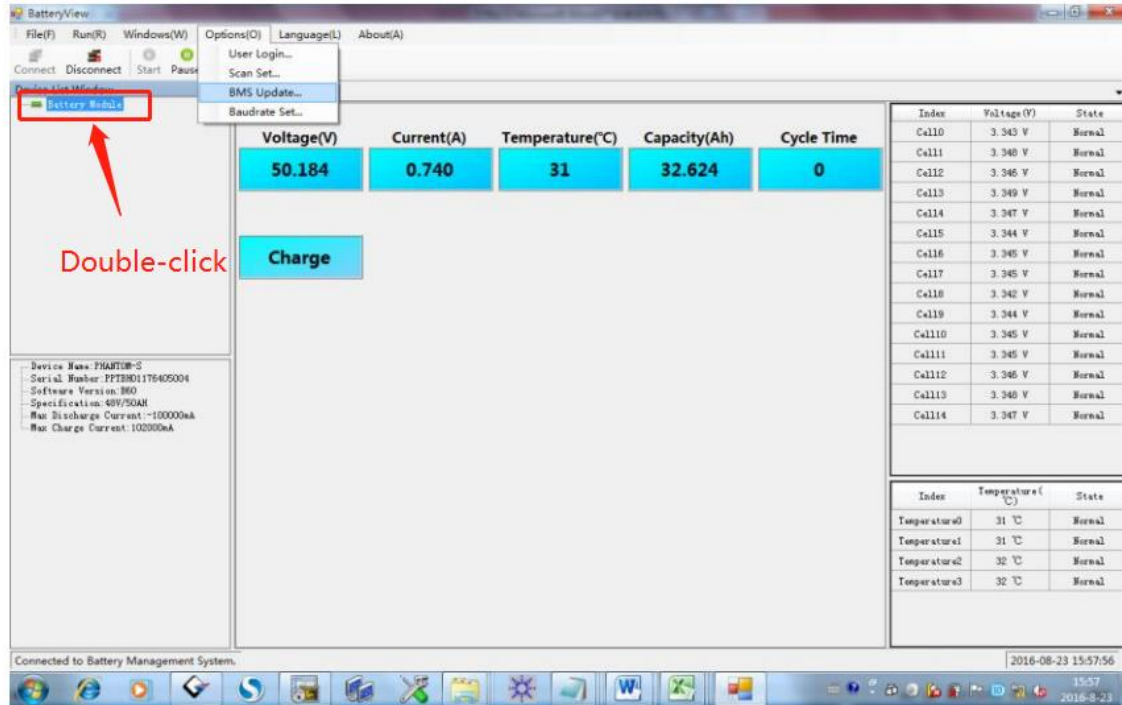


The Port Name will be automatically recognized once the RS232 cable is well installed or from the Device Manager; The Baudrate is 115200.

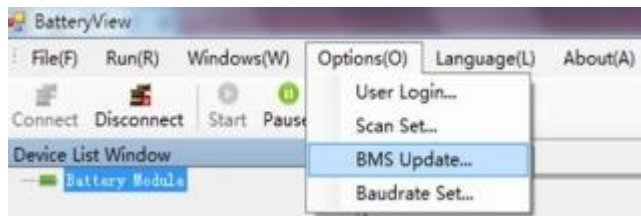


4. If the BatteryView showed values, which means connect successfully:

**\*Note: Please double-click the 'Battery Module' tool bar to receive correct battery information on the bottom right side, then take a Screenshot as evidence for further maintenance task.**



5. Please choose the "BMS Update":



6. Click Browse to choose the firmware:



For upgrade US2000B/US3000A/Force-L series product:

Please select the correct .bin file for the upgrade, by any version of Batteryview.

For upgrade US2000C/US3000C/UP5000:

If the 8<sup>th</sup> and 9<sup>th</sup> of the product Serial Number is not 'E2' or 'C3', it can still select the correct .bin file for the upgrade, by any version of Batteryview.

