



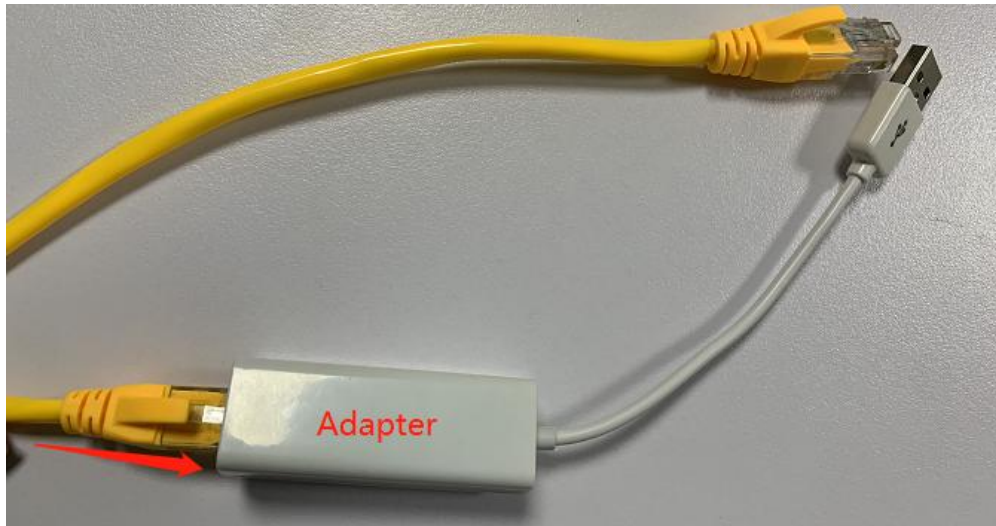
Shenzhen Seplos Technology Co., Ltd

User Manual

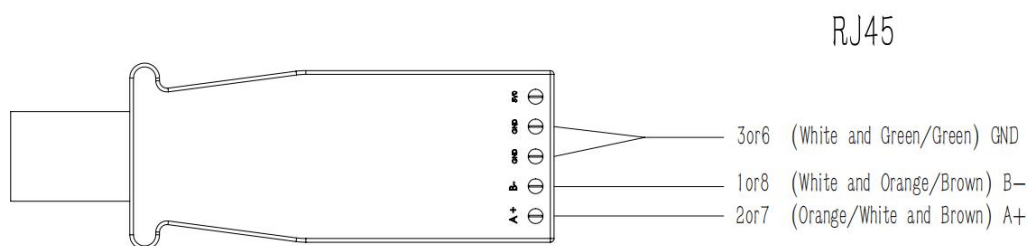
SEPLOS Smart BMS 8S-16S 50A 100A 150A 200A

Battery Connection - RS485 to USB adapter

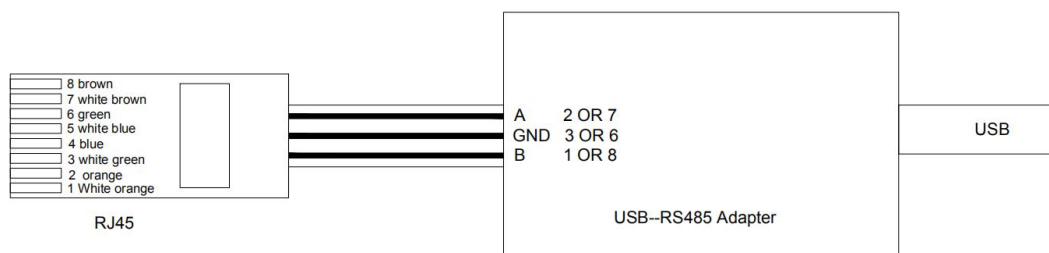
1. SEPLOS USB-RS485 adapter, just connect BMS with battery via SEPLOS USB-RS485 adapter.



2. If the adapter needs wiring, connect the RJ45 cables according to the following wire diagram.



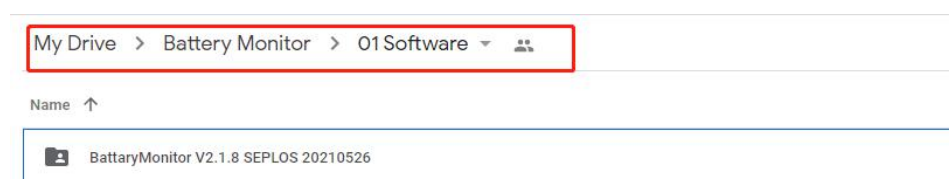
3. If you buy adapters on the market, make sure the **wiring diagram** is as follows, otherwise, the BatteryMonitor software can not be recognized.



