Home storage upper monitor system software operating manual

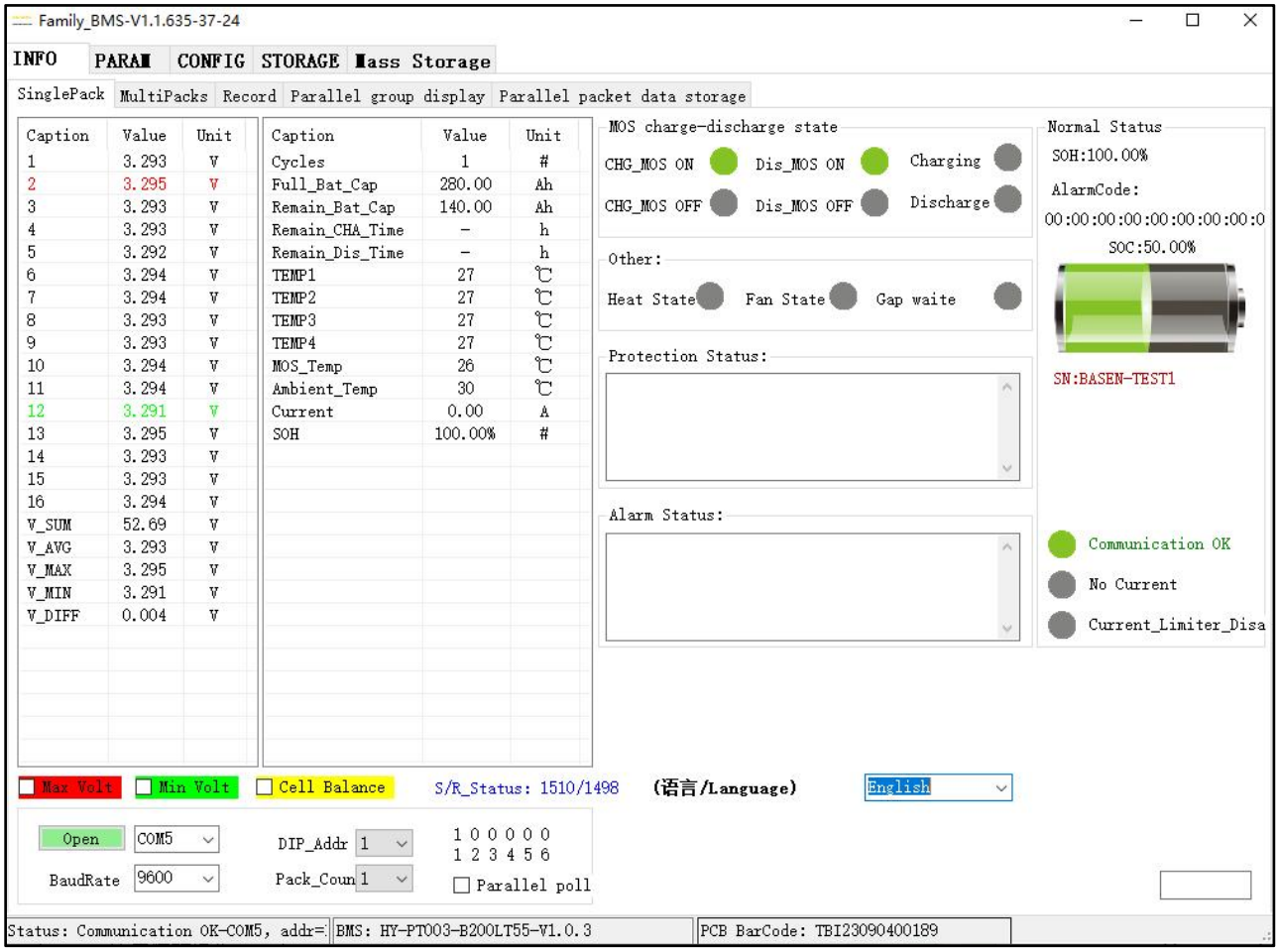
Catalogue

1. INTRODUCTION TO SOFTWARE FUNCTIONS

Energy storage communication base station BMS intelligent monitoring management software is Basengreen has developed intelligent software products for energy storage communication base station BMS, users can use Basengreen energy storage communication base station BMS intelligent monitoring management software for field data acquisition, parameter calibration operation, real-time acquisition BMS data, data storage, read historical data, parameter modification, etc.

Before enabling the software for monitoring, open the communication interface of the corresponding device, and set the PACK address ready to read the data.

The software can read and configure system parameters, read real-time BMS real-time data, parallel multi-machine monitoring, data storage and historical data reading and clearing functions.



2. SOFTWARE RUNNING ENVIRONMENT

The operating environment of the software is Windows, which cannot run under Android and Apple

IOS systems.

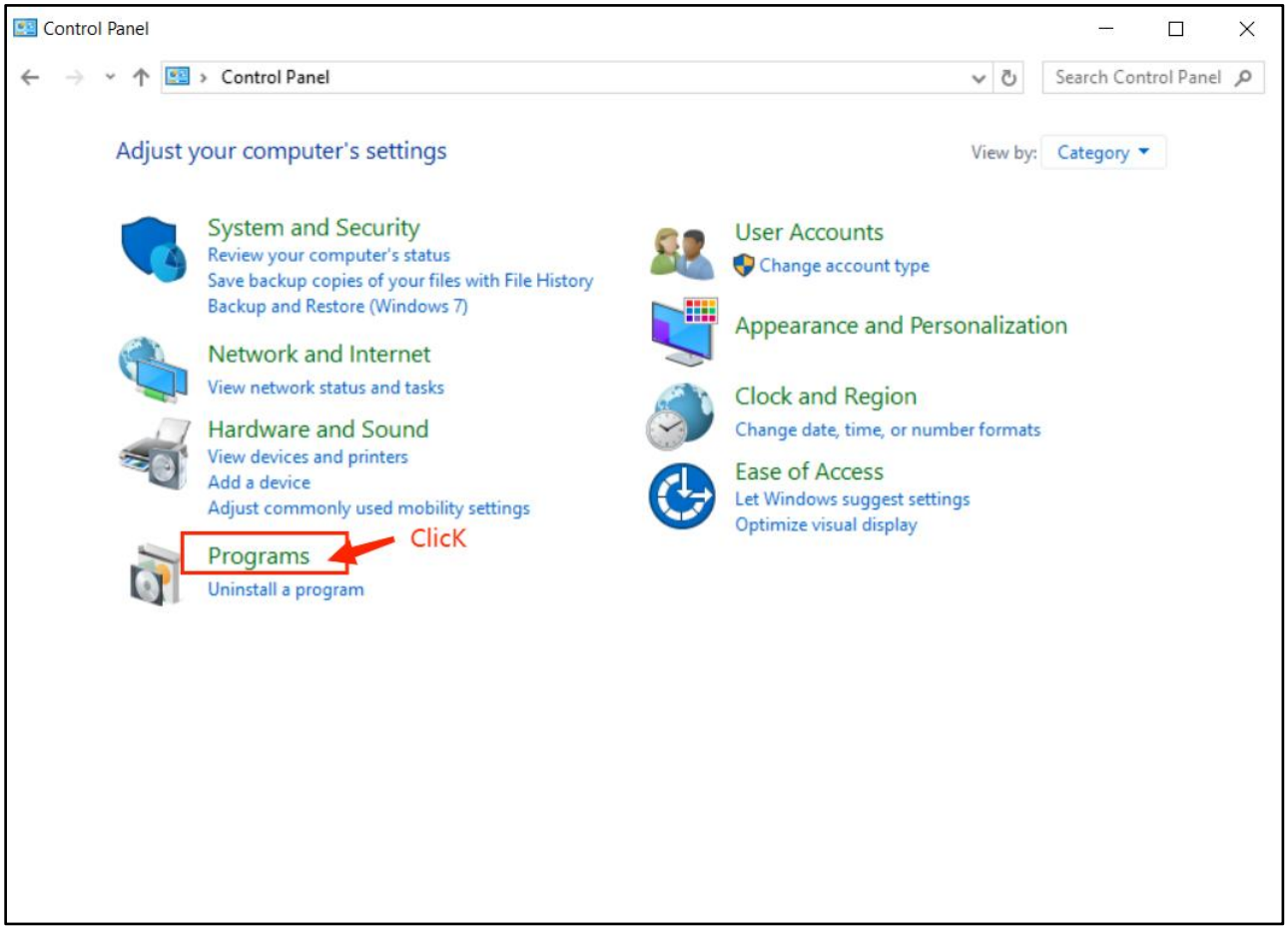
1. Windows XP :Windows XP: The system is intended to have the .NET 2.0 environment installed (you can contact Basengreen technicians for installation environment files) before running the upper monitor system software.（The .net2.0 is 22M).

2. Windows 7 : The system comes with the .net3.0 operating environment and can directly use the upper monitor system software.

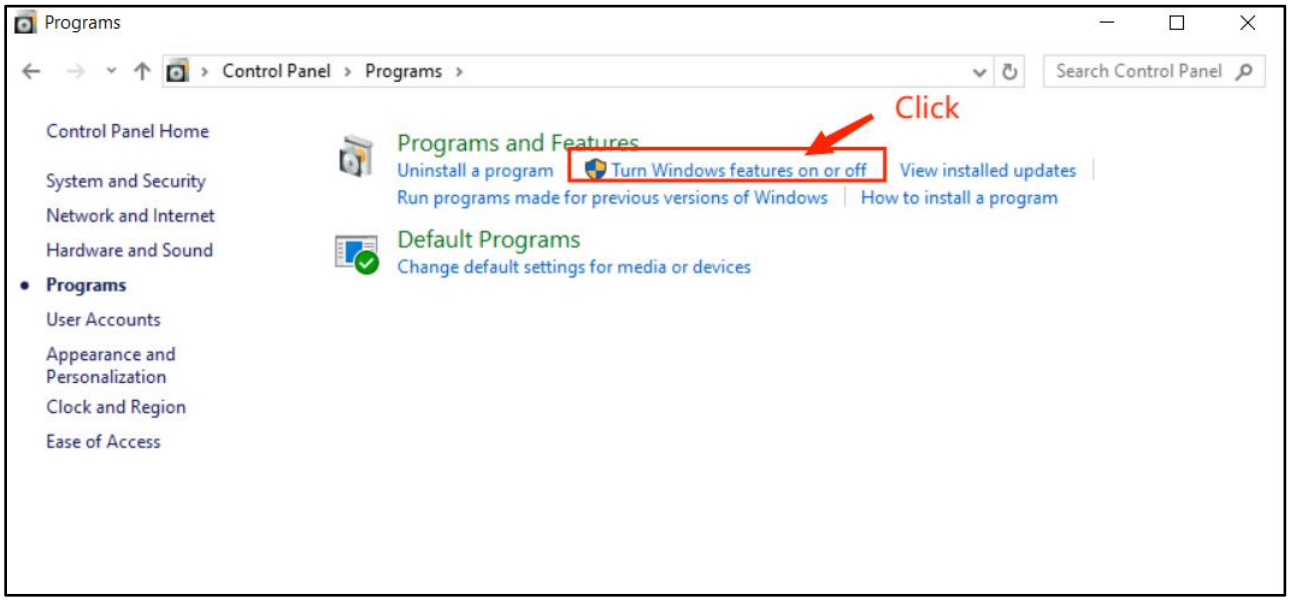
3. Windows 10 and Windows 11 systems are intended to have the .NET 3.5 environment installed before running the upper monitor system software.（. Net 3.5 The installation environment is 80M) There are two ways to obtain the installation environment files, one can contact Basengreen technicians , another way is to enable the system's own .net runtime environment.

Taking Windows 11 system as an example, the steps to enable the system's built-in .net runtime environment are as follows：

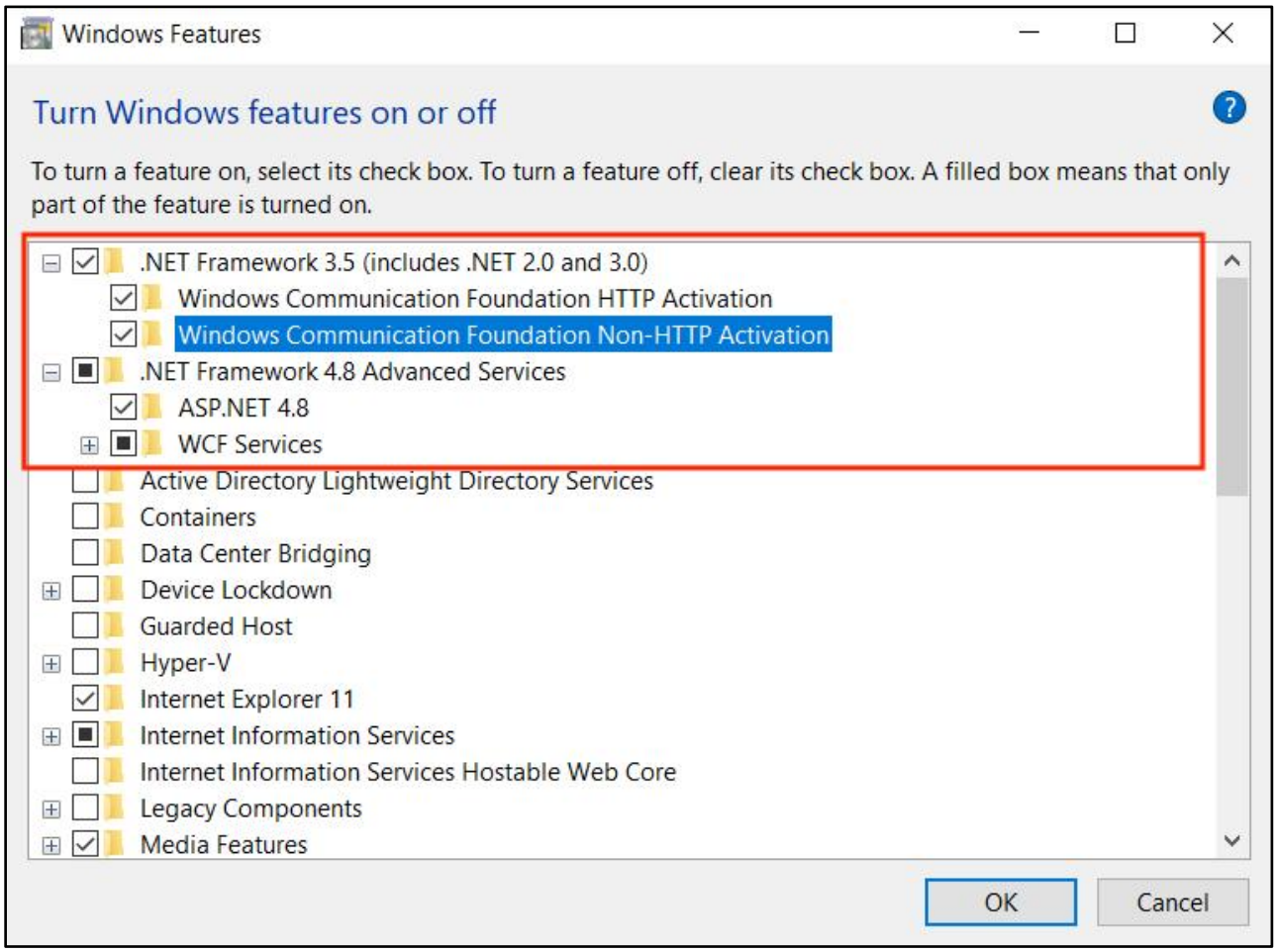
(1) Search for the "Control Panel" in the start menu of the Win 11 system, open the “Control panel” in the search, and select the "Programs" option inside.



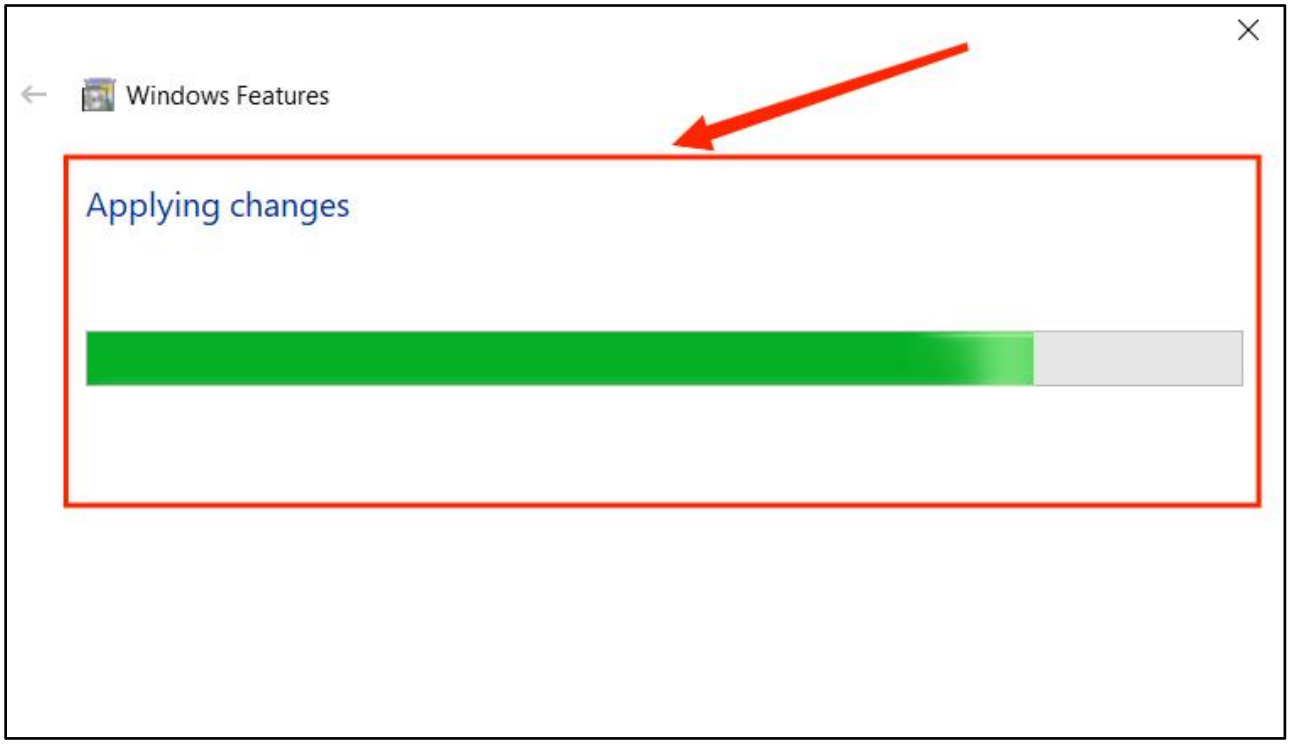
(2) In the "Programs and Features" window, click the "Turn Windows features on or off " option.