**If the 8<sup>th</sup> and 9<sup>th</sup> of the product Serial Number is 'E2' or 'C3', please select the correct .zip file for the upgrade, and require to use Batteryview V3.0.28 or higher.**

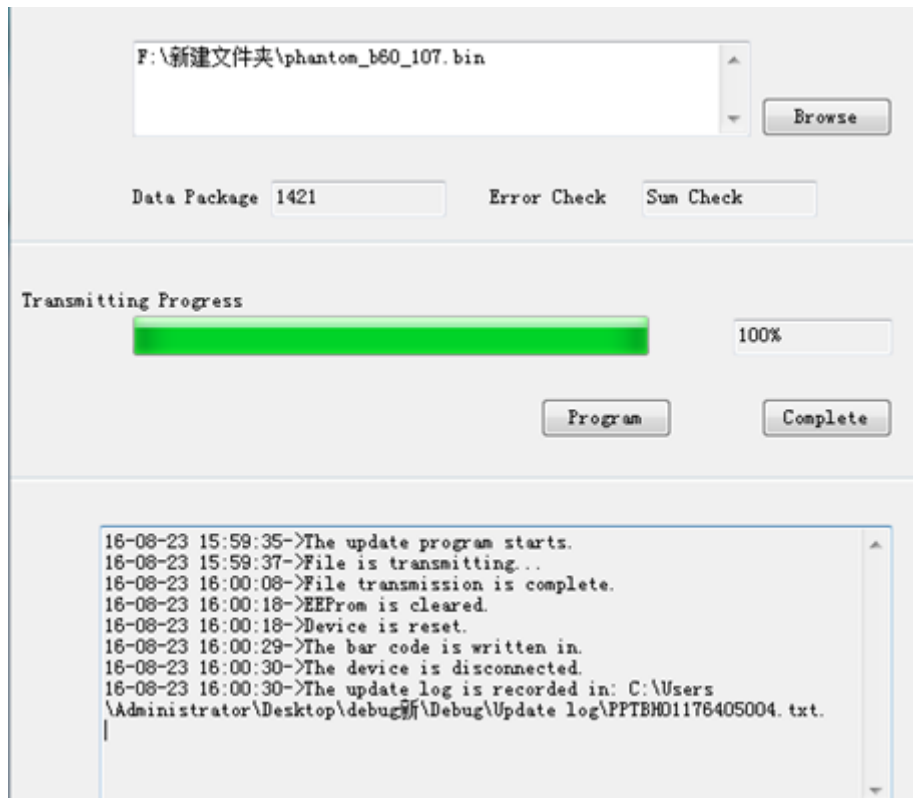
**\*It's suggested to always use the .zip file and Batteryview V3.0.28 for any US2000C/US3000C/UP5000 upgrade to avoid wrong upgrade caused PCBA damage.**