Software Download and Installation

1. Download the newest version of SEPLOS 'BatteryMonitor' software installation package with the link blow.

<https://drive.google.com/drive/folders/10pxgNLHovcDZRVGrCZsSkfecBrRw-AdW?usp=sharing>



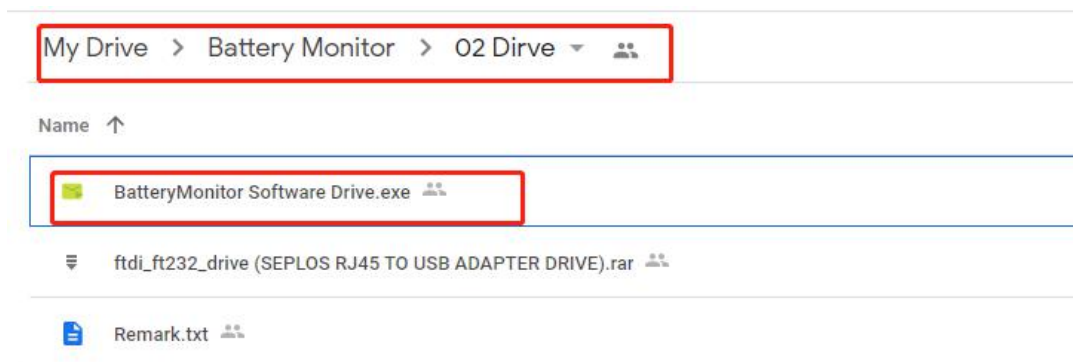
2. To run the 'BatteryMonitor' application, make sure the computer has installed 'NET Framework 4.0' and above. Download the 'NET Framework' installation pack at its official website or at Google Drive site that shared by SEPLOS.

NET Framework official website:

Supported versions		
Version	Release date	End of support
.NET Framework 4.8 (recommended)	2019-04-18	
.NET Framework 4.7.2	2018-04-30	
.NET Framework 4.7.1	2017-10-17	
.NET Framework 4.7	2017-04-05	
.NET Framework 4.6.2	2016-08-02	
.NET Framework 4.6.1	2015-11-30	
.NET Framework 4.6	2015-07-20	
.NET Framework 4.5.2	2014-05-05	
.NET Framework 3.5 SP1	2008-11-18	2028-10-10

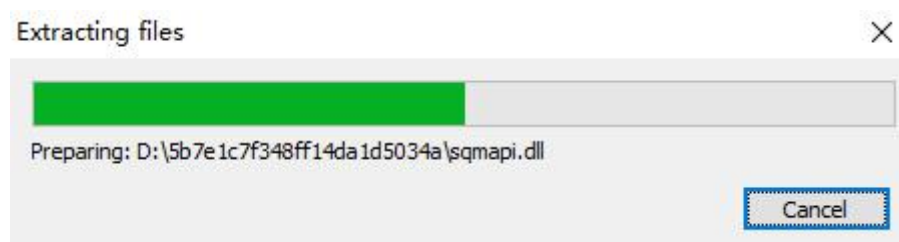
Google Drive site shared by SEPLOS:

<https://drive.google.com/drive/folders/10pxgNLHovcDZRVGrCZsSkfecBrRw-AdW?usp=sharing>



Click the link > Click '02 Drive' > Download the 'BatteryMonitor Software Drive'

3. Double click 'NET Framework' to install drive first. And wait for the progress bar to fill up. Then the BatteryMonitor software drive finished installation.



4. Unzip and extract the compressed file.



BatteryMonitor V2.1.5 - SEPLOS -
20210310-20210311T014828Z-001.zip



BatteryMonitor V2.1.5 - SEPLOS - 20210310

Note: Some USB to RJ45 adapters need drive, please make sure you've install the corresponding drive before formally run the BatteryMonitor application.

Run the software

5. Open 'BatteryMonitor' folder. And double click 'BatteryMonitor.exe' to run the application.

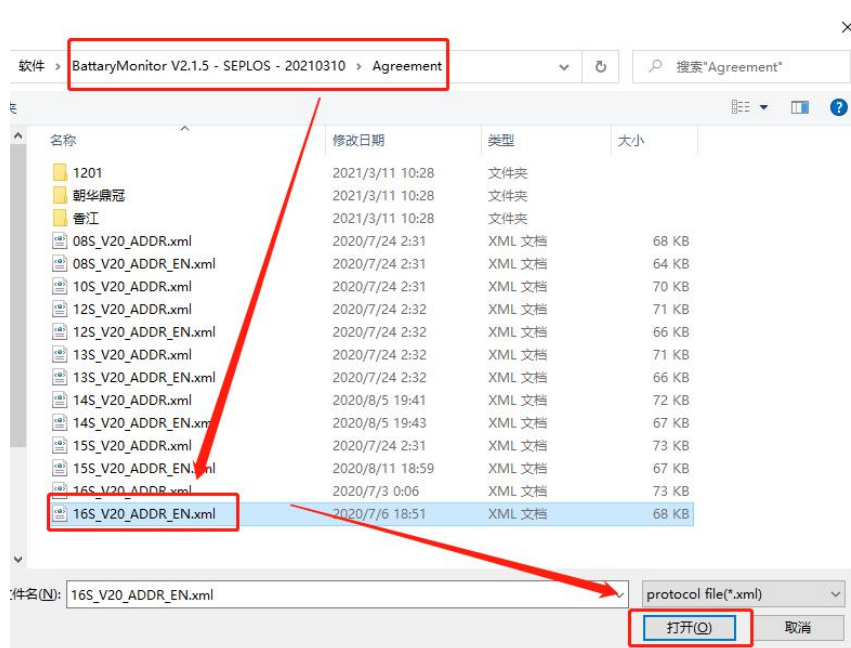


BatteryMonitor.exe

6. If a prompt dialogue box pops up, and indicates 'No agreement was found, please load agreement' like the following picture showed, please click 'OK'.