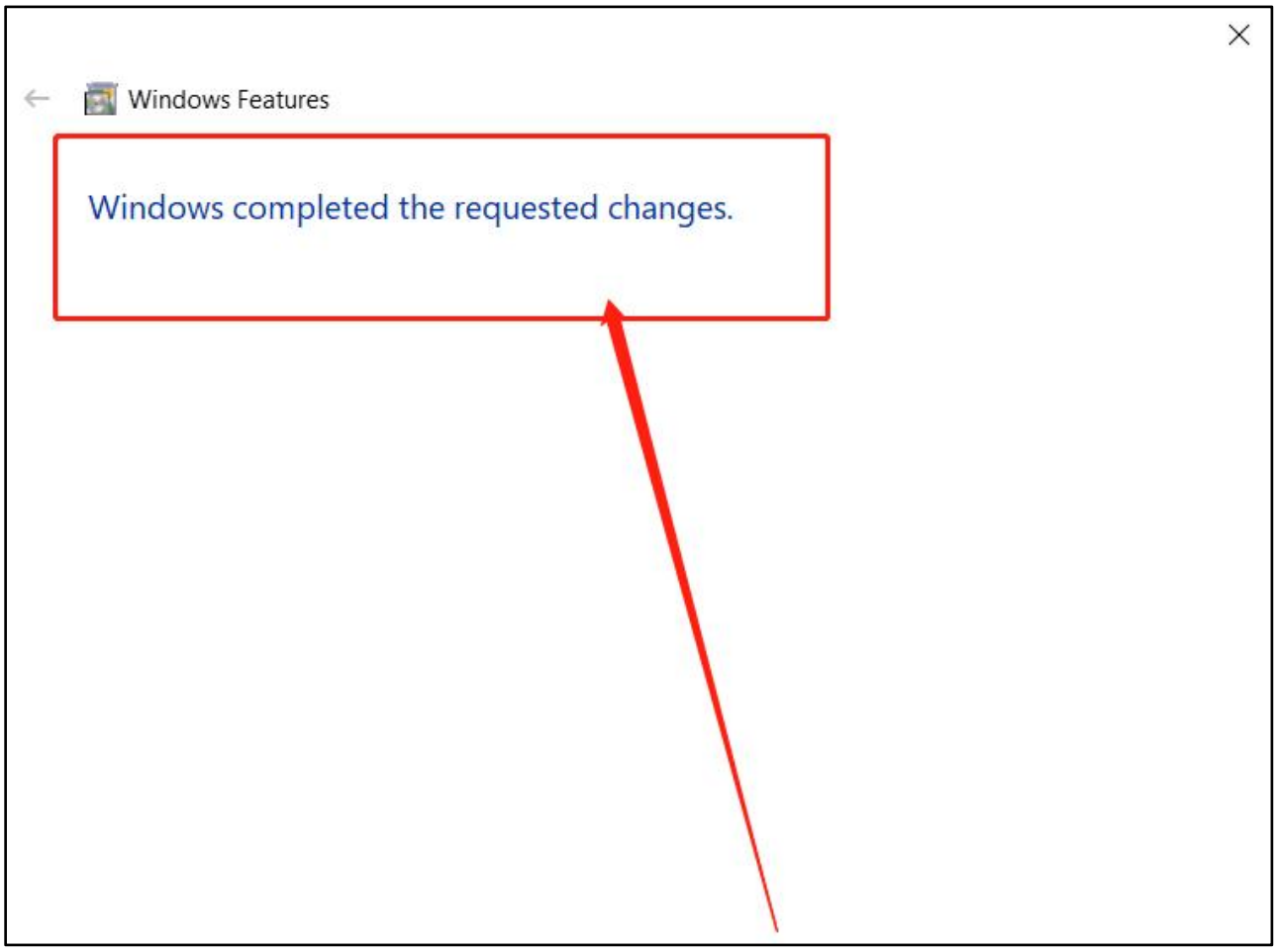


(3) After entering, check all. For the net service file, click on the "OK" button.

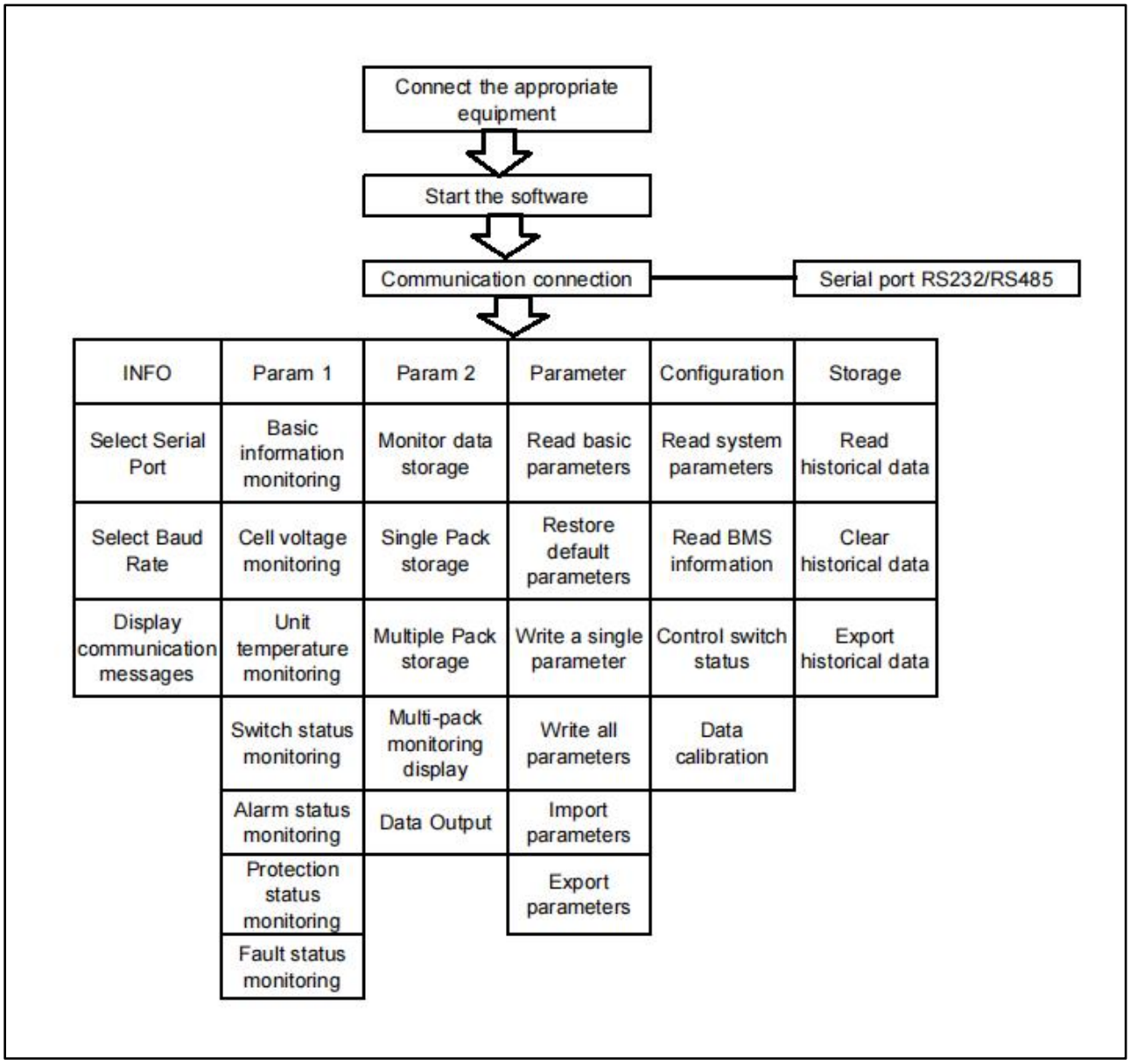


(4) Wait for the Win 11 system to automatically install and update, and then restart the computer.





3. MENU



4. OPERATION DECLARATION

The software is a clear and simple, with real-time monitoring, real-time data storage, management strategy, system Settings, historical data reading and other functions. In addition, multiple PACKS connection can be connected in parallel for data reading and storage.

4.1 Preparation work

Preliminary required before opening the upper monitor system to communicate with the BMS:

(1) Prepare a serial port converter from USB to RS485 / RS232;

(2) Install the corresponding USB serial port driver on the computer;

(3) Prepare communication line according to the definition of communication line in the specification.

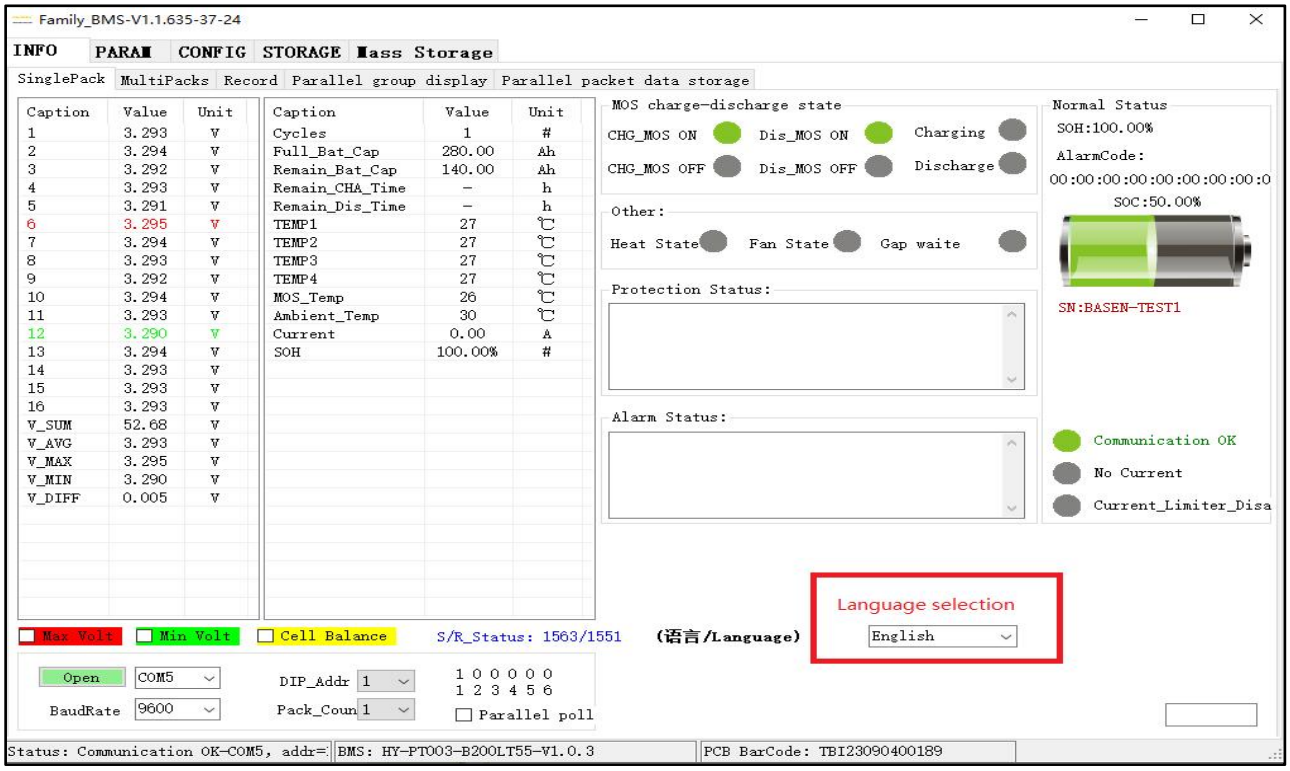
4.2 "Home page" interface function setting

4.2.1 Language selection

The computer software can choose the language of "Chinese" or "English", the specific operation is shown in the figure1 and 2.

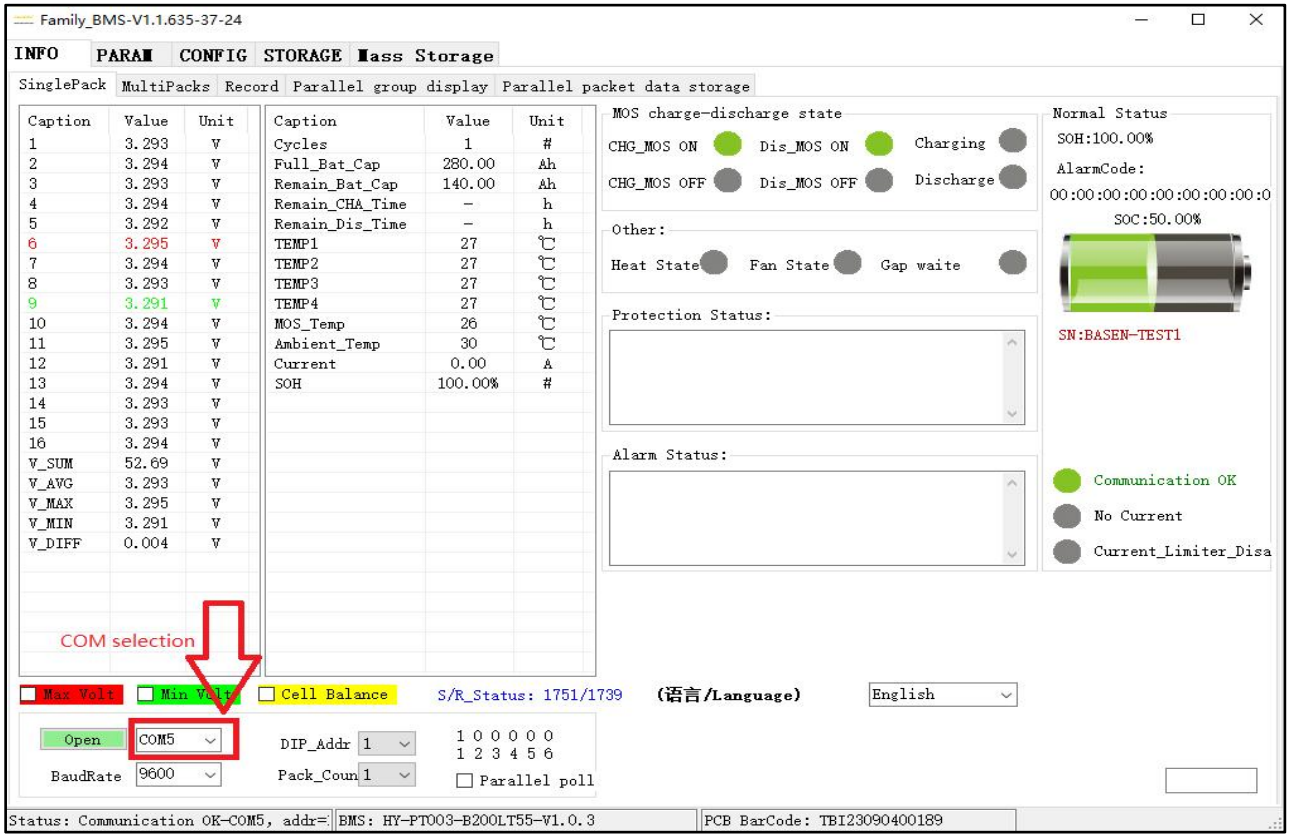
(Figure1: Upon entering the page, the Chinese interface shown below will be displayed.)

(Figure2: After changing the language to English, the English interface shown below will be displayed.)



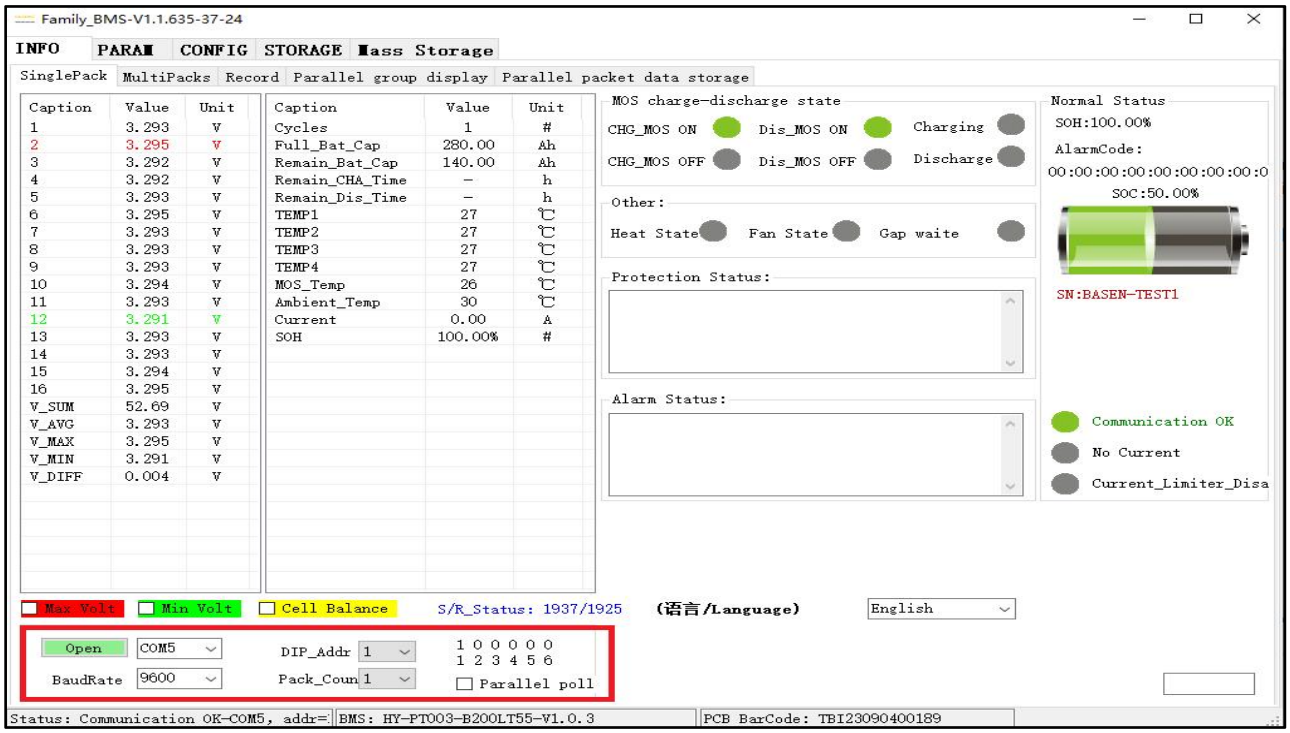
4.2.2 Serial port selection

After the BMS connection is successful, a new serial port will be added. Select a new serial port. The specific operation is as shown in the figure. For the serial port, you can check on your computer setting.



4.2.3 Selection of communication parameters

The selection of communication parameters includes the selection of Baud rate, data bit, stop bit, parity, and wave rate according to the requirements of the specification. The specific operation is shown in figure.

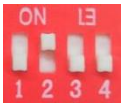


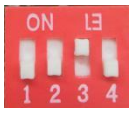
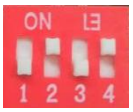
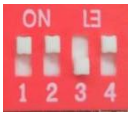
4.2.4 Dip code address setting

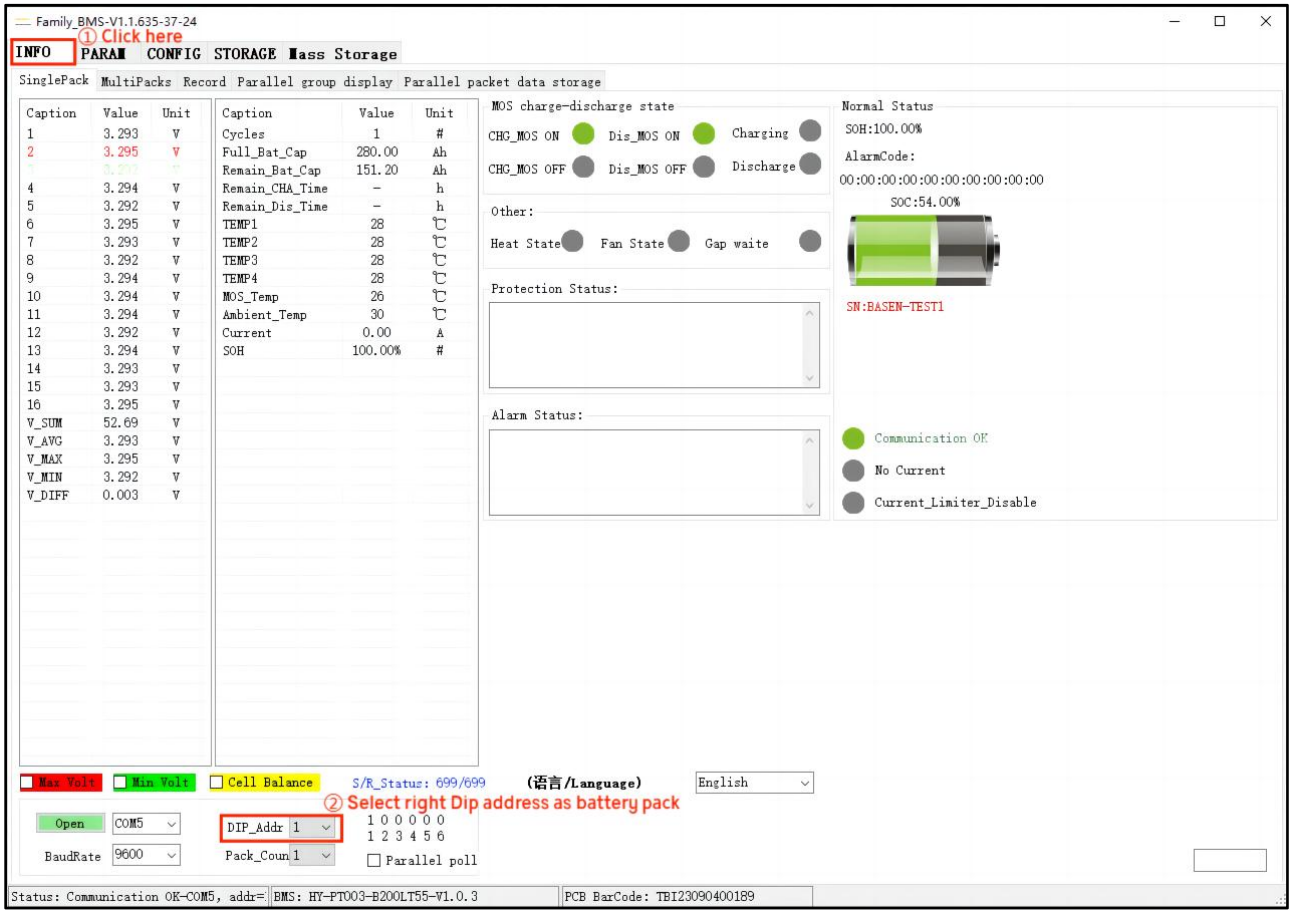
Code address 1 is defined as 

(black point is OFF state, blank is ON state, the same below), address 2 

, other addresses and so on. It should be noted that the dip address on the BMS should be consistent with the dial address of the upper machine. Since there are many kinds of BMS boards in our company, please refer to the corresponding BMS specification.