7. And click "Program" to start:



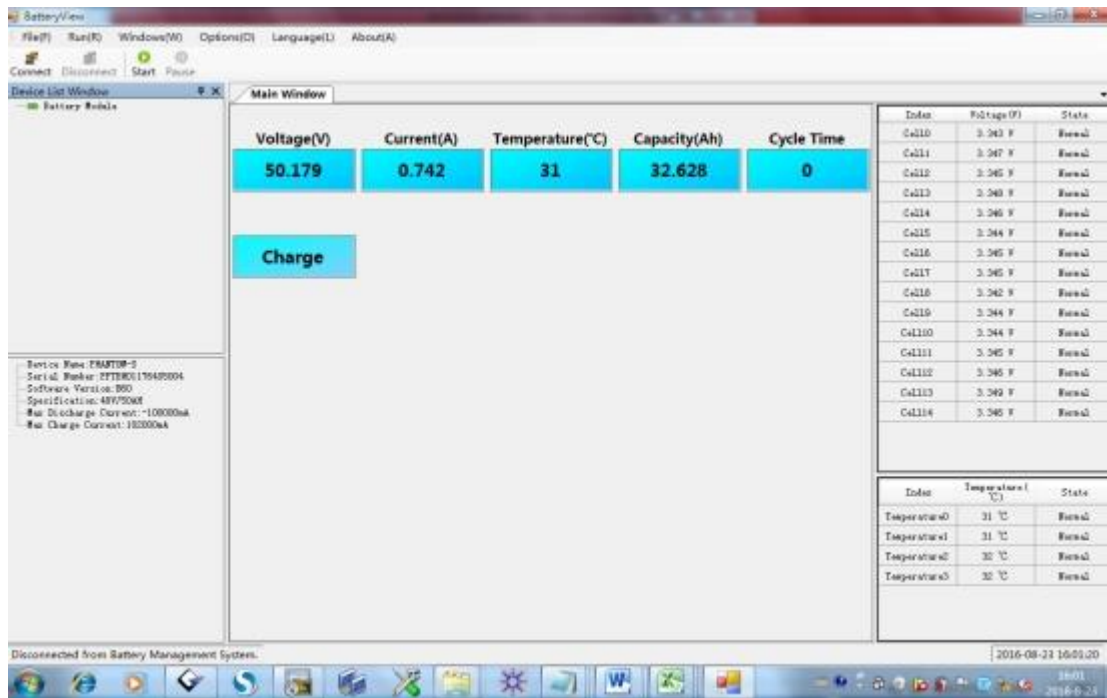
8. After it showed the Serial Number, which means update finished.

**\*Please keep watching the progress bar and 'Program' button till 100%; In different Operation System, it may happens that the upgrade stick during the process and require to click the 'Program' again(once the 'Program' button becomes highlighting again during the upgrade process).**



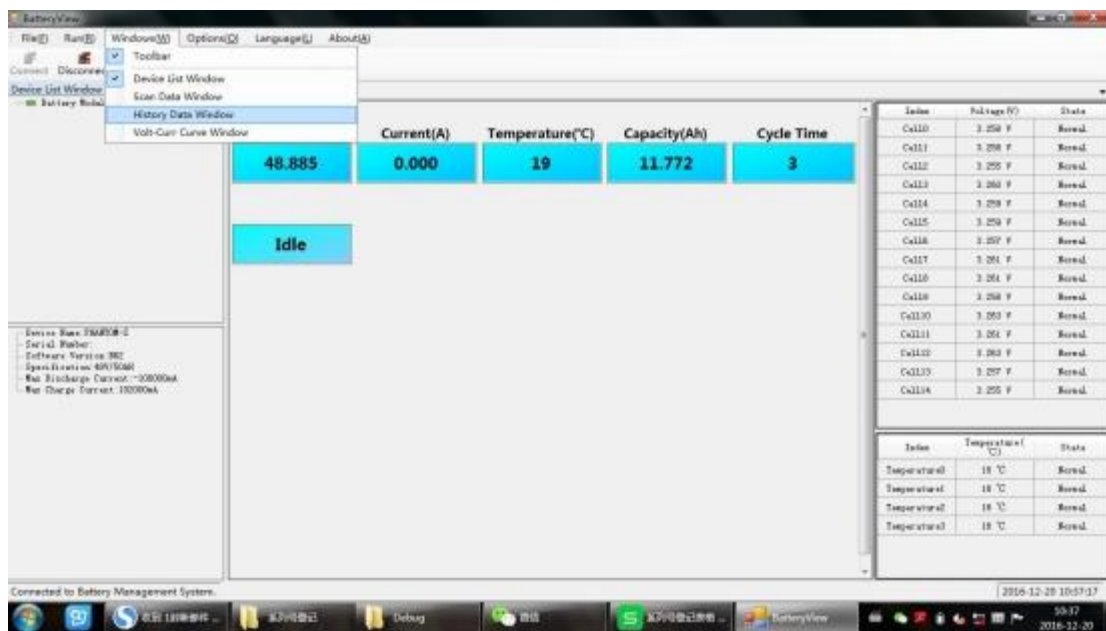


Complete and back to the main page:

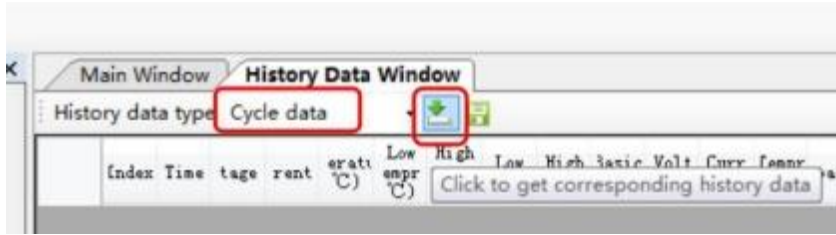


## Section B: Battery Data Acquisition

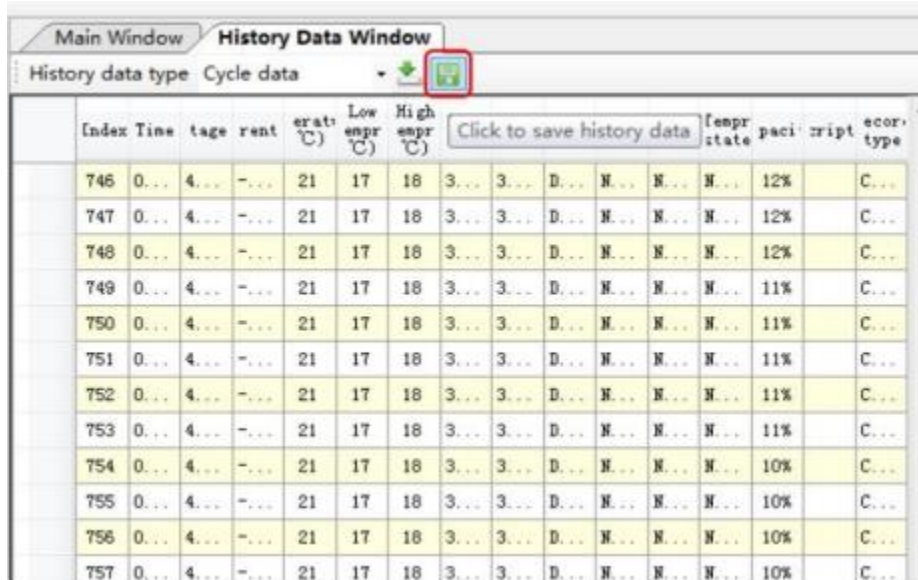
1. Back to Batteryview 'Mainwindow', choose 'History Data Window' under 'Window(M)' menu.