7. Then choose the '16S_V20_ADDR_EN.XML' agreement (An example of 48v 100A 16S BMS for LiFePO4 battery.) within the 'BatteryMonitor' folder. And click 'OPEN' to load the agreement.

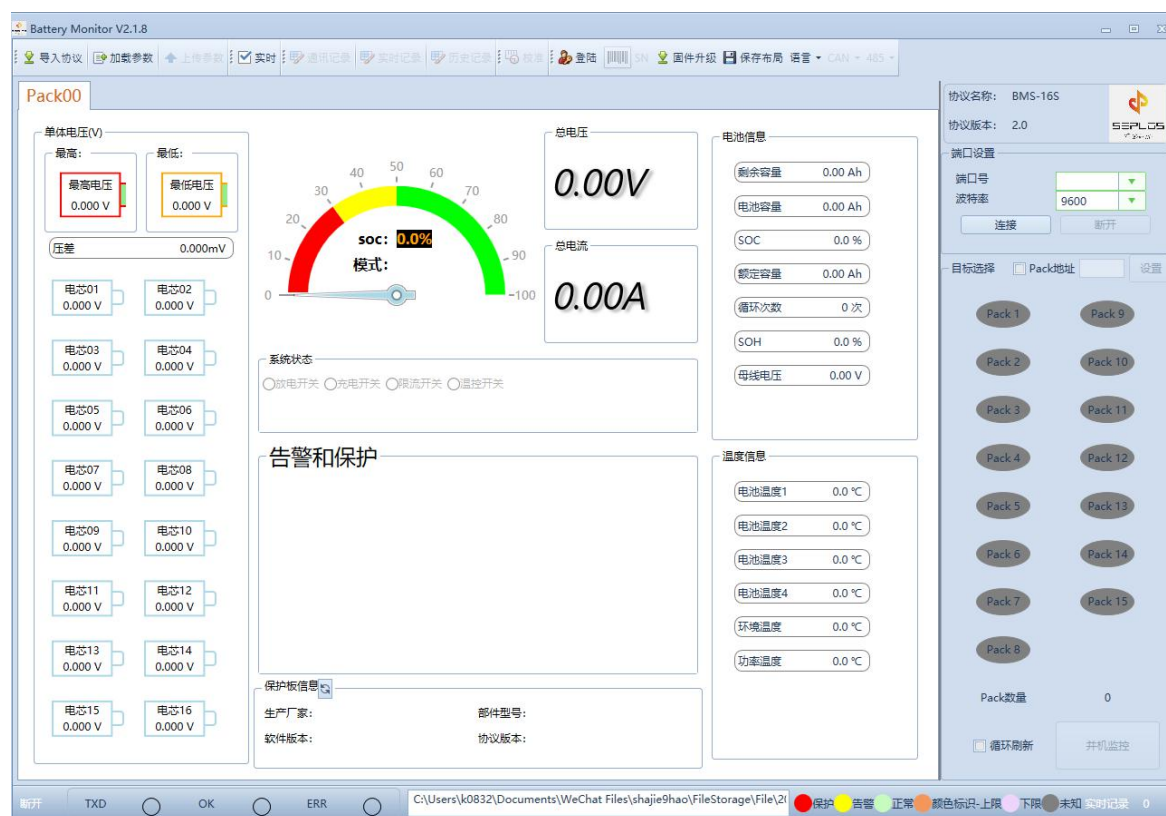


8. After the prompt dialogue pops up. Click 'OK'. And the software will be restarted automatically (Restart time about 10 seconds).

Note: If a incompatible agreement was loaded, please re-choose the agreement according to your BMS models.



9. The software enters into its home page.



10. Before connect with battery system. Make sure the 'Decimal symbol', 'No. of digits after decimal' and 'digits grouping symbol' as follows.

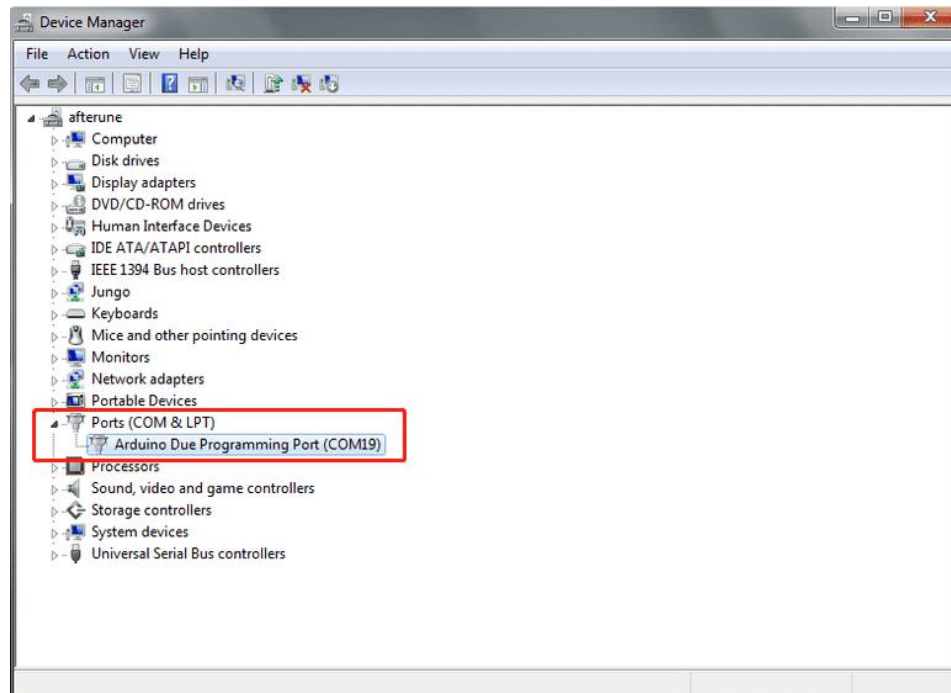
The screenshot shows the 'Customize Format' dialog box with the 'Numbers' tab selected. The 'Example' section shows 'Positive: 123,456,789.00' and 'Negative: -123,456,789.00'. The settings are as follows:

Setting	Value
Decimal symbol:	.
No. of digits after decimal:	2
Digit grouping symbol:	,
Digit grouping:	123,456,789
Negative sign symbol:	-
Negative number format:	-1.1
Display leading zeros:	0.7
List separator:	,
Measurement system:	U.S.
Standard digits:	0123456789
Use native digits:	Never

At the bottom, there is a 'Reset' button and a message: 'Click Reset to restore the system default settings for numbers, currency, time, and date.' The 'OK' and 'Apply' buttons are highlighted with red boxes.

Control panel > Time & Language > Additional data, time & regional settings > Region > Additional settings

11. Choose the port number, which is different for different computer devices. Check the ports in 'Device Manager'.



12. Baud rate is 19200. And click 'Connect'.



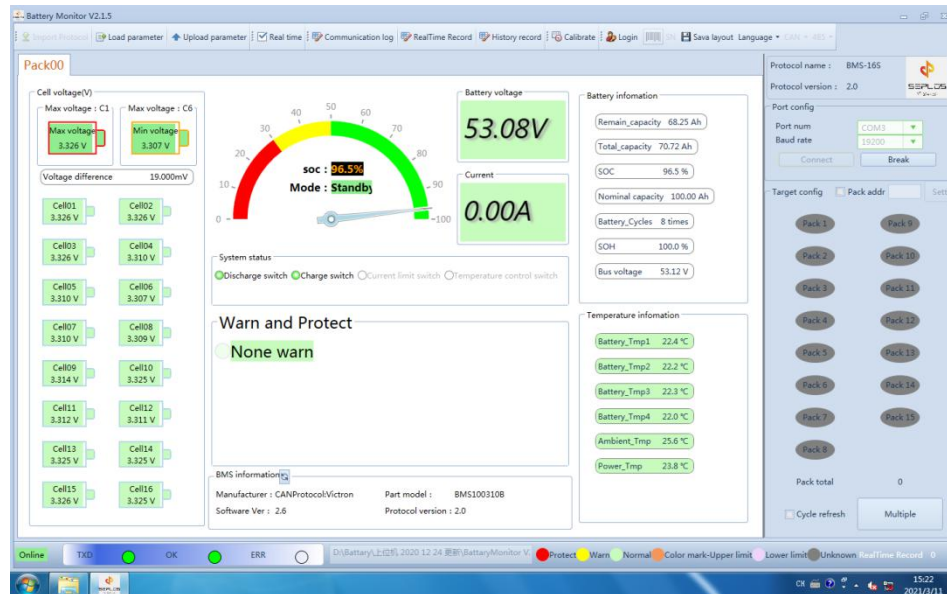
Computer Manager > Device Manager > Ports

13. Different adapters may need different drive. (Some computers will install drive automatically when the adapter is plugged in.) If there isn't COM No. Options. Install the drive manually.

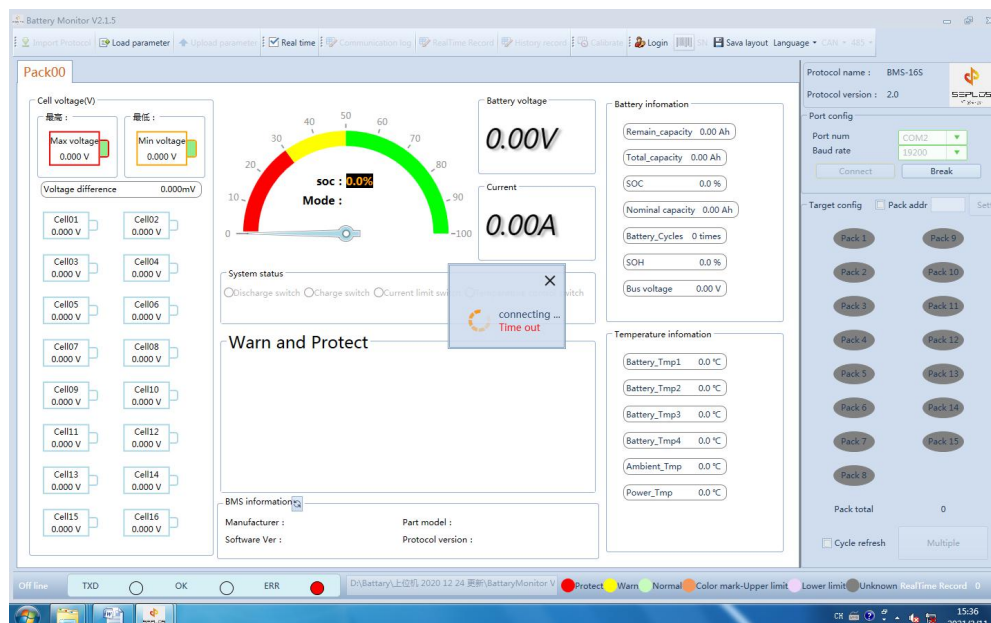
Download the drive with the following link:

<https://drive.google.com/drive/folders/10pxgNLHovcDZRVGrCZsSkfecBrRw-AdW?usp=sharing>

14. When successfully connected with the battery, the battery information can be read and displayed on the software interface.