address	Dial switch position				Example of in-kind dial
Battery#	#1	#2	#3	#4	
1	ON	OFF	OFF	OFF	
2	OFF	ON	OFF	OFF	

3	ON	ON	OFF	OFF	
4	OFF	OFF	ON	OFF	
5	ON	OFF	ON	OFF	
6	OFF	ON	ON	OFF	
7	ON	ON	ON	OFF	
8	OFF	OFF	OFF	ON	
9	ON	OFF	OFF	ON	
10	OFF	ON	OFF	ON	
11	ON	ON	OFF	ON	
12	OFF	OFF	ON	ON	
13	ON	OFF	ON	ON	
14	OFF	ON	ON	ON	
15	ON	ON	ON	ON	



4.2.5 Precautions

If the communication fails, the following aspects:

① Pay attention to the definition of communication line in the specification and check whether the communication line is correct;

② Check whether the selection of the Baud rate is consistent with the requirements of the specification;

③ Confirm the battery pack address before using the software, and select the corresponding address on the software for monitoring;

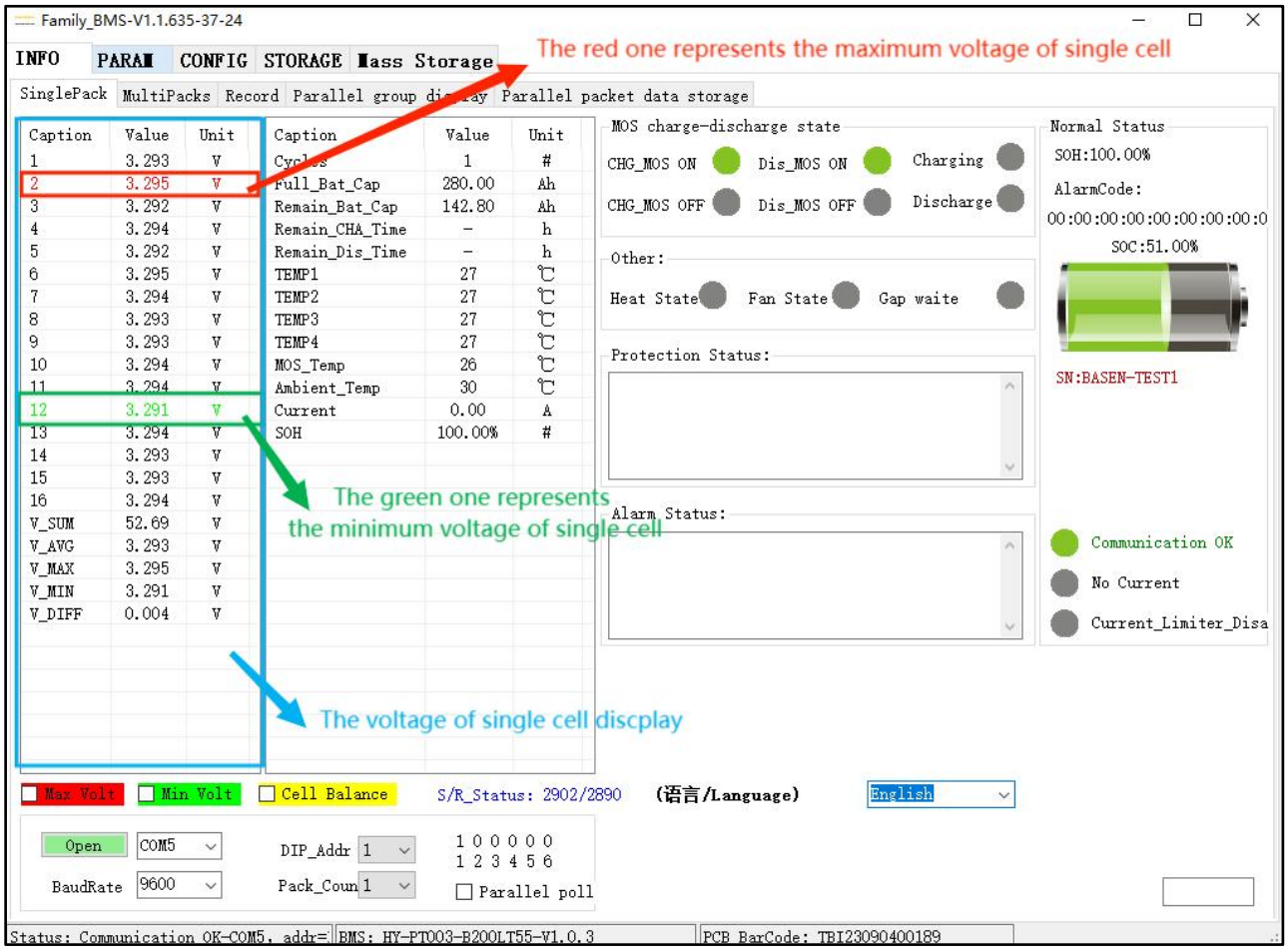
④ Check whether the communication serial port line can be used normally;

⑤ Generally, computers with a USB serial port driver should self-identify; if not, install the corresponding USB serial port driver;

⑥ The running platform of this software is .net, if the computer operating system is Windows XP or lower system, install .net environment first, the minimum version is .net2.0 or above. Windows 7 system comes with a built-in .net environment, and the Windows 10 and Windows 11 systems need to install the .net3.5 operating environment.

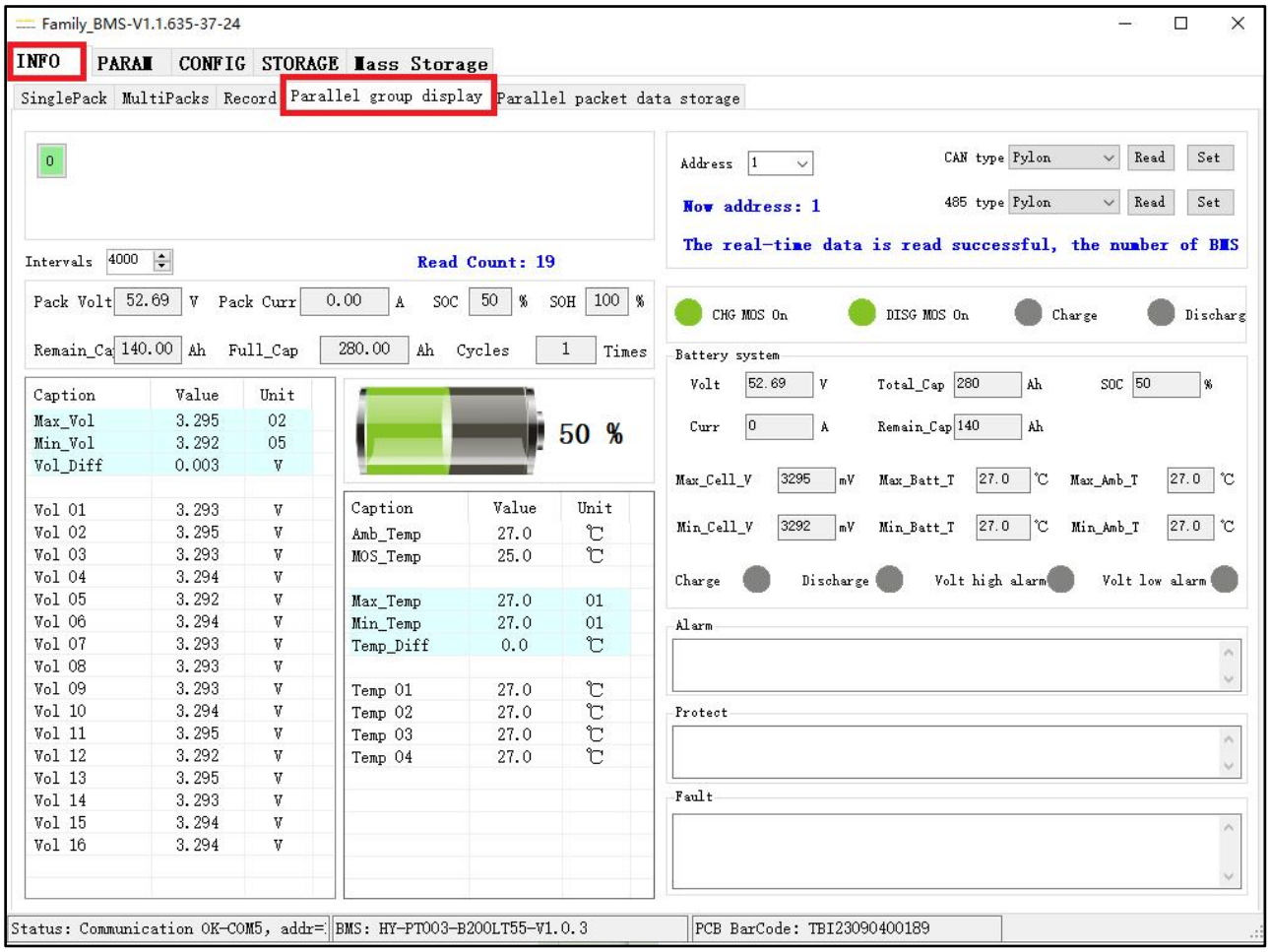
4.3 "MONITORING" INTERFACE FUNCTION SETTING

Select the corresponding serial port, click to start monitoring, and read the real-time data information of the BMS. The information includes voltage, temperature, switching status, alarm status, protection status, fault status, etc., as shown in the figure below.



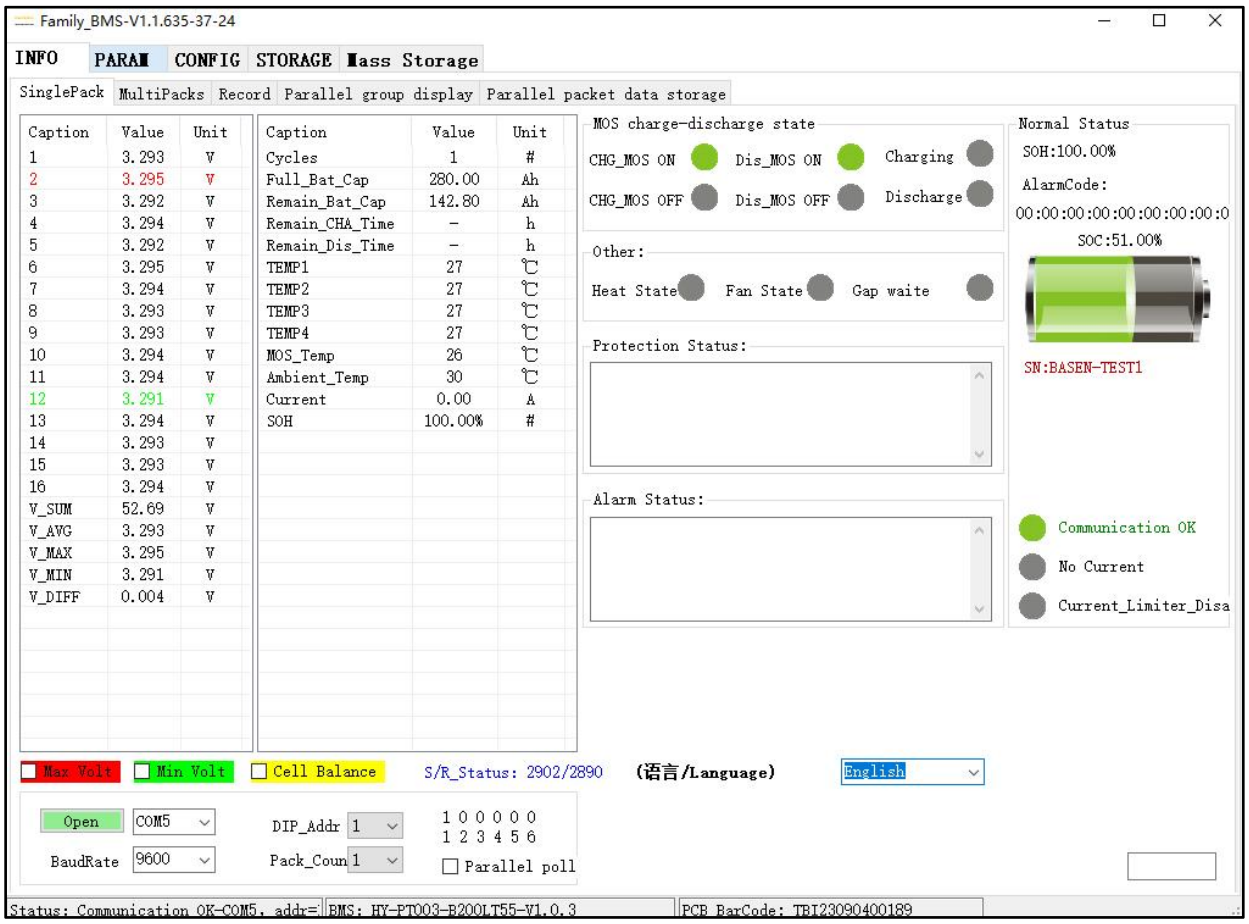
4.3.1 Parallel group display operation

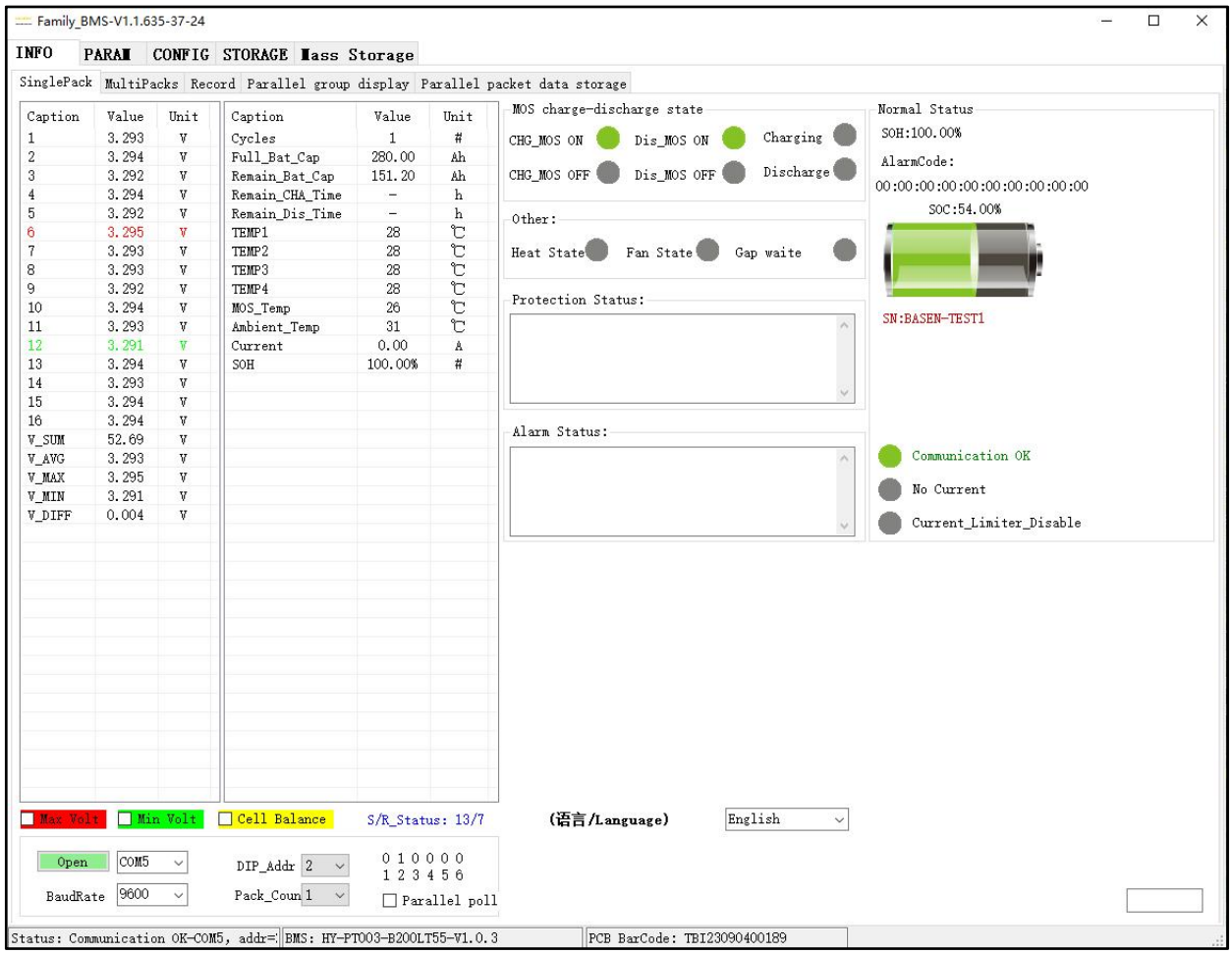
In the parallel state, open the "INFO" page and select the “parallel group display”. The specific operation is shown in the figure.



(1) Single group of information viewing

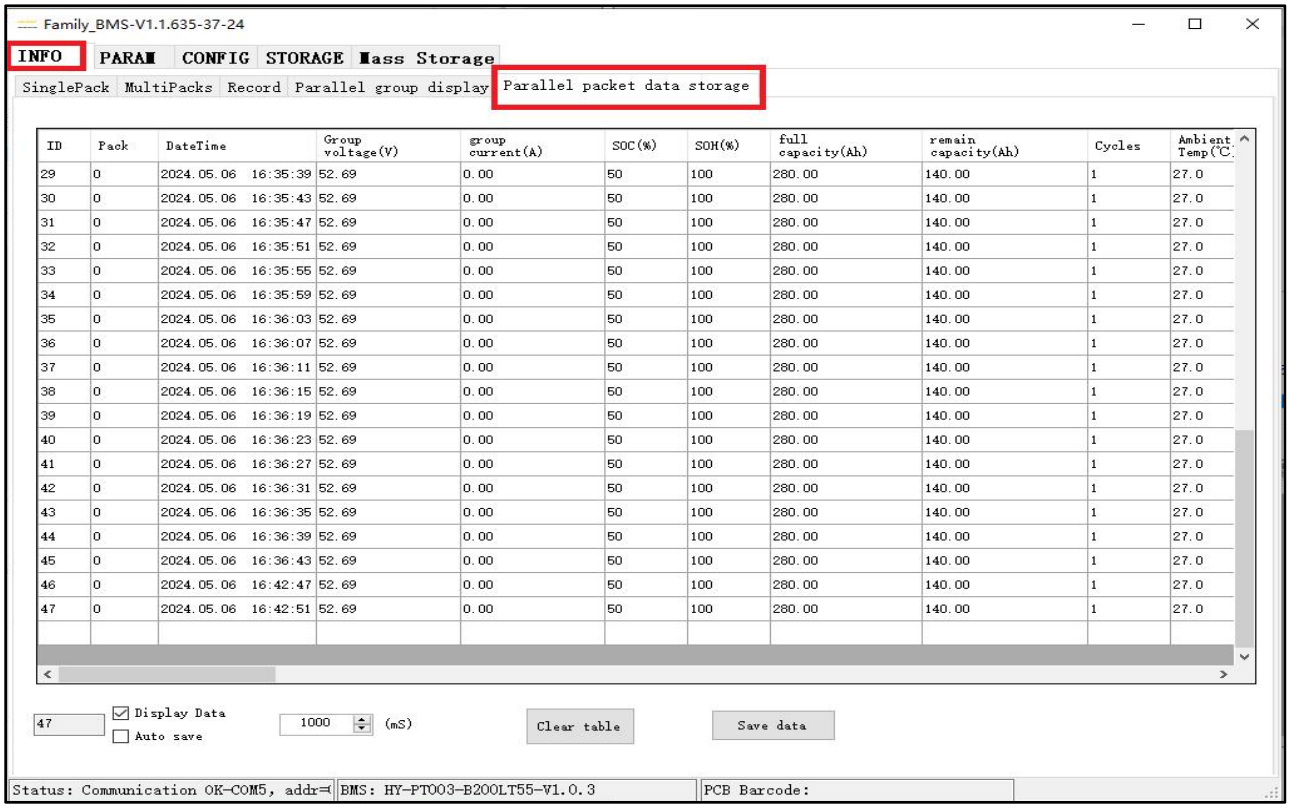
When the communication is normal, opening the "INFO" can observe the "Single Pack" interface, and the data information of each BMS will be displayed in turn. Taking two groups as an example, the "Single Pack" interface will display the following information in turn.