2. Select 'Cycle data' then click the the green down arrow just on the right side

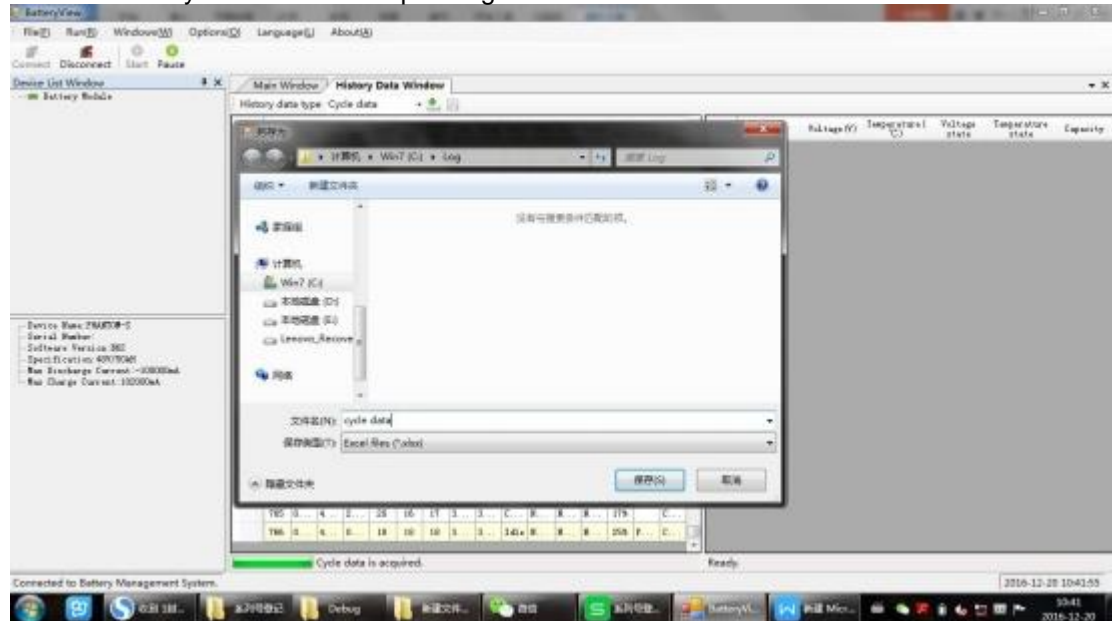


Wait for about 1 – 2mins to let BatteryView acquire the entire cycle data. Then click the save button as below:

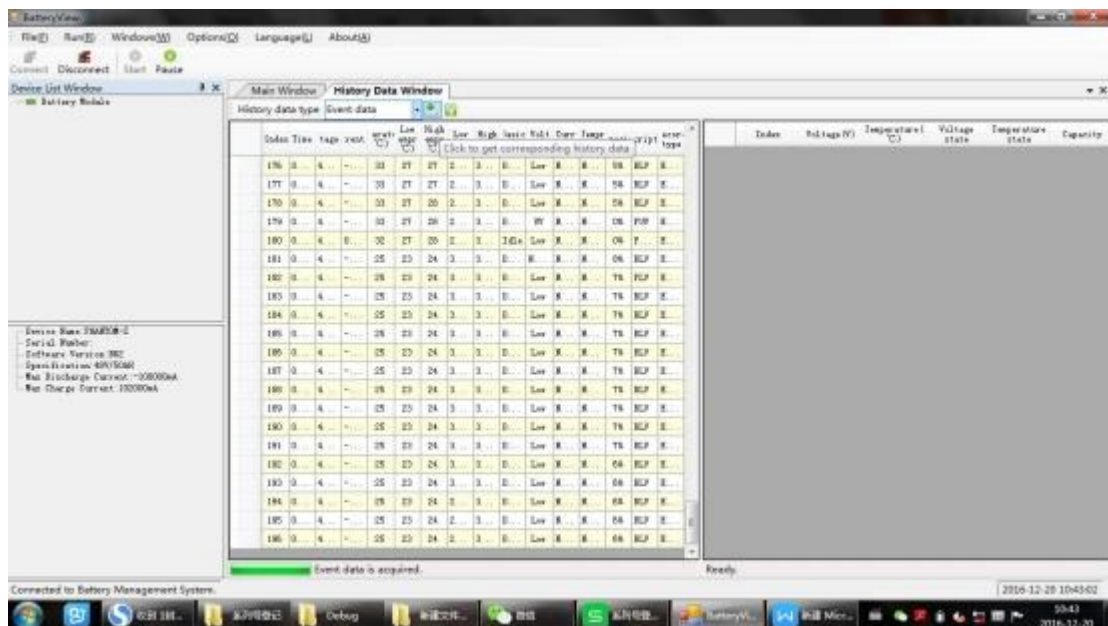
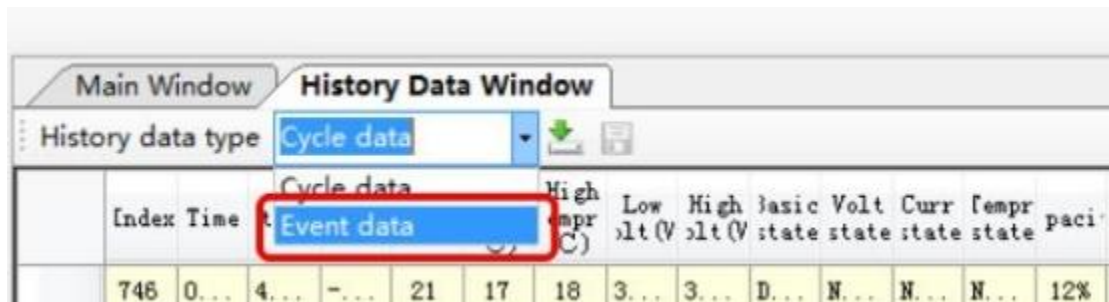