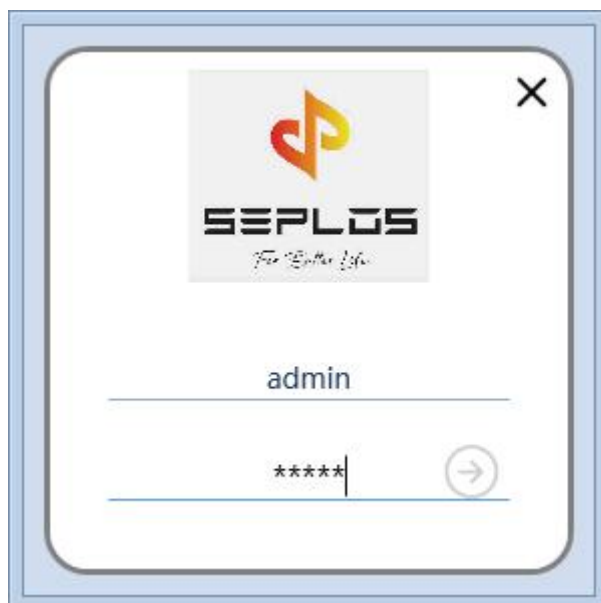


15. If BMS fail to connect with battery, a prompt dialogue box will pop up indicating the connection time out. Please check the port number and DIP address, then reconnect.

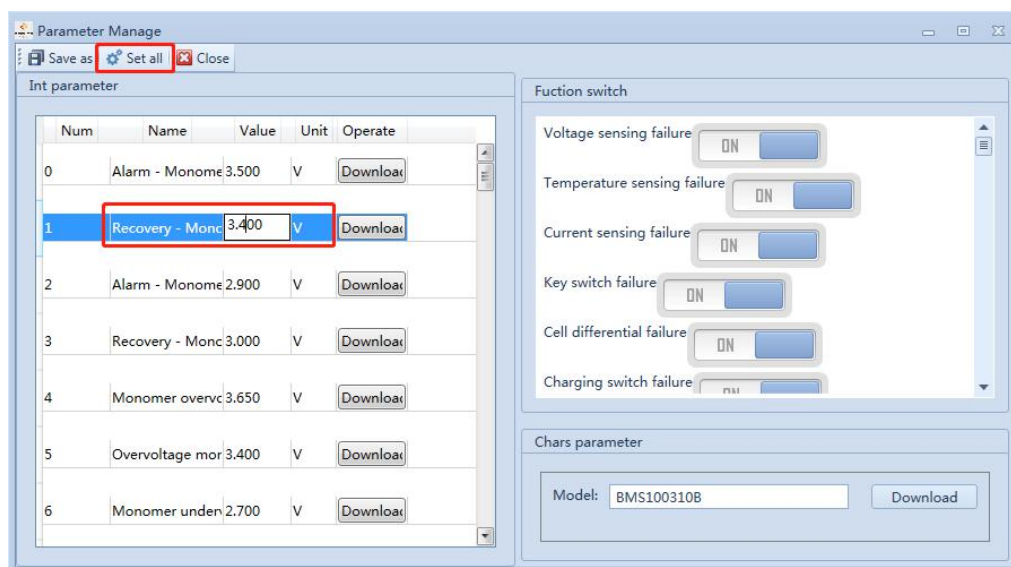


16. To manage the parameters, we need to login as administrator.

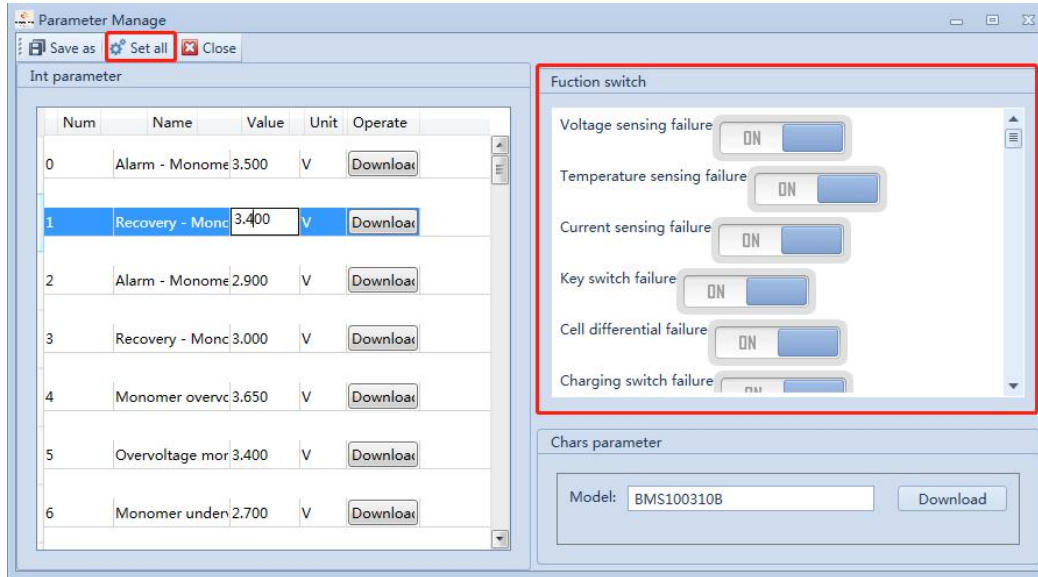
(Administrator account: admin; Password: admin)