Family_BMS-V1.1.635-37-24
INFO
PARA
CONFIG
STORAGE
ass Storage
SinglePack
MultiPacks
Record
Parallel group display
Parallel packet data storage
Caption Value Unit
1 3.293 V
2 3.295 V
3 3.292 V
4 3.294 V
5 3.292 V
6 3.295 V
7 3.294 V
8 3.293 V
9 3.293 V
10 3.294 V
11 3.294 V
12 3.291 V
13 3.294 V
14 3.293 V
15 3.293 V
16 3.294 V
V_SUM 52.69 V
V_AVG 3.293 V
V_MAX 3.295 V
V_MIN 3.291 V
V_DIFF 0.004 V
Caption Value Unit
Cycles 1 #
Full_Bat_Cap 280.00 Ah
Remain_Bat_Cap 142.80 Ah
Remain_CHA_Time - h
Remain_Dis_Time - h
TEMP1 27 ℃
TEMP2 27 ℃
TEMP3 27 ℃
TEMP4 27 ℃
MOS_Temp 26 ℃
Ambient_Temp 30 ℃
Current 0.00 A
SOH 100.00% #
MOS charge-discharge state
CHG_MOS ON
Dis_MOS ON
Charging
CHG_MOS OFF
Dis_MOS OFF
Discharge
Other:
Heat State
Fan State
Gap waite
Protection Status:
Alarm Status:
Normal Status
SOH:100.00%
AlarmCode:
00:00:00:00:00:00:00:00:0
SOC:51.00%
SN:BASEN-TEST1
Communication OK
No Current
Current_Limiter_Disa
Max Volt
Min Volt
Cell Balance
S/R_Status: 2902/2890
(语言/Language)
English
Open
COM5
BaudRate
9600
DIP_Addr
Pack_Coun
1 0 0 0 0 0
1 2 3 4 5 6
Parallel poll
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189


Family_BMS-V1.1.635-37-24
INFO
PARA
CONFIG
STORAGE
ass Storage
SinglePack
MultiPacks
Record
Parallel group display
Parallel packet data storage
Caption Value Unit
1 3.293 V
2 3.294 V
3 3.292 V
4 3.294 V
5 3.292 V
6 3.295 V
7 3.293 V
8 3.293 V
9 3.292 V
10 3.294 V
11 3.293 V
12 3.291 V
13 3.294 V
14 3.293 V
15 3.294 V
16 3.294 V
V_SUM 52.69 V
V_AVG 3.293 V
V_MAX 3.295 V
V_MIN 3.291 V
V_DIFF 0.004 V
Caption Value Unit
Cycles 1 #
Full_Bat_Cap 280.00 Ah
Remain_Bat_Cap 151.20 Ah
Remain_CHA_Time - h
Remain_Dis_Time - h
TEMP1 28 ℃
TEMP2 28 ℃
TEMP3 28 ℃
TEMP4 28 ℃
MOS_Temp 26 ℃
Ambient_Temp 31 ℃
Current 0.00 A
SOH 100.00% #
MOS charge-discharge state
CHG_MOS ON
Dis_MOS ON
Charging
CHG_MOS OFF
Dis_MOS OFF
Discharge
Other:
Heat State
Fan State
Gap waite
Protection Status:
Alarm Status:
Normal Status
SOH:100.00%
AlarmCode:
00:00:00:00:00:00:00:00:00:00
SOC:54.00%
SN:BASEN-TEST1
Communication OK
No Current
Current_Limiter_Disable
Max Volt
Min Volt
Cell Balance
S/R_Status: 13/7
(语言/Language)
English
Open
COM5
BaudRate
9600
DIP_Addr
Pack_Coun
0 1 0 0 0 0
1 2 3 4 5 6
Parallel poll
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189

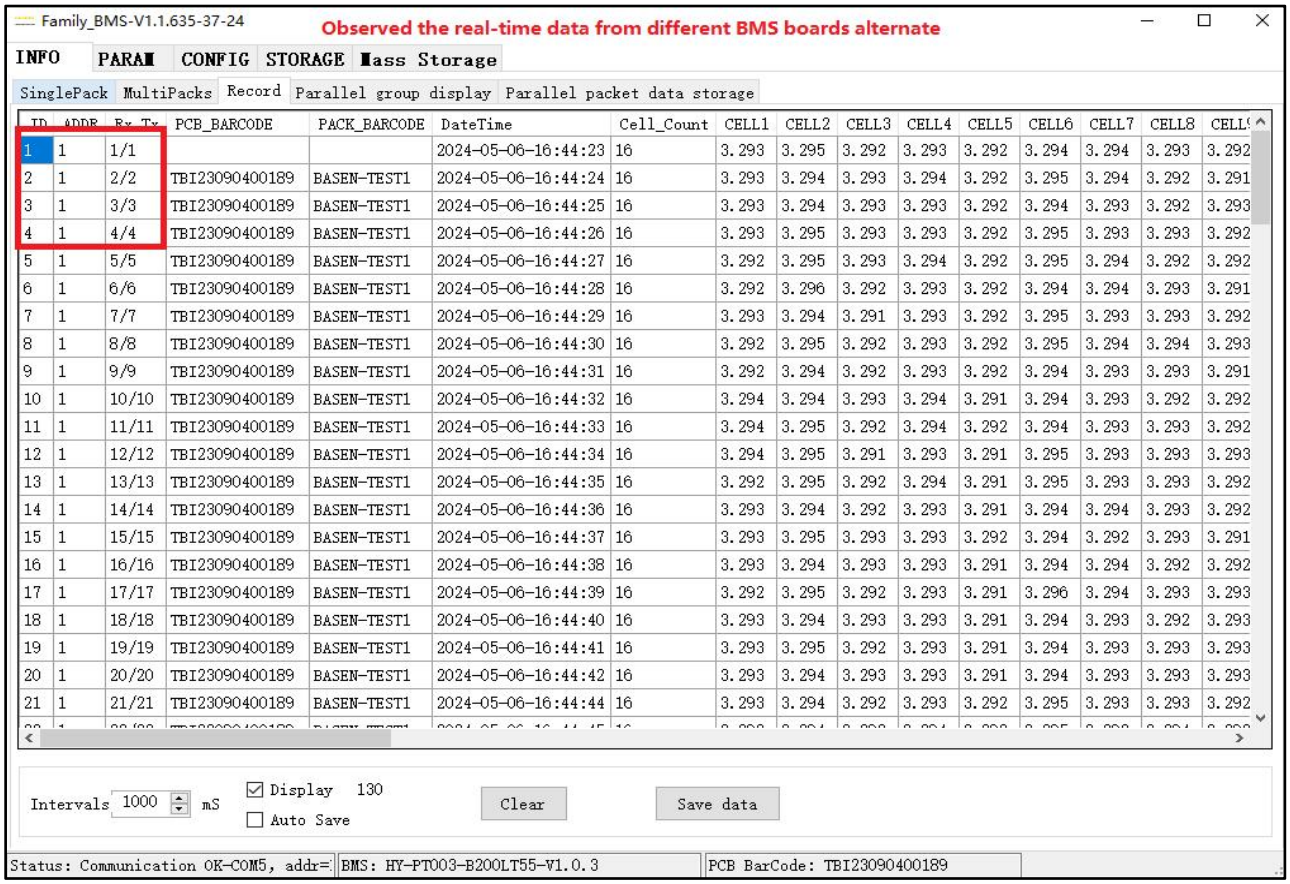
(2) Multiple groups of information viewing

Opening the "Parallel packet data storage" interface will display the data for each battery pack.



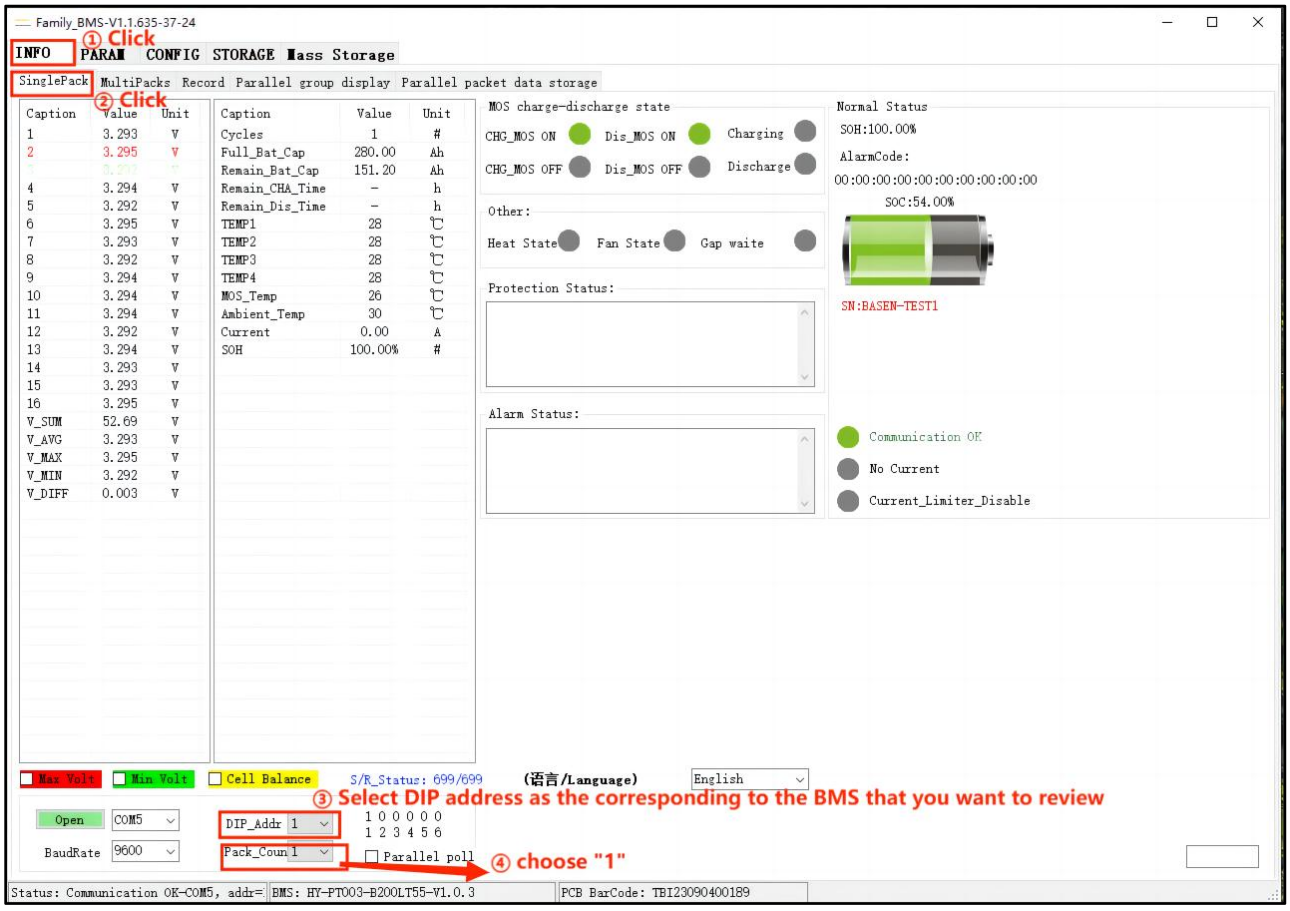
ID	Pack	DateTime	Group voltage(V)	group current(A)	SOC(%)	SOH(%)	full capacity(Ah)	remain capacity(Ah)	Cycles	Ambient Temp(℃
29	0	2024.05.06 16:35:39	52.69	0.00	50	100	280.00	140.00	1	27.0
30	0	2024.05.06 16:35:43	52.69	0.00	50	100	280.00	140.00	1	27.0
31	0	2024.05.06 16:35:47	52.69	0.00	50	100	280.00	140.00	1	27.0
32	0	2024.05.06 16:35:51	52.69	0.00	50	100	280.00	140.00	1	27.0
33	0	2024.05.06 16:35:55	52.69	0.00	50	100	280.00	140.00	1	27.0
34	0	2024.05.06 16:35:59	52.69	0.00	50	100	280.00	140.00	1	27.0
35	0	2024.05.06 16:36:03	52.69	0.00	50	100	280.00	140.00	1	27.0
36	0	2024.05.06 16:36:07	52.69	0.00	50	100	280.00	140.00	1	27.0
37	0	2024.05.06 16:36:11	52.69	0.00	50	100	280.00	140.00	1	27.0
38	0	2024.05.06 16:36:15	52.69	0.00	50	100	280.00	140.00	1	27.0
39	0	2024.05.06 16:36:19	52.69	0.00	50	100	280.00	140.00	1	27.0
40	0	2024.05.06 16:36:23	52.69	0.00	50	100	280.00	140.00	1	27.0
41	0	2024.05.06 16:36:27	52.69	0.00	50	100	280.00	140.00	1	27.0
42	0	2024.05.06 16:36:31	52.69	0.00	50	100	280.00	140.00	1	27.0
43	0	2024.05.06 16:36:35	52.69	0.00	50	100	280.00	140.00	1	27.0
44	0	2024.05.06 16:36:39	52.69	0.00	50	100	280.00	140.00	1	27.0
45	0	2024.05.06 16:36:43	52.69	0.00	50	100	280.00	140.00	1	27.0
46	0	2024.05.06 16:42:47	52.69	0.00	50	100	280.00	140.00	1	27.0
47	0	2024.05.06 16:42:51	52.69	0.00	50	100	280.00	140.00	1	27.0

（3） Viewing real-time data



ID	ADDR	Rx_Tx	PCB_BARCODE	PACK_BARCODE	DateTime	Cell_Count	CELL1	CELL2	CELL3	CELL4	CELL5	CELL6	CELL7	CELL8	CELL
1	1	1/1			2024-05-06-16:44:23	16	3.293	3.295	3.292	3.293	3.292	3.294	3.294	3.293	3.292
2	1	2/2	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:24	16	3.293	3.294	3.293	3.294	3.292	3.295	3.294	3.292	3.291
3	1	3/3	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:25	16	3.293	3.294	3.293	3.293	3.292	3.294	3.293	3.292	3.293
4	1	4/4	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:26	16	3.293	3.295	3.293	3.293	3.292	3.295	3.293	3.293	3.292
5	1	5/5	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:27	16	3.292	3.295	3.293	3.294	3.292	3.295	3.294	3.292	3.292
6	1	6/6	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:28	16	3.292	3.296	3.292	3.293	3.292	3.294	3.294	3.293	3.291
7	1	7/7	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:29	16	3.293	3.294	3.291	3.293	3.292	3.295	3.293	3.293	3.292
8	1	8/8	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:30	16	3.292	3.295	3.292	3.293	3.292	3.295	3.294	3.294	3.293
9	1	9/9	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:31	16	3.292	3.294	3.292	3.293	3.292	3.294	3.293	3.293	3.291
10	1	10/10	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:32	16	3.294	3.294	3.293	3.294	3.291	3.294	3.293	3.292	3.292
11	1	11/11	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:33	16	3.294	3.295	3.292	3.294	3.292	3.294	3.293	3.293	3.292
12	1	12/12	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:34	16	3.294	3.295	3.291	3.293	3.291	3.295	3.293	3.293	3.293
13	1	13/13	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:35	16	3.292	3.295	3.292	3.294	3.291	3.295	3.293	3.293	3.292
14	1	14/14	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:36	16	3.293	3.294	3.292	3.293	3.291	3.294	3.294	3.293	3.292
15	1	15/15	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:37	16	3.293	3.295	3.293	3.293	3.292	3.294	3.292	3.293	3.291
16	1	16/16	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:38	16	3.293	3.294	3.293	3.293	3.291	3.294	3.294	3.292	3.292
17	1	17/17	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:39	16	3.292	3.295	3.292	3.293	3.291	3.296	3.294	3.293	3.293
18	1	18/18	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:40	16	3.293	3.294	3.293	3.293	3.291	3.294	3.293	3.292	3.293
19	1	19/19	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:41	16	3.293	3.295	3.292	3.293	3.291	3.294	3.293	3.293	3.293
20	1	20/20	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:42	16	3.293	3.294	3.293	3.293	3.291	3.294	3.293	3.293	3.293
21	1	21/21	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:44	16	3.293	3.294	3.292	3.293	3.292	3.295	3.293	3.293	3.292

(5) If you only want to view the data of one BMS after the connection of several battery packs, change the pack number of the “INFO” interface to 1, and the address is selected as the corresponding address of the BMS to be viewed. The specific operation is shown in the figure.

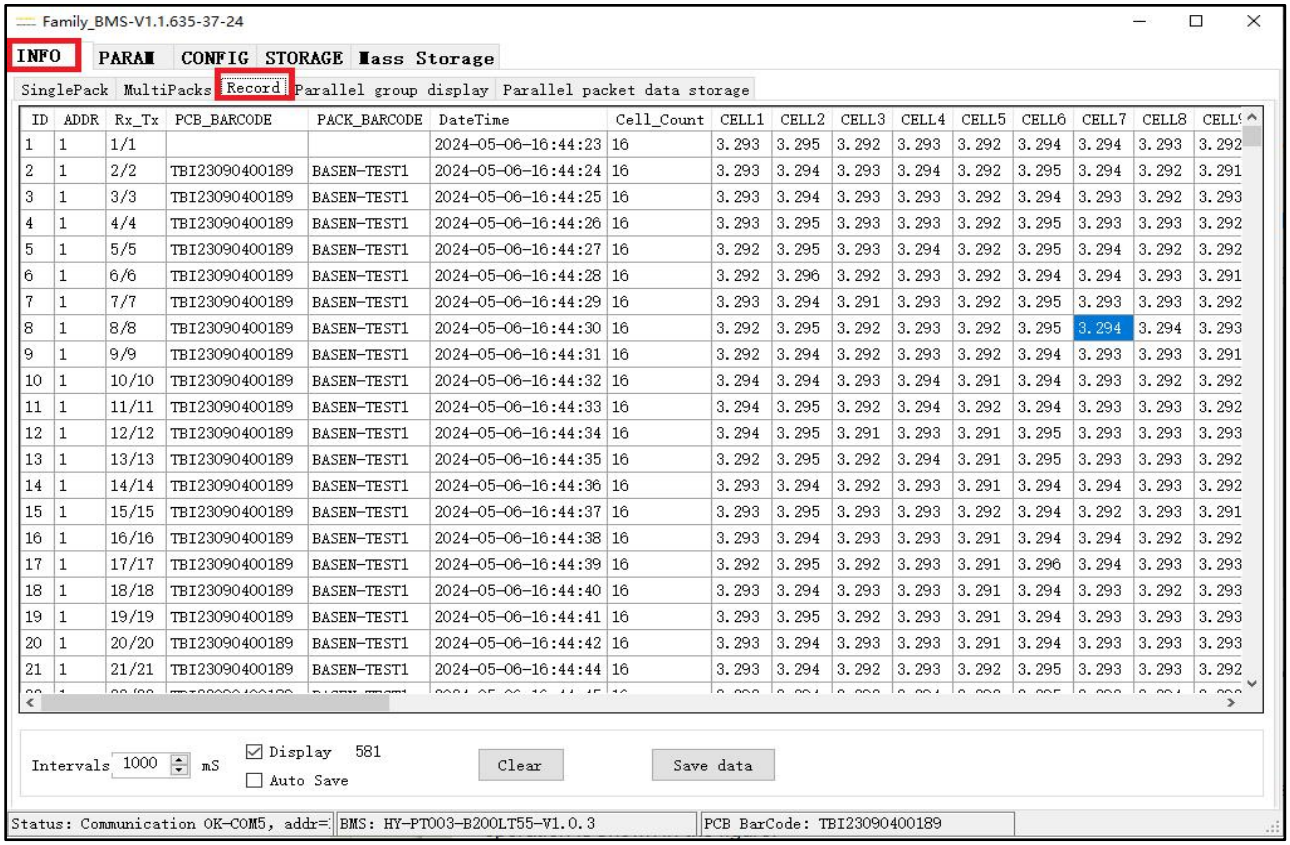


Note: USB serial port has RS232 and RS485, multi-pack monitoring must be connected to RS485, and each pack address cannot be the same.