| Index | Time | age  | rent | erat<br>(°C) | Low<br>enpr<br>(°C) | High<br>enpr<br>(°C) | Low  | High | Basic | Volt | Cur  | tempr | pac | ript | acor | type |
|-------|------|------|------|--------------|---------------------|----------------------|------|------|-------|------|------|-------|-----|------|------|------|
| 746   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 12% |      | C... |      |
| 747   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 12% |      | C... |      |
| 748   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 12% |      | C... |      |
| 749   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 11% |      | C... |      |
| 750   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 11% |      | C... |      |
| 751   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 11% |      | C... |      |
| 752   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 11% |      | C... |      |
| 753   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 11% |      | C... |      |
| 754   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 10% |      | C... |      |
| 755   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 10% |      | C... |      |
| 756   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 10% |      | C... |      |
| 757   | 0... | 4... | -... | 21           | 17                  | 18                   | 3... | 3... | D...  | N... | N... | N...  | 10% |      | C... |      |

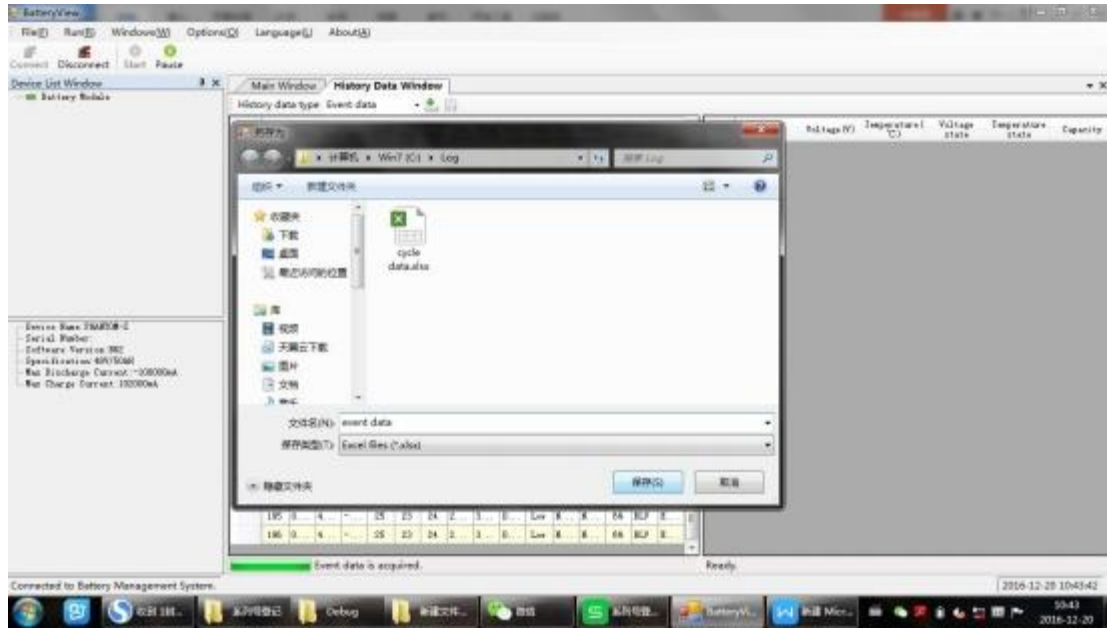
3. Save the cycle data to corresponding folder for record.