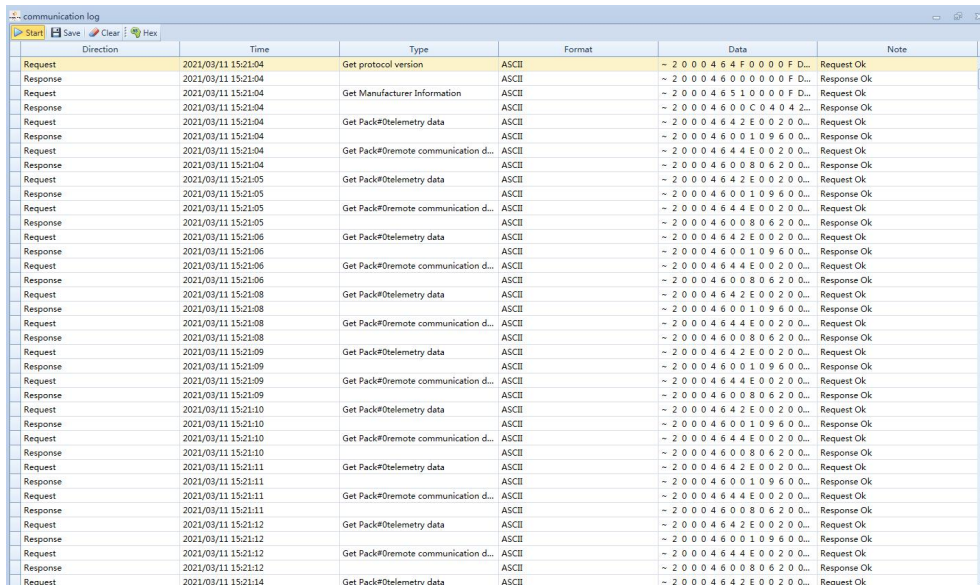
17. After login successfully, choose the menu 'upload parameter'. Then double click the parameters that need to modify. And click 'set all' to save the changes. Click 'save as' to export the settings for backup.



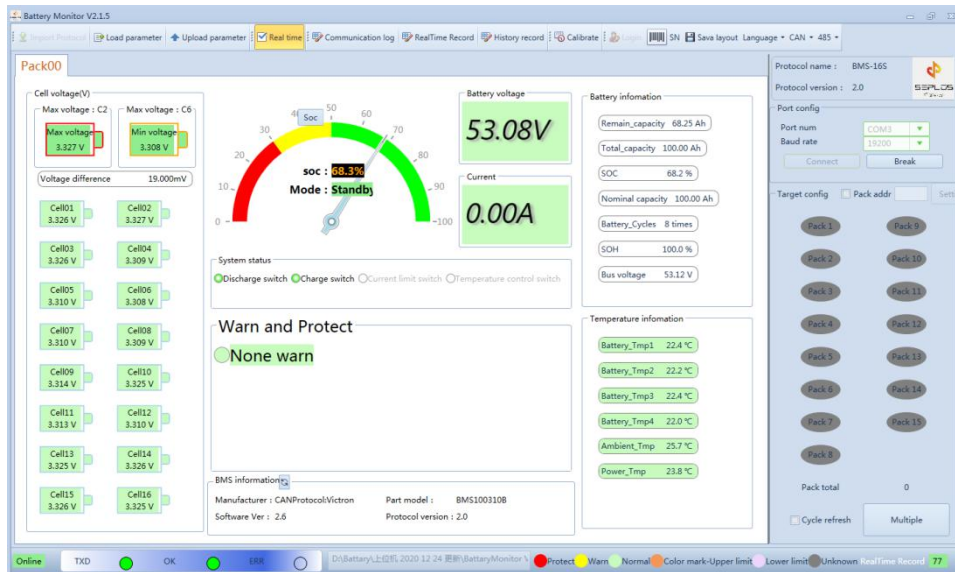
18. The 'upload menu' could also manage the ON/OFF of functions. Double click to choose the switch status. And click 'set all' to save the change.