4.3.2 Real-time data storage

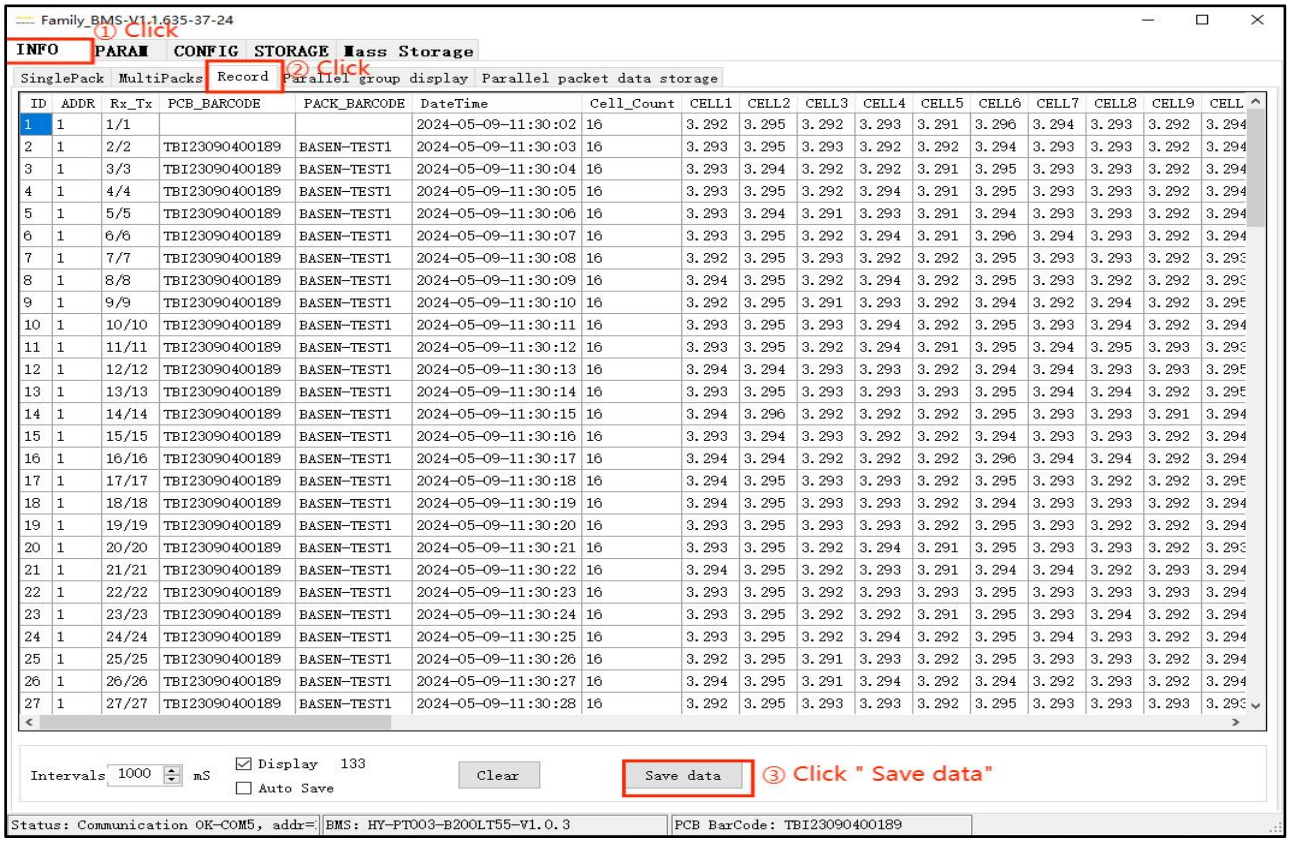
(1) View of real-time data

View the real-time data and enter the "Record" interface in the "INFO" interface. The specific operation is shown in the figure.



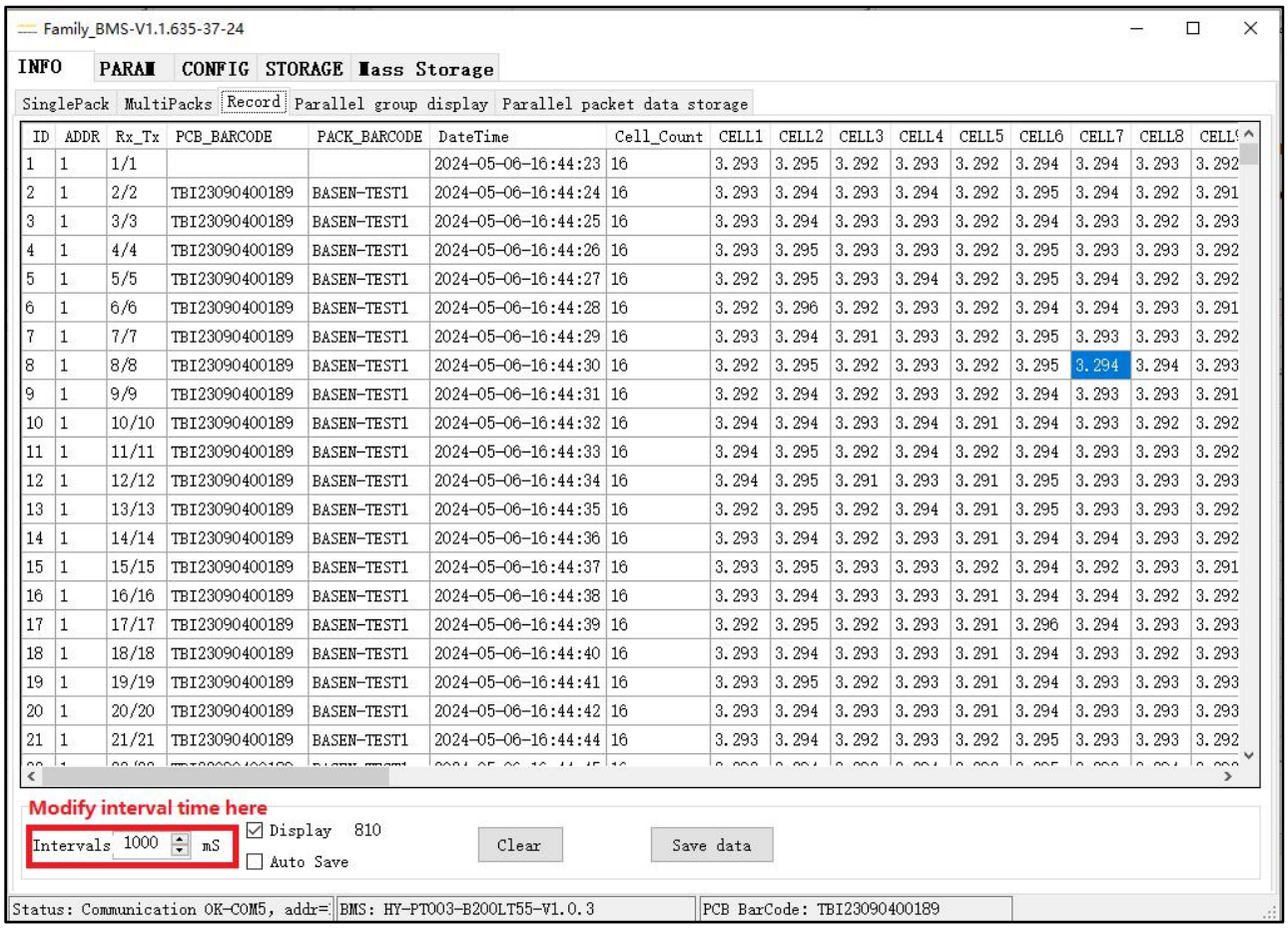
(2) Export of real-time data

Real-time data can be exported into a EXCEL table data format, click "Save data", the specific operation is shown in the figure.



(3) Modification interval time

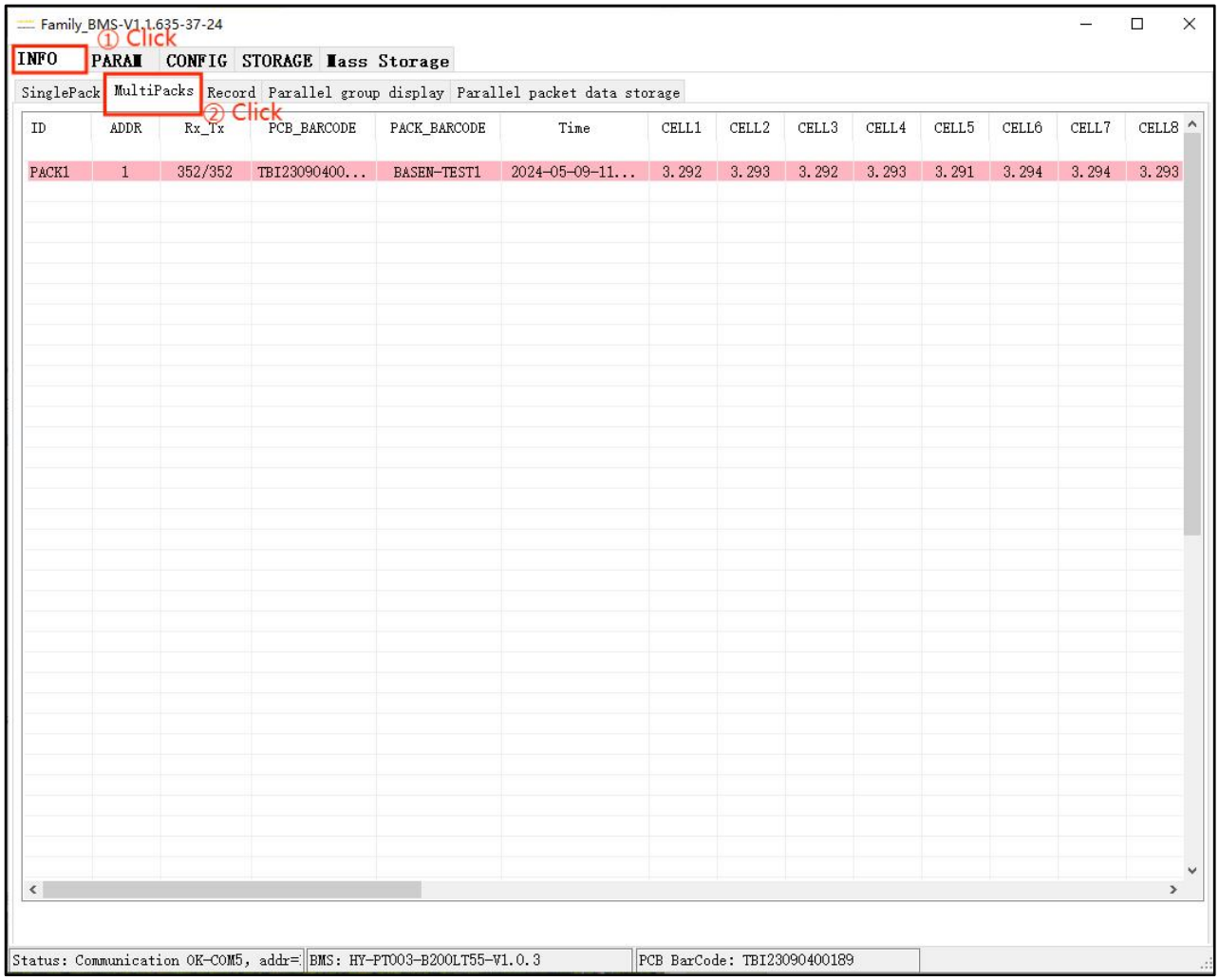
The real-time data storage interval can be defined by ourselves. The default real-time data recording interval is 1 second / record. If the real-time data recording interval is modified, the specific operation is shown in the figure.



ID	ADDR	Rx_Tx	PCB_BARCODE	PACK_BARCODE	DateTime	Cell_Count	CELL1	CELL2	CELL3	CELL4	CELL5	CELL6	CELL7	CELL8	CELL
1	1	1/1			2024-05-06-16:44:23	16	3.293	3.295	3.292	3.293	3.292	3.294	3.294	3.293	3.292
2	1	2/2	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:24	16	3.293	3.294	3.293	3.294	3.292	3.295	3.294	3.292	3.291
3	1	3/3	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:25	16	3.293	3.294	3.293	3.293	3.292	3.294	3.293	3.292	3.293
4	1	4/4	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:26	16	3.293	3.295	3.293	3.293	3.292	3.295	3.293	3.293	3.292
5	1	5/5	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:27	16	3.292	3.295	3.293	3.294	3.292	3.295	3.294	3.292	3.292
6	1	6/6	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:28	16	3.292	3.296	3.292	3.293	3.292	3.294	3.294	3.293	3.291
7	1	7/7	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:29	16	3.293	3.294	3.291	3.293	3.292	3.295	3.293	3.293	3.292
8	1	8/8	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:30	16	3.292	3.295	3.292	3.293	3.292	3.295	3.294	3.294	3.293
9	1	9/9	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:31	16	3.292	3.294	3.292	3.293	3.292	3.294	3.293	3.293	3.291
10	1	10/10	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:32	16	3.294	3.294	3.293	3.294	3.291	3.294	3.293	3.292	3.292
11	1	11/11	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:33	16	3.294	3.295	3.292	3.294	3.292	3.294	3.293	3.293	3.292
12	1	12/12	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:34	16	3.294	3.295	3.291	3.293	3.291	3.295	3.293	3.293	3.293
13	1	13/13	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:35	16	3.292	3.295	3.292	3.294	3.291	3.295	3.293	3.293	3.292
14	1	14/14	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:36	16	3.293	3.294	3.292	3.293	3.291	3.294	3.294	3.293	3.292
15	1	15/15	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:37	16	3.293	3.295	3.293	3.293	3.292	3.294	3.292	3.293	3.291
16	1	16/16	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:38	16	3.293	3.294	3.293	3.293	3.291	3.294	3.294	3.292	3.292
17	1	17/17	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:39	16	3.292	3.295	3.292	3.293	3.291	3.296	3.294	3.293	3.293
18	1	18/18	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:40	16	3.293	3.294	3.293	3.293	3.291	3.294	3.293	3.292	3.293
19	1	19/19	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:41	16	3.293	3.295	3.292	3.293	3.291	3.294	3.293	3.293	3.293
20	1	20/20	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:42	16	3.293	3.294	3.293	3.293	3.291	3.294	3.293	3.293	3.293
21	1	21/21	TBI23090400189	BASEN-TEST1	2024-05-06-16:44:44	16	3.293	3.294	3.292	3.293	3.292	3.295	3.293	3.293	3.292

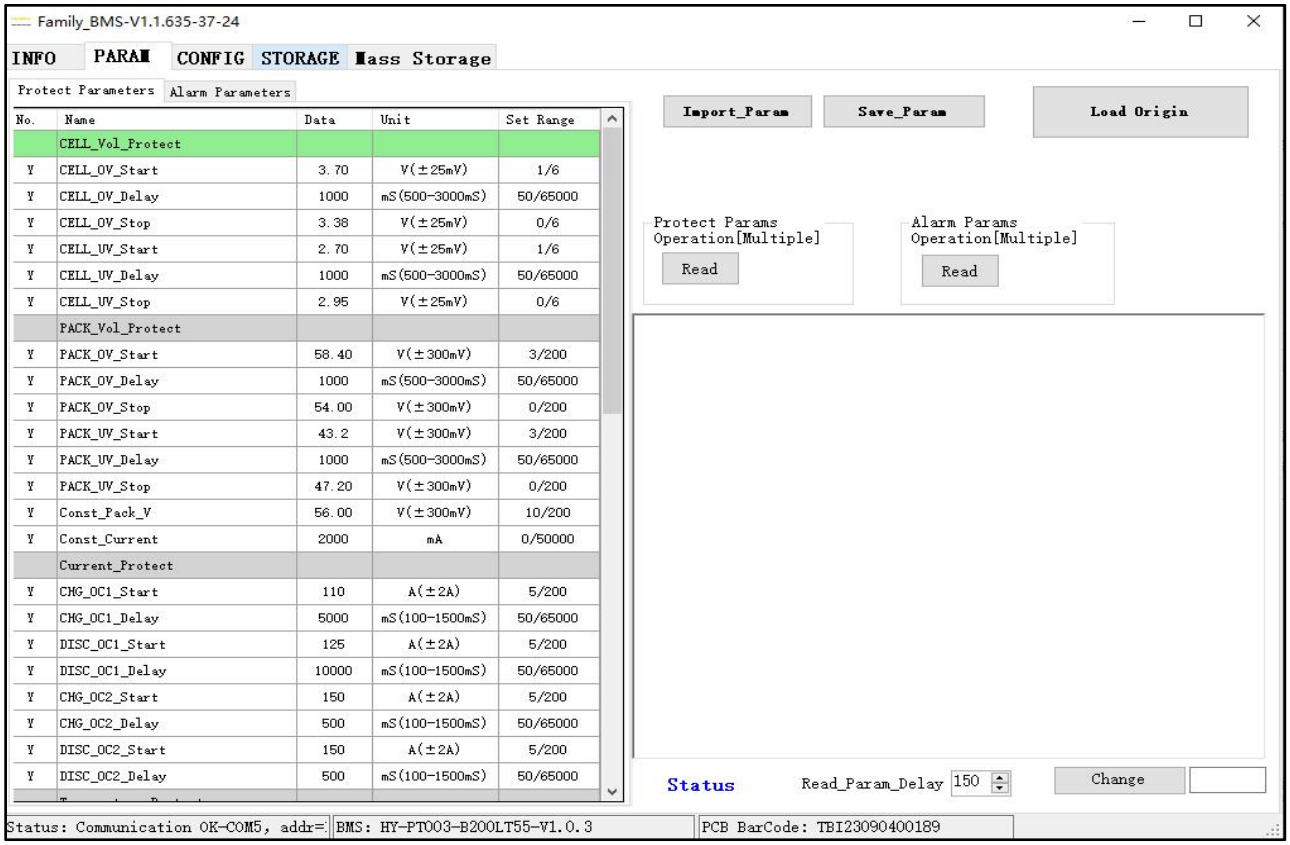
4.3.3 Multi-pack data monitoring

In the multi-pack data monitoring, the data of each battery pack can be compared and displayed. Click the "Multi Packs" interface under the "INFO" interface to view the multi-pack data. The specific operation is shown in the figure.