4. For event data acquirment, just select 'Event data' as below, then repeat the remain steps from step 5 to step 6. **It's more critical to save the event data in case a failure.**





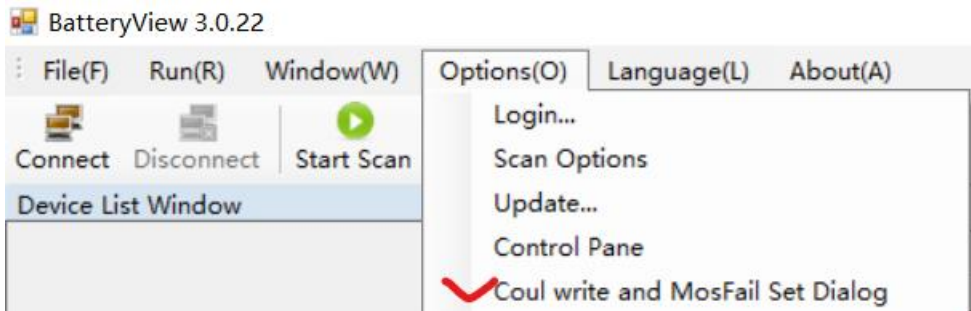


Please remember to save the Event data to your computer as well as Cycle data.

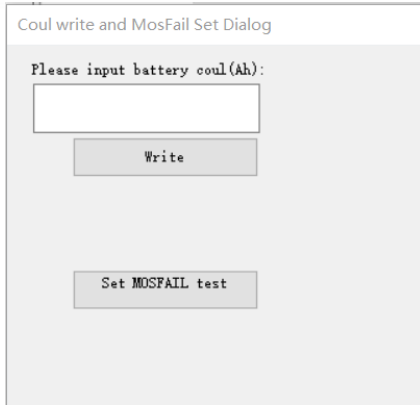
### Section C. Special settings for US2000C/US3000C/UP5000

Below settings only need to be set after swap the PCB of US2000C/US3000C/UP5000.  
 Settings only available from Batteryview V3.0.22

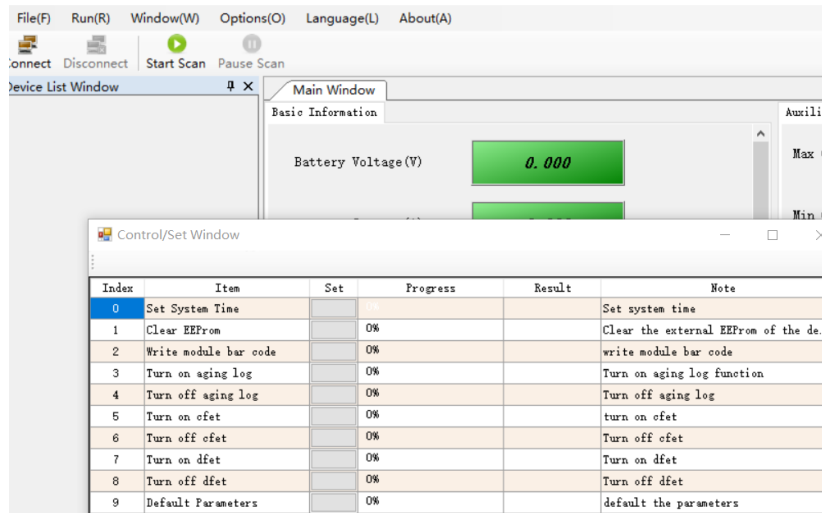
1. Connect to battery console port
2. Choose-options-coul write and mosfail set dialog



- Type in number
  - If US2000C: 50
  - If US3000C: 74
  - If UP5000: 100
- Click Write
- Click Set Mosfail test



3. Choose-options-control panel



Set Index number 0: this will set BMS time same as your PC  
 Set Index number 2: this will need to type in the SN on label.

***Any further questions to this SOP please contact us via [service@pylontech.com.cn](mailto:service@pylontech.com.cn)***



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