19. Click 'communication log' menu. The communication information of warning status can be checked.



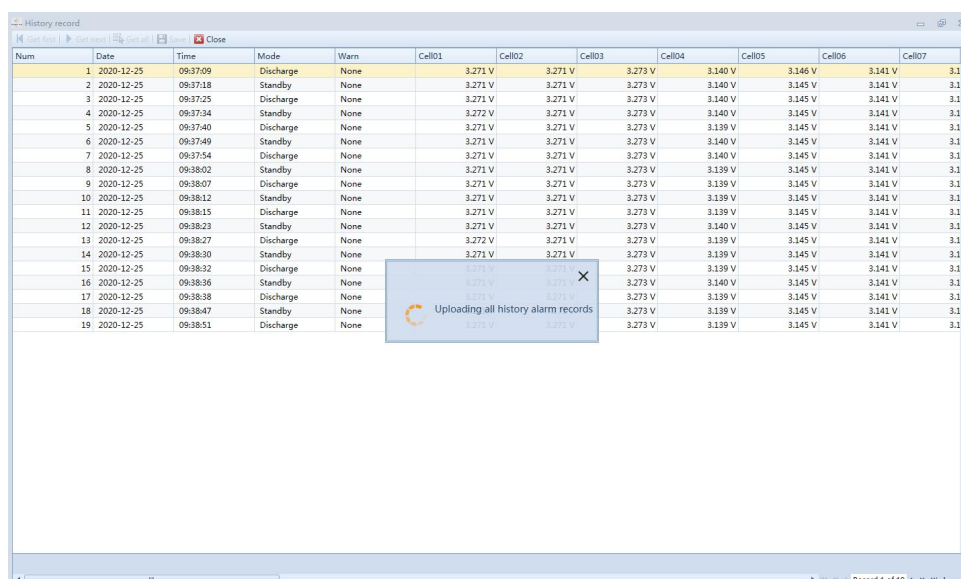
20. Click 'Real time', and its background color will turn yellow. BMS will record the battery information in real-time (Every seconds).



21. And the record data can be read and saved through the 'Real time record' menu. Click 'Real time' again, real-time recording will stop updating.

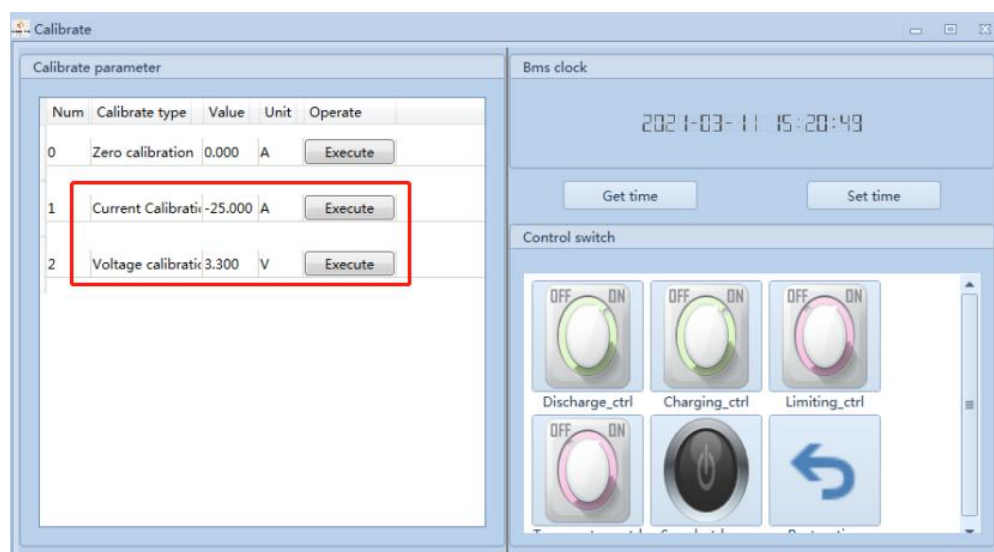
Num	Pack#	Date	Time	Mode	Warn	Cell01	Cell02	Cell03	Cell04	Cell05	Cell06
54	0	2021-03-11	15:29:10	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
55	0	2021-03-11	15:29:17	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
56	0	2021-03-11	15:29:18	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
57	0	2021-03-11	15:29:19	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
58	0	2021-03-11	15:29:21	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
59	0	2021-03-11	15:29:22	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
60	0	2021-03-11	15:29:23	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
61	0	2021-03-11	15:29:24	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
62	0	2021-03-11	15:29:25	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
63	0	2021-03-11	15:29:27	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
64	0	2021-03-11	15:29:28	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
65	0	2021-03-11	15:29:29	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
66	0	2021-03-11	15:29:30	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
67	0	2021-03-11	15:29:32	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
68	0	2021-03-11	15:29:33	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
69	0	2021-03-11	15:29:34	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
70	0	2021-03-11	15:29:35	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
71	0	2021-03-11	15:29:36	Standby	None	3.326 V	3.327 V	3.326 V	3.310 V	3.310 V	3.3
72	0	2021-03-11	15:29:37	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
73	0	2021-03-11	15:29:39	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
74	0	2021-03-11	15:29:55	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
75	0	2021-03-11	15:29:56	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
76	0	2021-03-11	15:29:57	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
77	0	2021-03-11	15:29:58	Standby	None	3.326 V	3.327 V	3.326 V	3.309 V	3.310 V	3.3
78	0	2021-03-11	15:29:59	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
79	0	2021-03-11	15:30:01	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
80	0	2021-03-11	15:30:02	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
81	0	2021-03-11	15:30:03	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
82	0	2021-03-11	15:30:04	Standby	None	3.326 V	3.326 V	3.326 V	3.309 V	3.310 V	3.3
83	0	2021-03-11	15:30:05	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
84	0	2021-03-11	15:30:07	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
85	0	2021-03-11	15:30:08	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
86	0	2021-03-11	15:30:09	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
87	0	2021-03-11	15:30:10	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3
88	0	2021-03-11	15:30:11	Standby	None	3.326 V	3.326 V	3.326 V	3.310 V	3.310 V	3.3