4.4 PARAMETERS INTERFACE FUNCTION SETTINGS

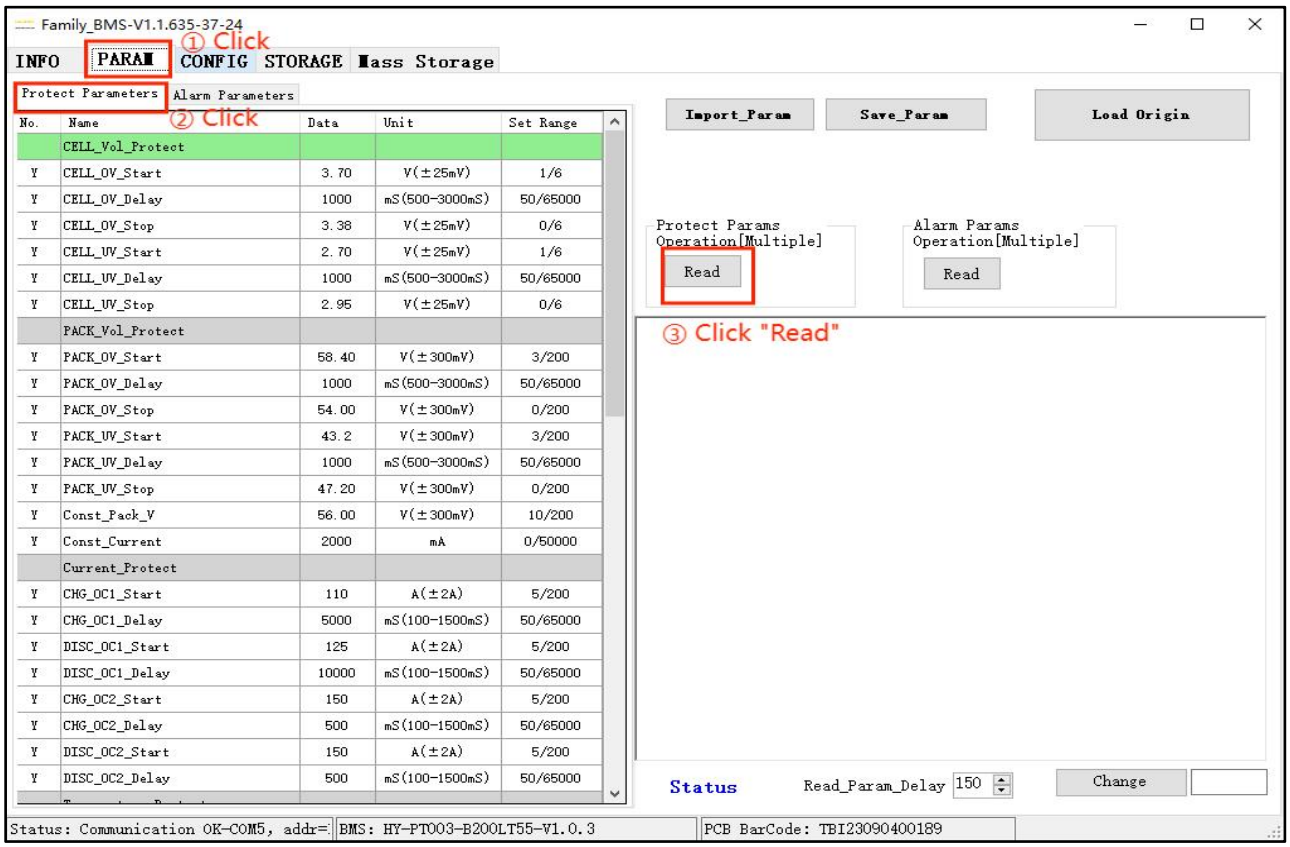
This part includes the functions of reading basic parameter information, restoring default parameters, writing single parameters, writing all parameters, importing parameters and exporting parameters. The "Parameter" interface is shown in the figure below.



No.	Name	Data	Unit	Set Range
	CELL_Vol_Protect			
Y	CELL_OV_Start	3.70	V(±25mV)	1/6
Y	CELL_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.38	V(±25mV)	0/6
Y	CELL_UV_Start	2.70	V(±25mV)	1/6
Y	CELL_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Protect			
Y	PACK_OV_Start	58.40	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	54.00	V(±300mV)	0/200
Y	PACK_UV_Start	43.2	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.20	V(±300mV)	0/200
Y	Const_Pack_V	56.00	V(±300mV)	10/200
Y	Const_Current	2000	mA	0/50000
	Current_Protect			
Y	CHG_OC1_Start	110	A(±2A)	5/200
Y	CHG_OC1_Delay	5000	mS(100-1500mS)	50/65000
Y	DISC_OC1_Start	125	A(±2A)	5/200
Y	DISC_OC1_Delay	10000	mS(100-1500mS)	50/65000
Y	CHG_OC2_Start	150	A(±2A)	5/200
Y	CHG_OC2_Delay	500	mS(100-1500mS)	50/65000
Y	DISC_OC2_Start	150	A(±2A)	5/200
Y	DISC_OC2_Delay	500	mS(100-1500mS)	50/65000

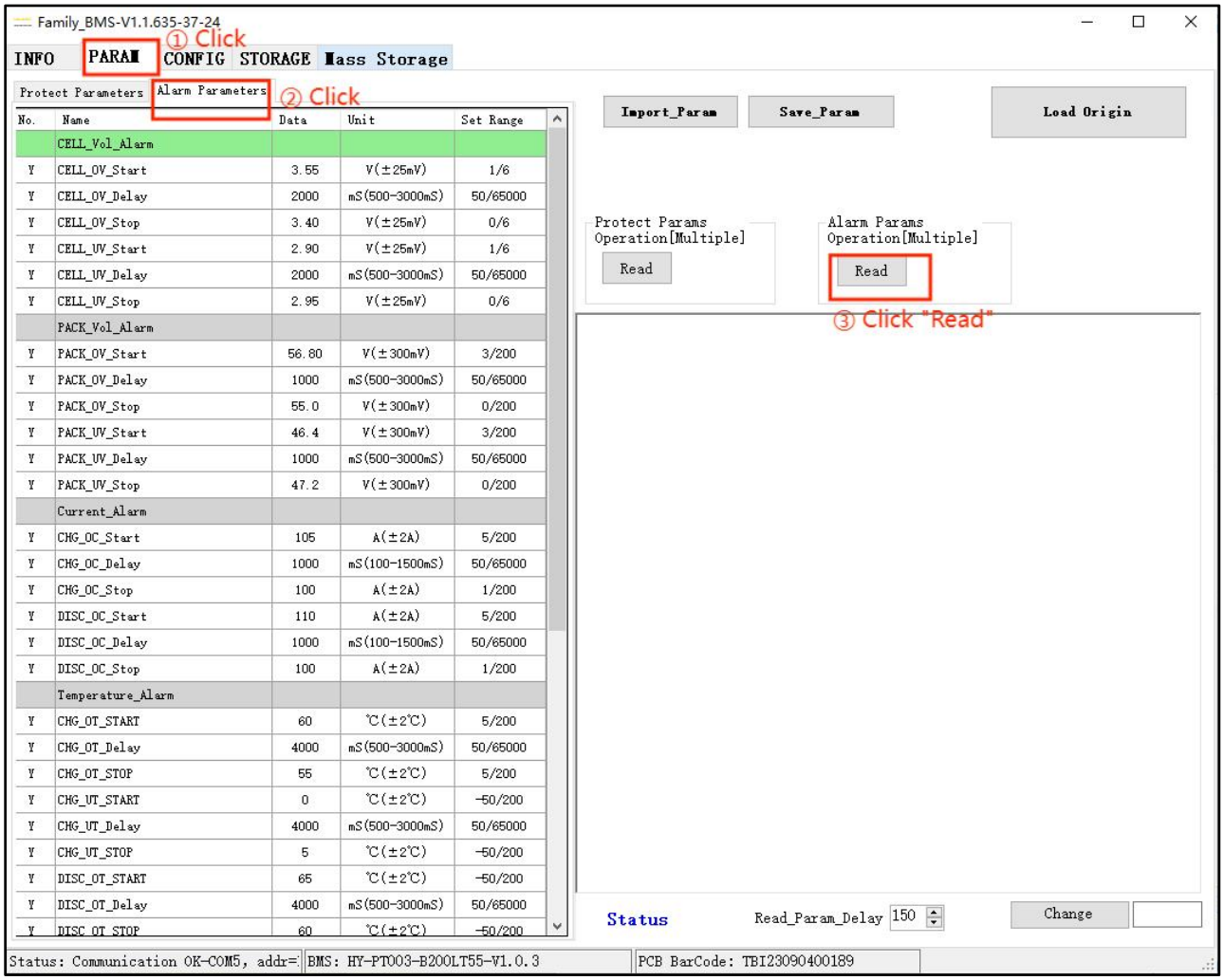
4.4.1 Parameter reading

(1) Protection parameter reading



No.	Name	Data	Unit	Set Range
	CELL_Vol_Protect			
Y	CELL_OV_Start	3.70	V(±25mV)	1/6
Y	CELL_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.38	V(±25mV)	0/6
Y	CELL_UV_Start	2.70	V(±25mV)	1/6
Y	CELL_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Protect			
Y	PACK_OV_Start	58.40	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	54.00	V(±300mV)	0/200
Y	PACK_UV_Start	43.2	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.20	V(±300mV)	0/200
Y	Const_Pack_V	56.00	V(±300mV)	10/200
Y	Const_Current	2000	mA	0/50000
	Current_Protect			
Y	CHG_OC1_Start	110	A(±2A)	5/200
Y	CHG_OC1_Delay	5000	mS(100-1500mS)	50/65000
Y	DISC_OC1_Start	125	A(±2A)	5/200
Y	DISC_OC1_Delay	10000	mS(100-1500mS)	50/65000
Y	CHG_OC2_Start	150	A(±2A)	5/200
Y	CHG_OC2_Delay	500	mS(100-1500mS)	50/65000
Y	DISC_OC2_Start	150	A(±2A)	5/200
Y	DISC_OC2_Delay	500	mS(100-1500mS)	50/65000

(2) Reading of the alarm parameters

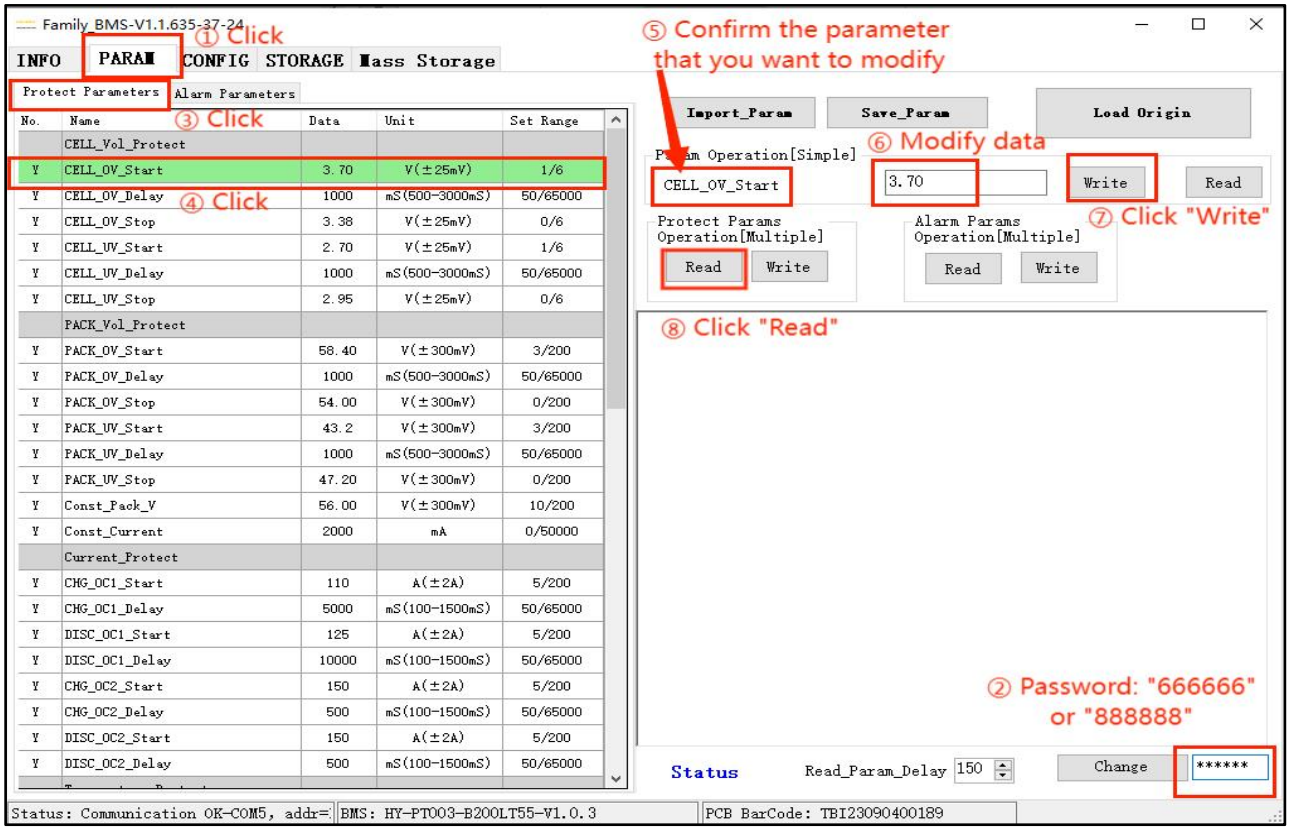


No.	Name	Data	Unit	Set Range
	CELL_Vol_Alarm			
Y	CELL_OV_Start	3.55	V(±25mV)	1/6
Y	CELL_OV_Delay	2000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.40	V(±25mV)	0/6
Y	CELL_UV_Start	2.90	V(±25mV)	1/6
Y	CELL_UV_Delay	2000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Alarm			
Y	PACK_OV_Start	56.80	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	55.0	V(±300mV)	0/200
Y	PACK_UV_Start	46.4	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.2	V(±300mV)	0/200
	Current_Alarm			
Y	CHG_OC_Start	105	A(±2A)	5/200
Y	CHG_OC_Delay	1000	mS(100-1500mS)	50/65000
Y	CHG_OC_Stop	100	A(±2A)	1/200
Y	DISC_OC_Start	110	A(±2A)	5/200
Y	DISC_OC_Delay	1000	mS(100-1500mS)	50/65000
Y	DISC_OC_Stop	100	A(±2A)	1/200
	Temperature_Alarm			
Y	CHG_OT_START	60	℃(±2℃)	5/200
Y	CHG_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	CHG_OT_STOP	55	℃(±2℃)	5/200
Y	CHG_UT_START	0	℃(±2℃)	-50/200
Y	CHG_UT_Delay	4000	mS(500-3000mS)	50/65000
Y	CHG_UT_STOP	5	℃(±2℃)	-50/200
Y	DISC_OT_START	65	℃(±2℃)	-50/200
Y	DISC_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	DISC_OT_STOP	60	℃(±2℃)	-50/200

4.4.2 Parameter modification (the range of the parameter should be indicated)

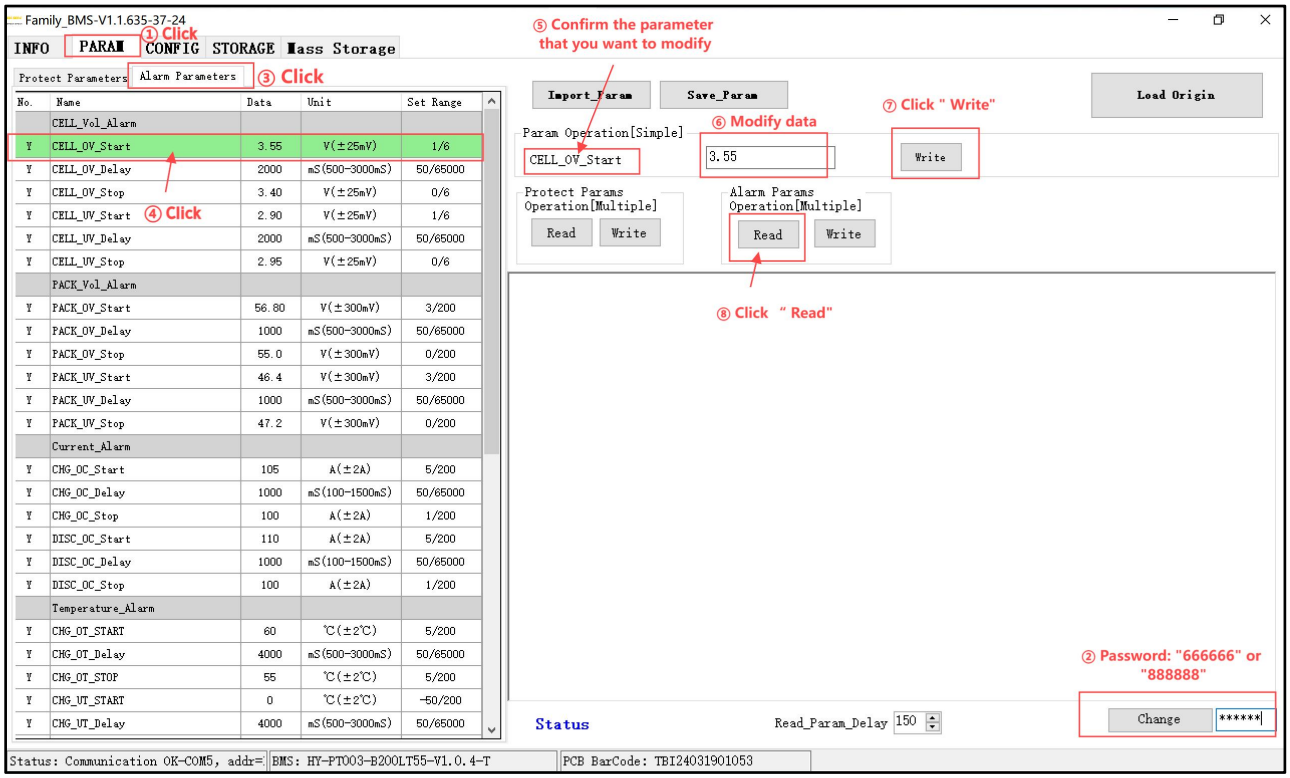
Take the modification of “CELL-OV-START” as an example, other parameters to modify the same operation. The specific operation is as shown in the figure:

(1) Modification of the protection parameters:



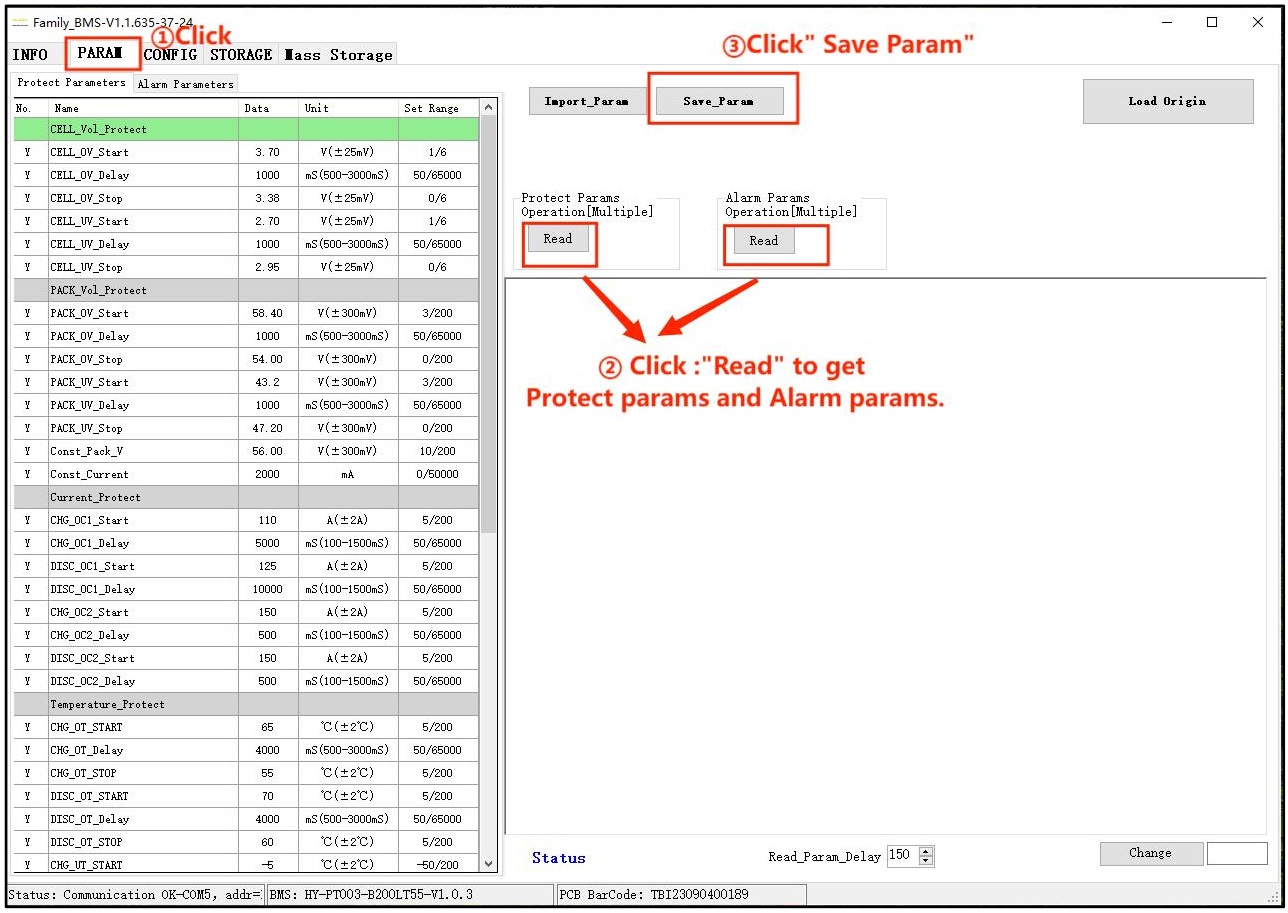
No.	Name	Data	Unit	Set Range
	CELL_Vol_Protect			
Y	CELL_OV_Start	3.70	V(±25mV)	1/6
Y	CELL_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.38	V(±25mV)	0/6
Y	CELL_UV_Start	2.70	V(±25mV)	1/6
Y	CELL_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Protect			
Y	PACK_OV_Start	58.40	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	54.00	V(±300mV)	0/200
Y	PACK_UV_Start	43.2	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.20	V(±300mV)	0/200
Y	Const_Pack_V	56.00	V(±300mV)	10/200
Y	Const_Current	2000	mA	0/50000
	Current_Protect			
Y	CHG_OC1_Start	110	A(±2A)	5/200
Y	CHG_OC1_Delay	5000	mS(100-1500mS)	50/65000
Y	DISC_OC1_Start	125	A(±2A)	5/200
Y	DISC_OC1_Delay	10000	mS(100-1500mS)	50/65000
Y	CHG_OC2_Start	150	A(±2A)	5/200
Y	CHG_OC2_Delay	500	mS(100-1500mS)	50/65000
Y	DISC_OC2_Start	150	A(±2A)	5/200
Y	DISC_OC2_Delay	500	mS(100-1500mS)	50/65000

(2) Modify the alarm parameters:

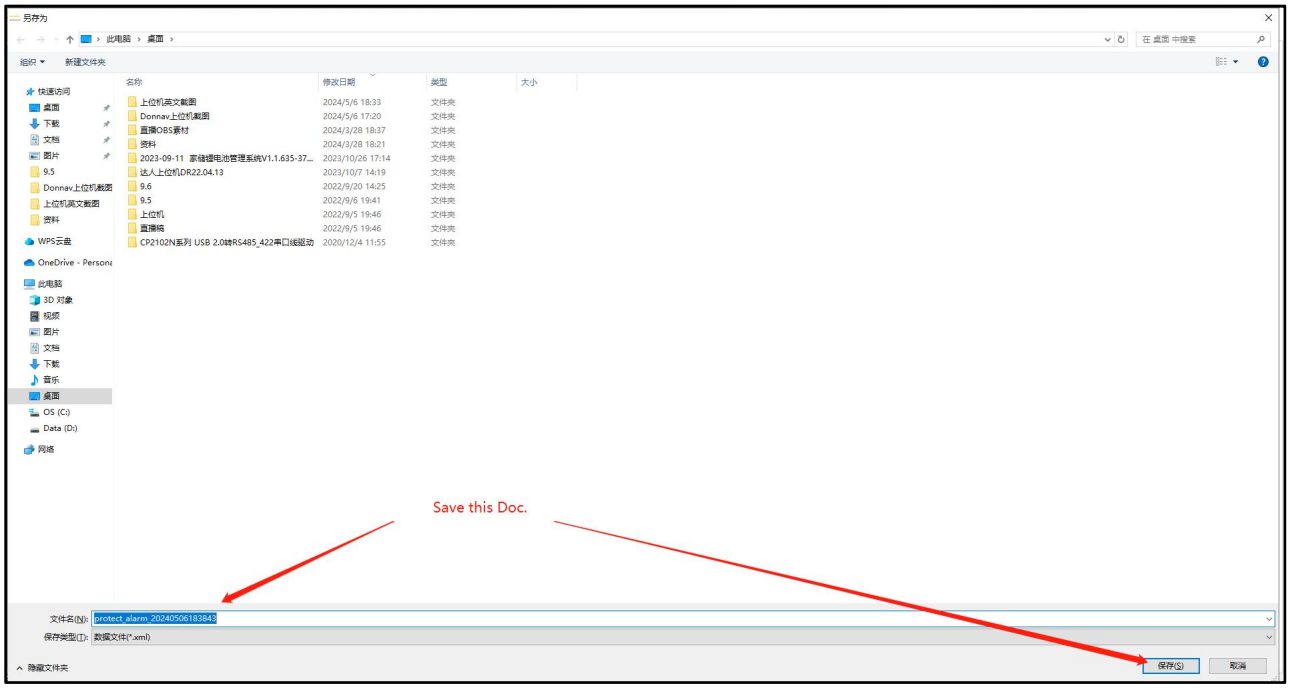


No.	Name	Data	Unit	Set Range
	CELL_Vol_Alarm			
Y	CELL_OV_Start	3.55	V(±25mV)	1/6
Y	CELL_OV_Delay	2000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.40	V(±25mV)	0/6
Y	CELL_UV_Start	2.90	V(±25mV)	1/6
Y	CELL_UV_Delay	2000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Alarm			
Y	PACK_OV_Start	56.80	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	55.0	V(±300mV)	0/200
Y	PACK_UV_Start	46.4	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.2	V(±300mV)	0/200
	Current_Alarm			
Y	CHG_OC_Start	105	A(±2A)	5/200
Y	CHG_OC_Delay	1000	mS(100-1500mS)	50/65000
Y	CHG_OC_Stop	100	A(±2A)	1/200
Y	DISC_OC_Start	110	A(±2A)	5/200
Y	DISC_OC_Delay	1000	mS(100-1500mS)	50/65000
Y	DISC_OC_Stop	100	A(±2A)	1/200
	Temperature_Alarm			
Y	CHG_OT_START	60	℃(±2℃)	5/200
Y	CHG_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	CHG_OT_STOP	55	℃(±2℃)	5/200
Y	CHG_UT_START	0	℃(±2℃)	-50/200
Y	CHG_UT_Delay	4000	mS(500-3000mS)	50/65000

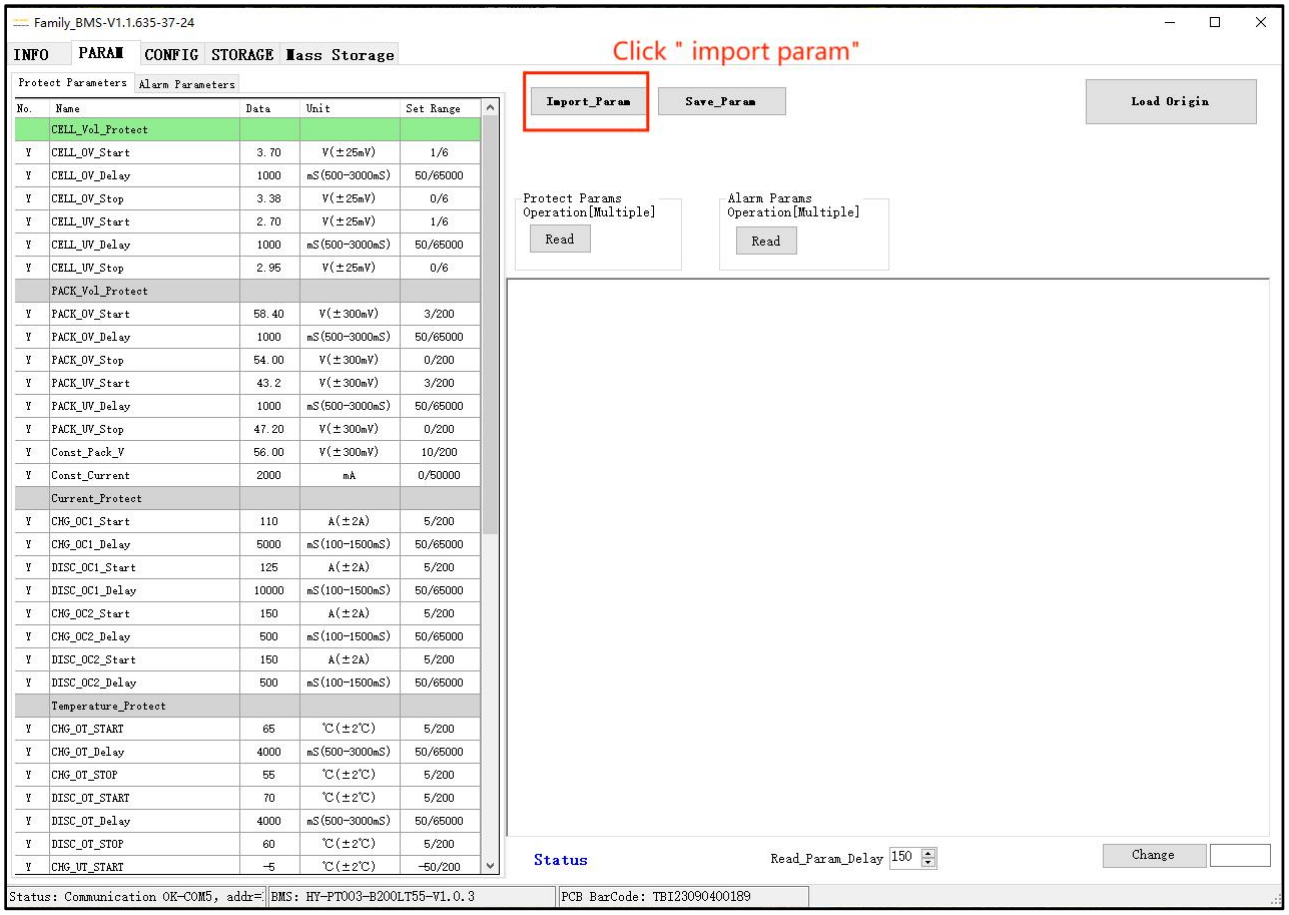
4.4.3 Parameter export



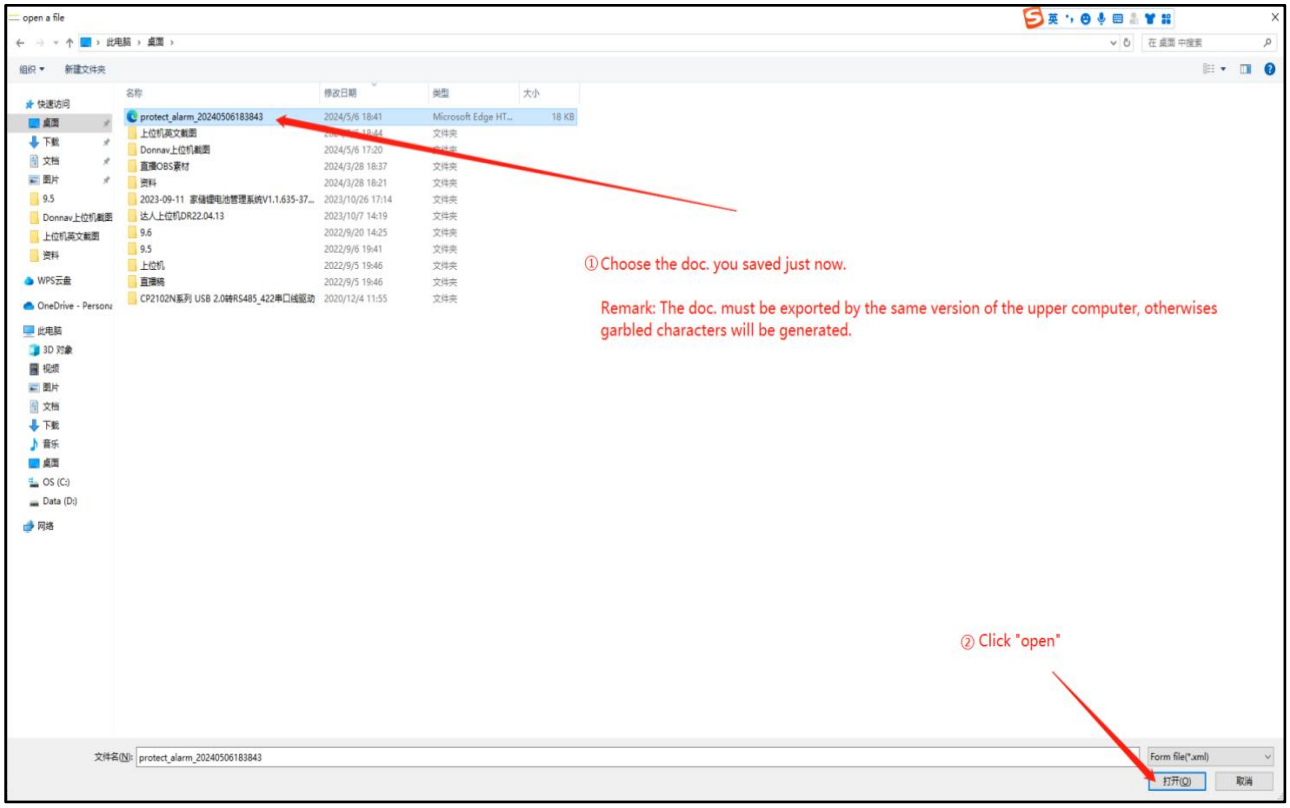
No.	Name	Data	Unit	Set Range
	CELL_Vol_Protect			
Y	CELL_OV_Start	3.70	V(±25mV)	1/6
Y	CELL_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.38	V(±25mV)	0/6
Y	CELL_UV_Start	2.70	V(±25mV)	1/6
Y	CELL_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Protect			
Y	PACK_OV_Start	58.40	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	54.00	V(±300mV)	0/200
Y	PACK_UV_Start	43.2	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.20	V(±300mV)	0/200
Y	Const_Pack_V	56.00	V(±300mV)	10/200
Y	Const_Current	2000	mA	0/50000
	Current_Protect			
Y	CHG_OC1_Start	110	A(±2A)	5/200
Y	CHG_OC1_Delay	5000	mS(100-1500mS)	50/65000
Y	DISC_OC1_Start	125	A(±2A)	5/200
Y	DISC_OC1_Delay	10000	mS(100-1500mS)	50/65000
Y	CHG_OC2_Start	150	A(±2A)	5/200
Y	CHG_OC2_Delay	500	mS(100-1500mS)	50/65000
Y	DISC_OC2_Start	150	A(±2A)	5/200
Y	DISC_OC2_Delay	500	mS(100-1500mS)	50/65000
	Temperature_Protect			
Y	CHG_OT_START	65	℃(±2℃)	5/200
Y	CHG_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	CHG_OT_STOP	55	℃(±2℃)	5/200
Y	DISC_OT_START	70	℃(±2℃)	5/200
Y	DISC_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	DISC_OT_STOP	60	℃(±2℃)	5/200
Y	CHG_UT_START	-5	℃(±2℃)	-50/200



4.4.4 Parameter import



No.	Name	Data	Unit	Set Range
	CELL_Vol_Protect			
Y	CELL_OV_Start	3.70	V(±25mV)	1/6
Y	CELL_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_OV_Stop	3.38	V(±25mV)	0/6
Y	CELL_UV_Start	2.70	V(±25mV)	1/6
Y	CELL_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	CELL_UV_Stop	2.95	V(±25mV)	0/6
	PACK_Vol_Protect			
Y	PACK_OV_Start	58.40	V(±300mV)	3/200
Y	PACK_OV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_OV_Stop	54.00	V(±300mV)	0/200
Y	PACK_UV_Start	43.2	V(±300mV)	3/200
Y	PACK_UV_Delay	1000	mS(500-3000mS)	50/65000
Y	PACK_UV_Stop	47.20	V(±300mV)	0/200
Y	Const_Pack_V	56.00	V(±300mV)	10/200
Y	Const_Current	2000	mA	0/50000
	Current_Protect			
Y	CHG_OC1_Start	110	A(±2A)	5/200
Y	CHG_OC1_Delay	5000	mS(100-1500mS)	50/65000
Y	DISC_OC1_Start	125	A(±2A)	5/200
Y	DISC_OC1_Delay	10000	mS(100-1500mS)	50/65000
Y	CHG_OC2_Start	150	A(±2A)	5/200
Y	CHG_OC2_Delay	500	mS(100-1500mS)	50/65000
Y	DISC_OC2_Start	150	A(±2A)	5/200
Y	DISC_OC2_Delay	500	mS(100-1500mS)	50/65000
	Temperature_Protect			
Y	CHG_OT_START	65	℃(±2℃)	5/200
Y	CHG_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	CHG_OT_STOP	55	℃(±2℃)	5/200
Y	DISC_OT_START	70	℃(±2℃)	5/200
Y	DISC_OT_Delay	4000	mS(500-3000mS)	50/65000
Y	DISC_OT_STOP	60	℃(±2℃)	5/200
Y	CHG_UT_START	-5	℃(±2℃)	-50/200



4.4.5 Configure the default parameters of the upper monitor system

Note: After the protection parameters and alarm parameters are read, the parameters of the upper monitor system appear red color. The reason for this phenomenon is that the parameter version of the upper monitor system and the BMS are not consistent, which does not affect the normal use, and the operation is not recommended. If the operation of "cancel the mark red" is required, please contact the Basengreen customer service.

4.4.6 Current-limiting mode

Note: 0,3,4,5,10, five modes, other numbers are meaningless.

Each of the five current limiting modes are as follows:

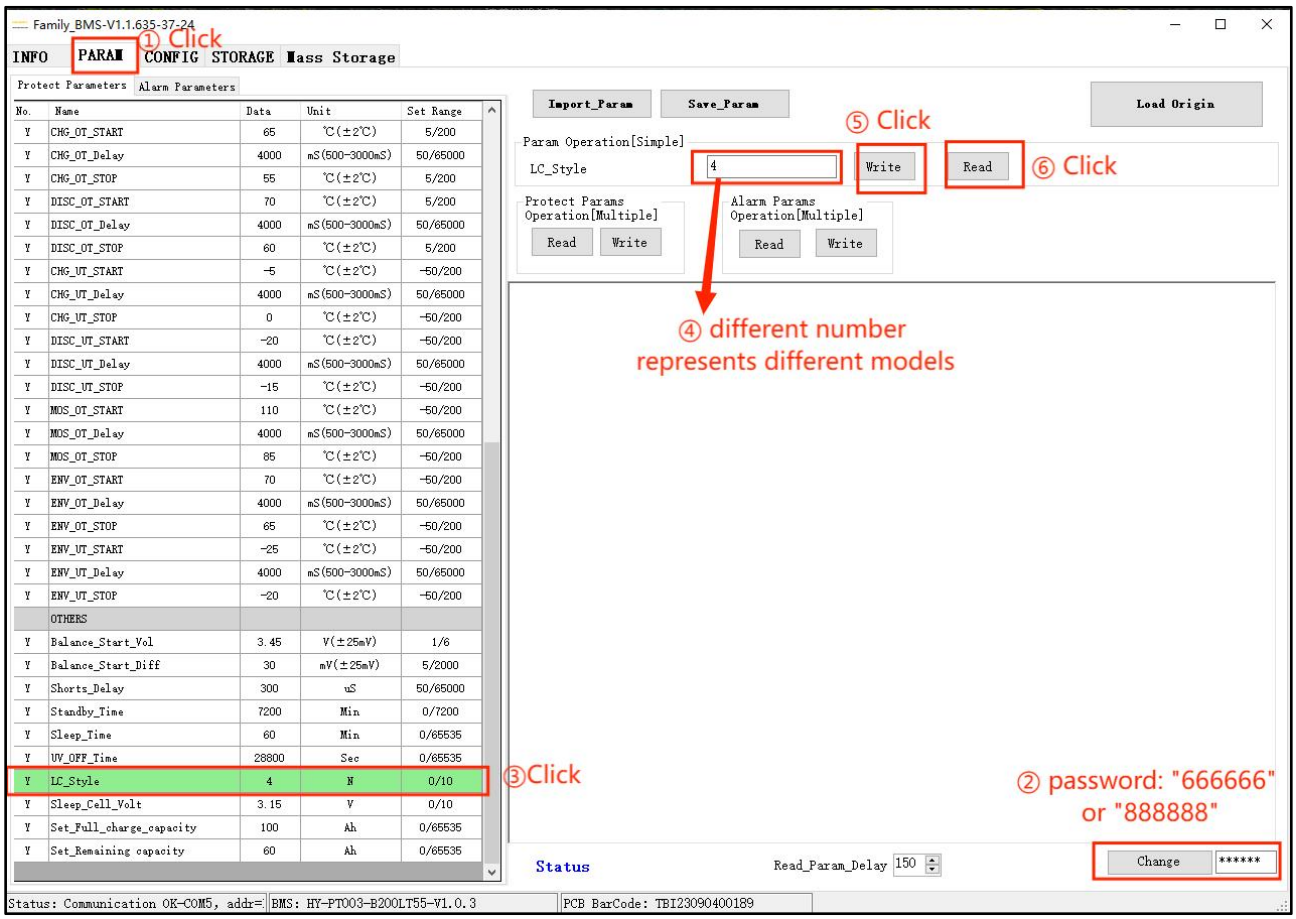
0: unlimited flow mode;