22. Click the 'History record'. All the historical data can be read and saved.

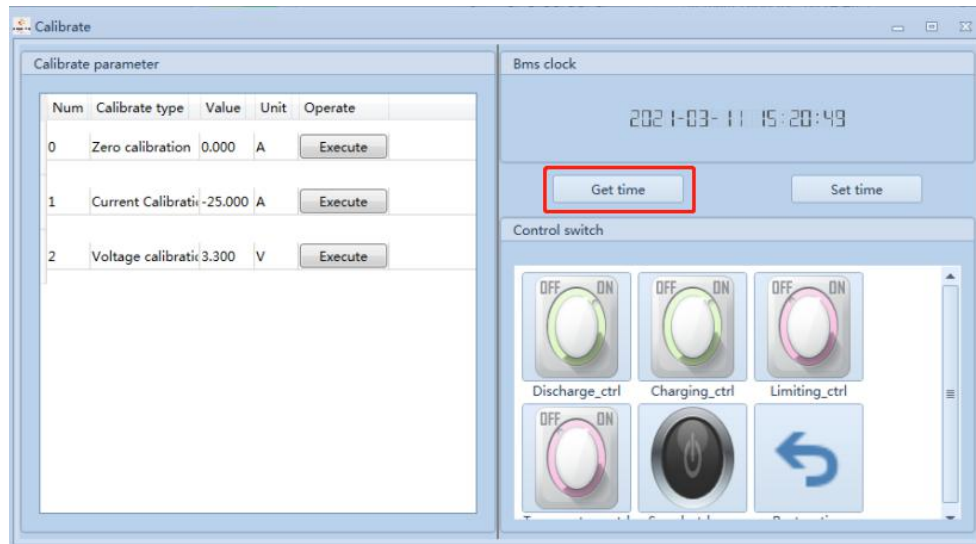


23. Current Calibration and Voltage Calibration is for quality control during manufacturing. (Do not click unless being permitted, or the BMS will be damaged, and SEPLOS will not responsible for the damage.)

电流校准和电压校准用于出厂质检，只有专业设备才能使用。（未经允许请勿点击，否则会损坏 BMS，SEPLOS 对因此造车的损坏不承担任何责任。）

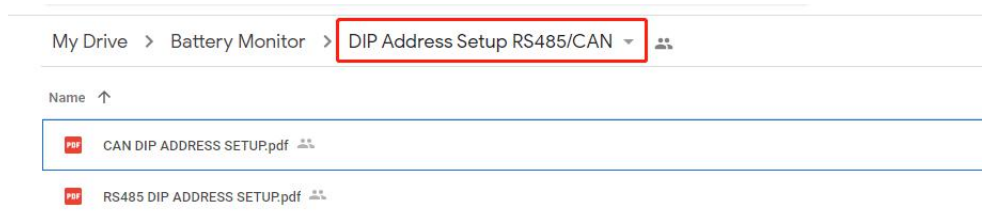


24. Click 'Calibrate' - 'Get time' to get BMS time. If the date and time is not accurate, click 'Set time' to updating. (Make sure the computer date and time correctly before operating.)

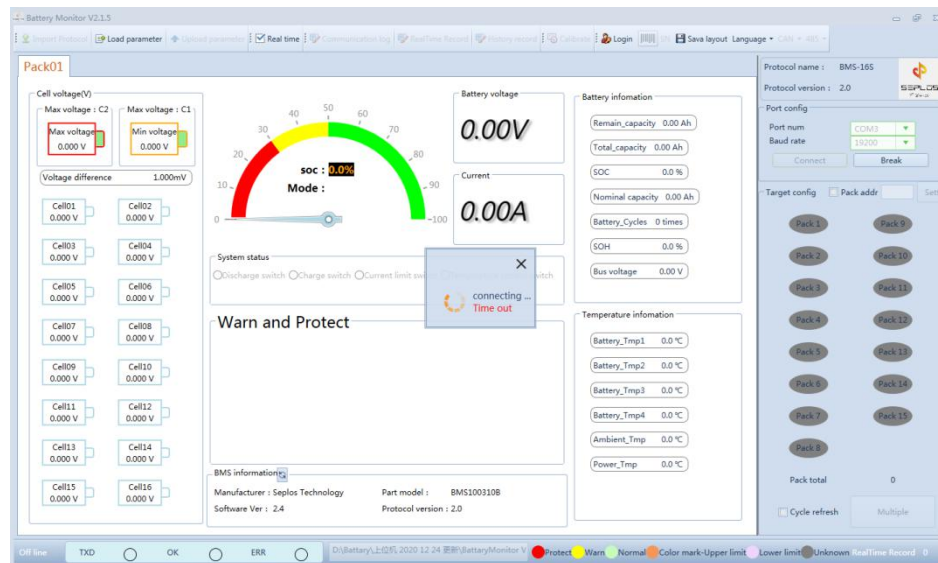


25. When multiple packs in parallel, make sure the DIP address is correctly set. Check the RS485 DIP ADDRESS SETUP.

<https://drive.google.com/drive/folders/10pxgNLHovcDZRVGrCZsSkfecBrRw-AdW?usp=sharing>



26. And choose the corresponding packs before clicking 'connect'. Or the connection will result in time out.



27. Then the 'BatteryMonitor' installed successfully. All the cell voltage, current, status and historical record can be monitored in real-time.