3: Half of the lower flow value of the passive flow limiting mode;

4: Passive flow-limiting mode;

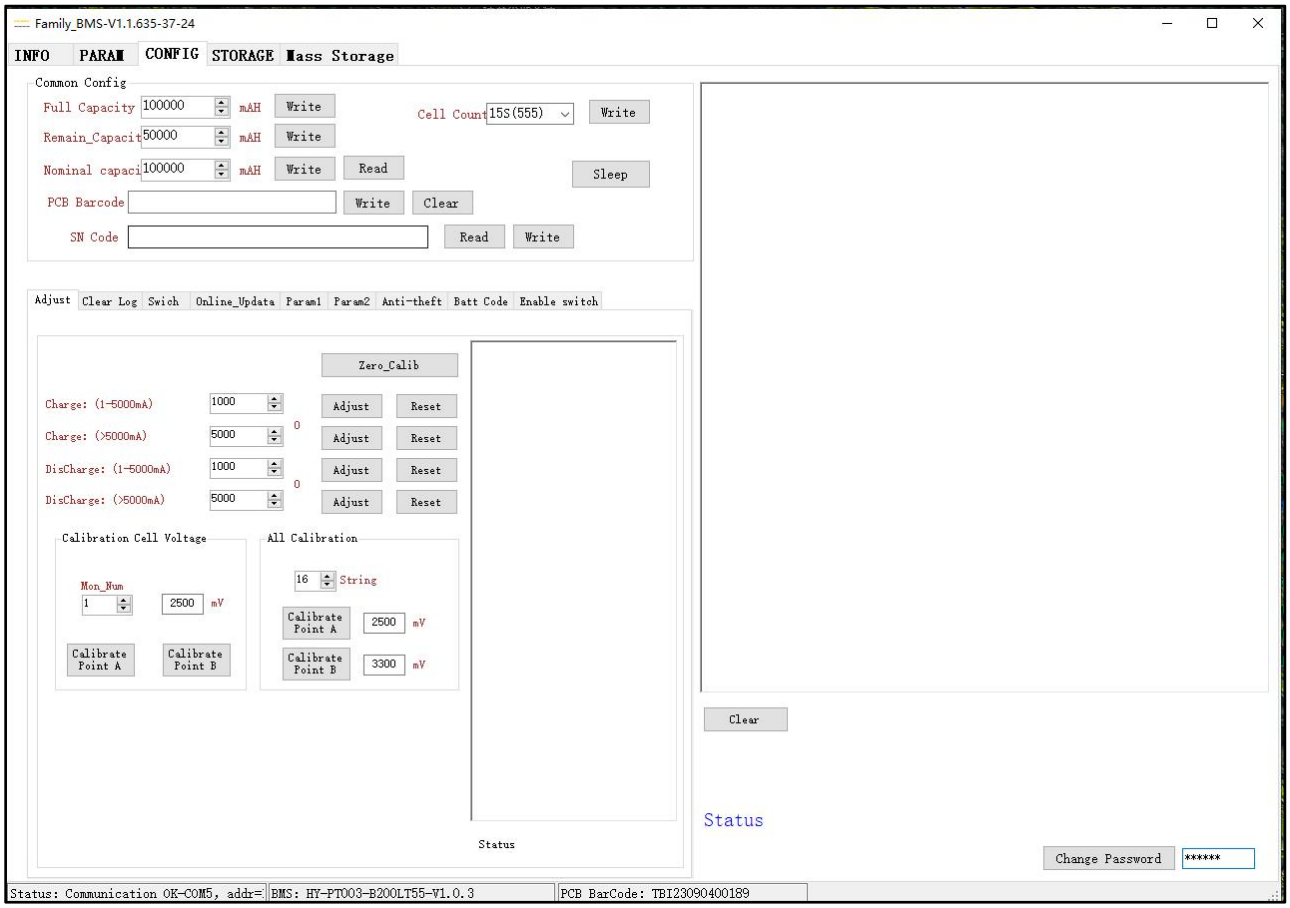
5: Half of the lower flow value of the active current limiting mode;

10: Active current limiting mode.



4.5 "CONFIGURATION" INTERFACE FUNCTION SETTING

The functions of this part include system parameters read / write, reading BMS information, reading / setting switch status, data calibration and other functions.

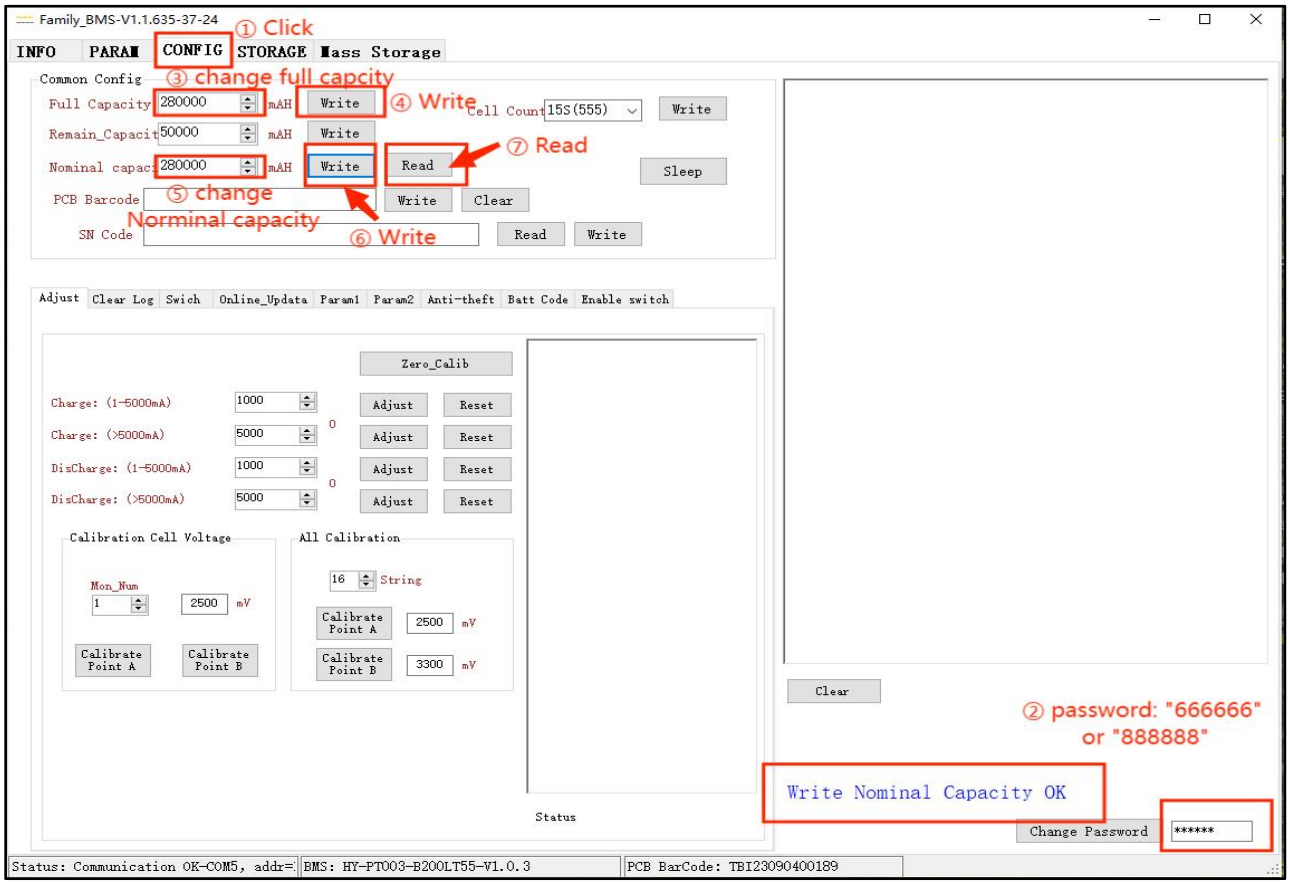


4.5.1 Modification of the battery capacity

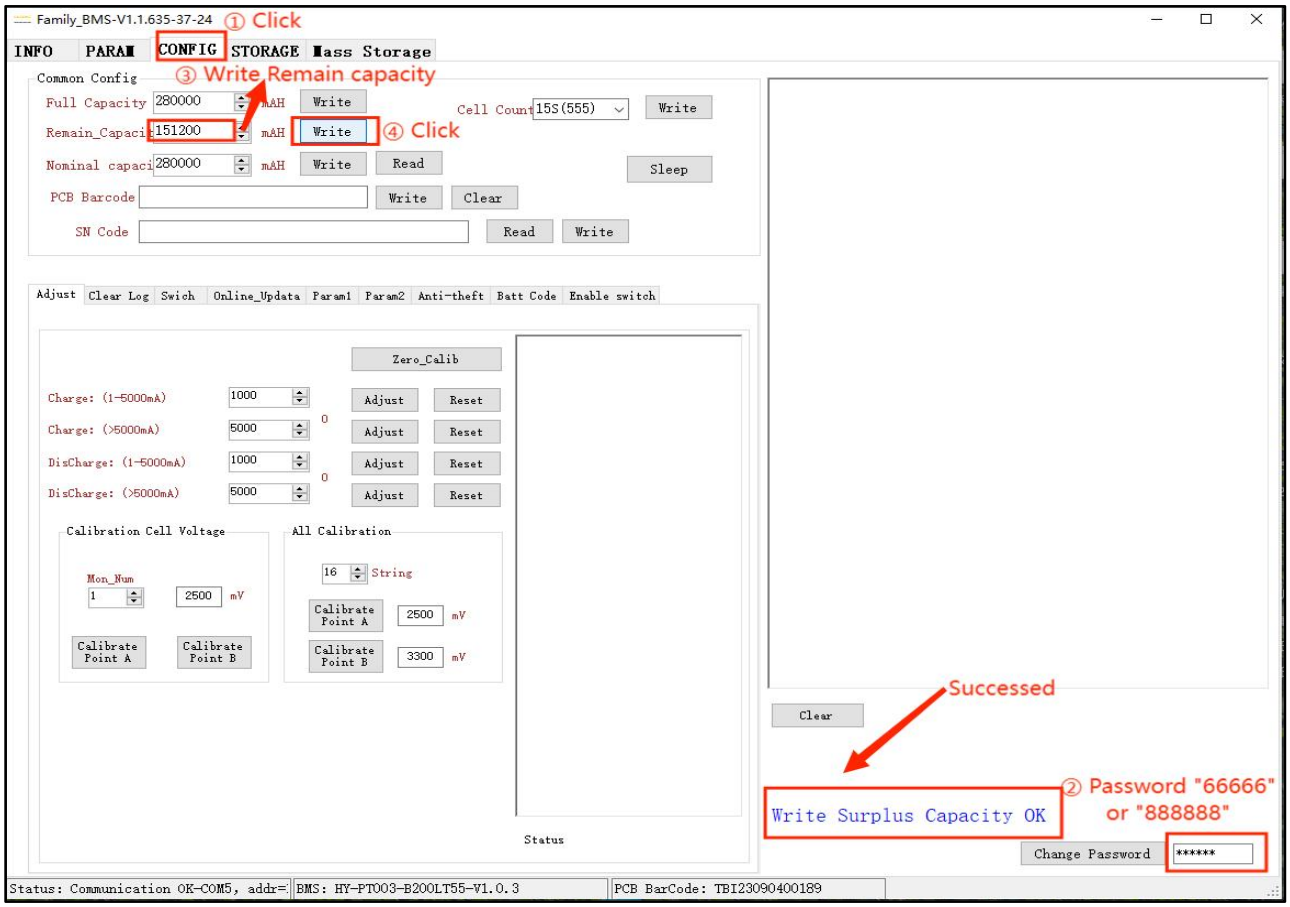
Note: "Nominal capacity" represents the rated capacity, and "Full capacity" represents the actual full charge capacity

（1） Full capacity modification

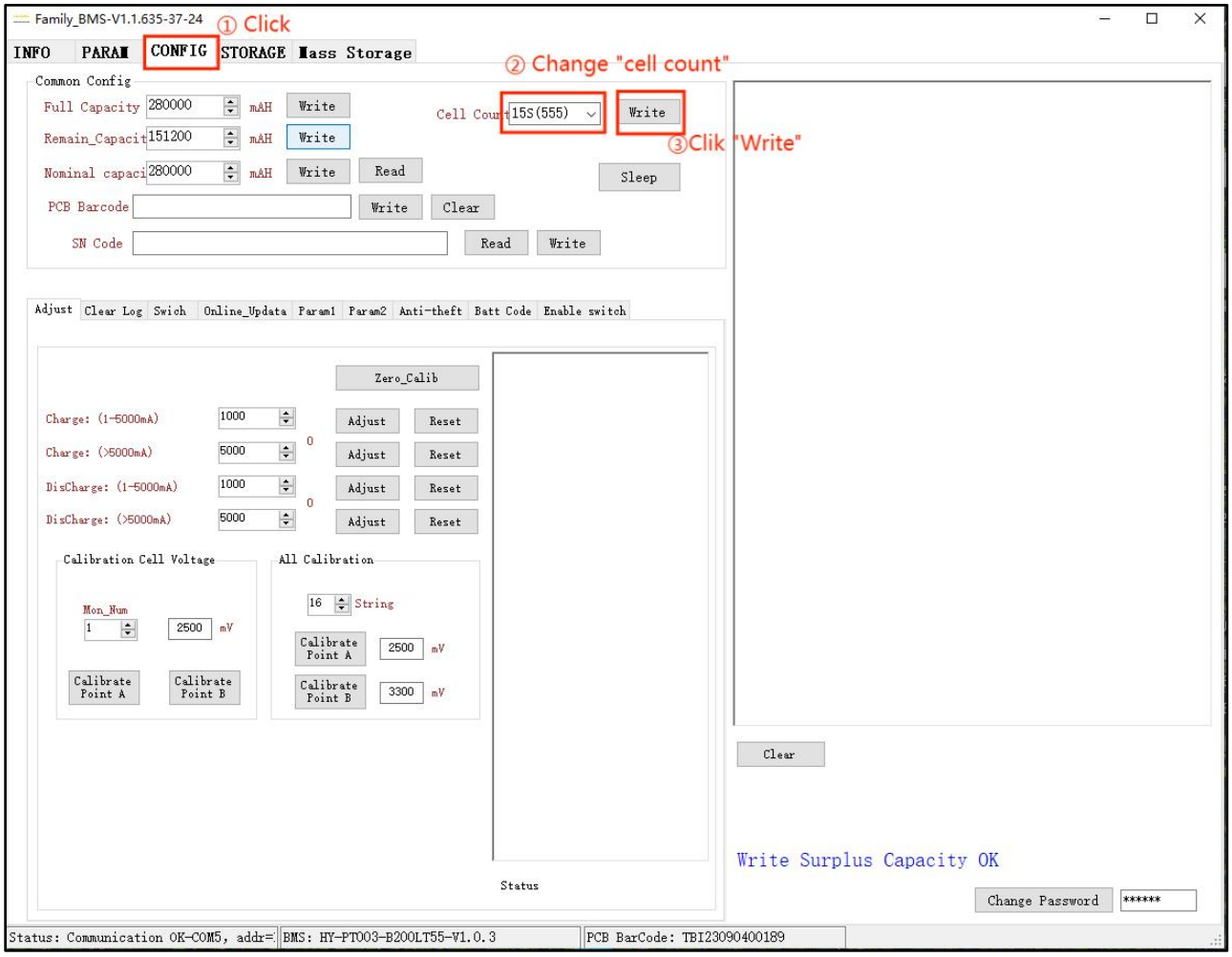
If the actual capacity of the battery is quite different from the default battery capacity of the factory, the "Nominal capacity" should be modified at the same time, when the "Full capacity" is modified. For example, if the factory battery capacity is set to be 100 AH, but the actual battery capacity is 200 AH, then when the "Full capacity" is modified to 200 AH, the "Nominal capacity" also needs to be changed to 200 AH.



(2) Change the remaining capacity

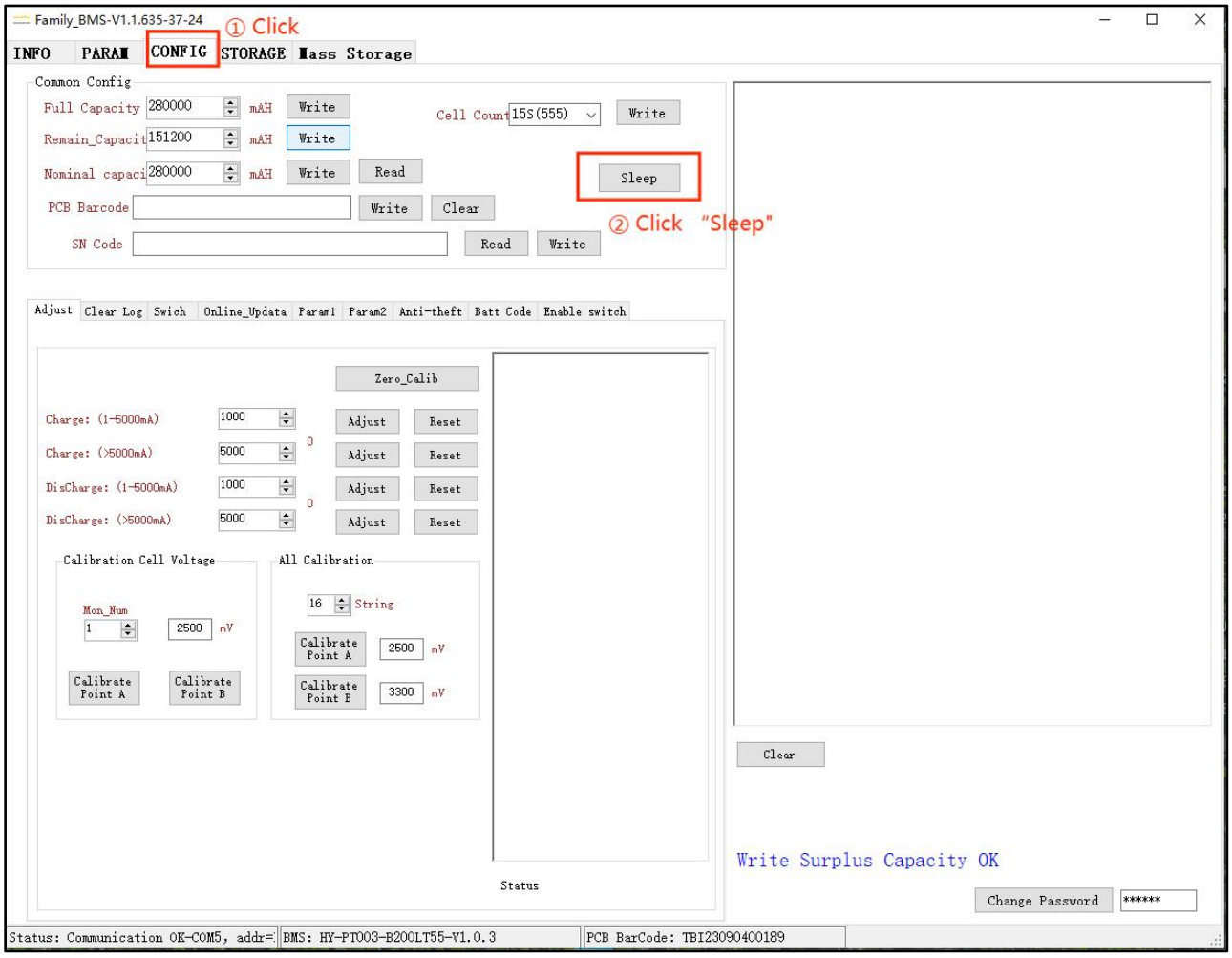


4.5.2 Modification of battery strings



Note: After the modification, the data related to the total voltage should also be modified. The wiring shall be adjusted according to different versions. Operation is not recommended. Please confirm with the Basengreen.

4.5.3 Forced dormancy function of upper monitor system



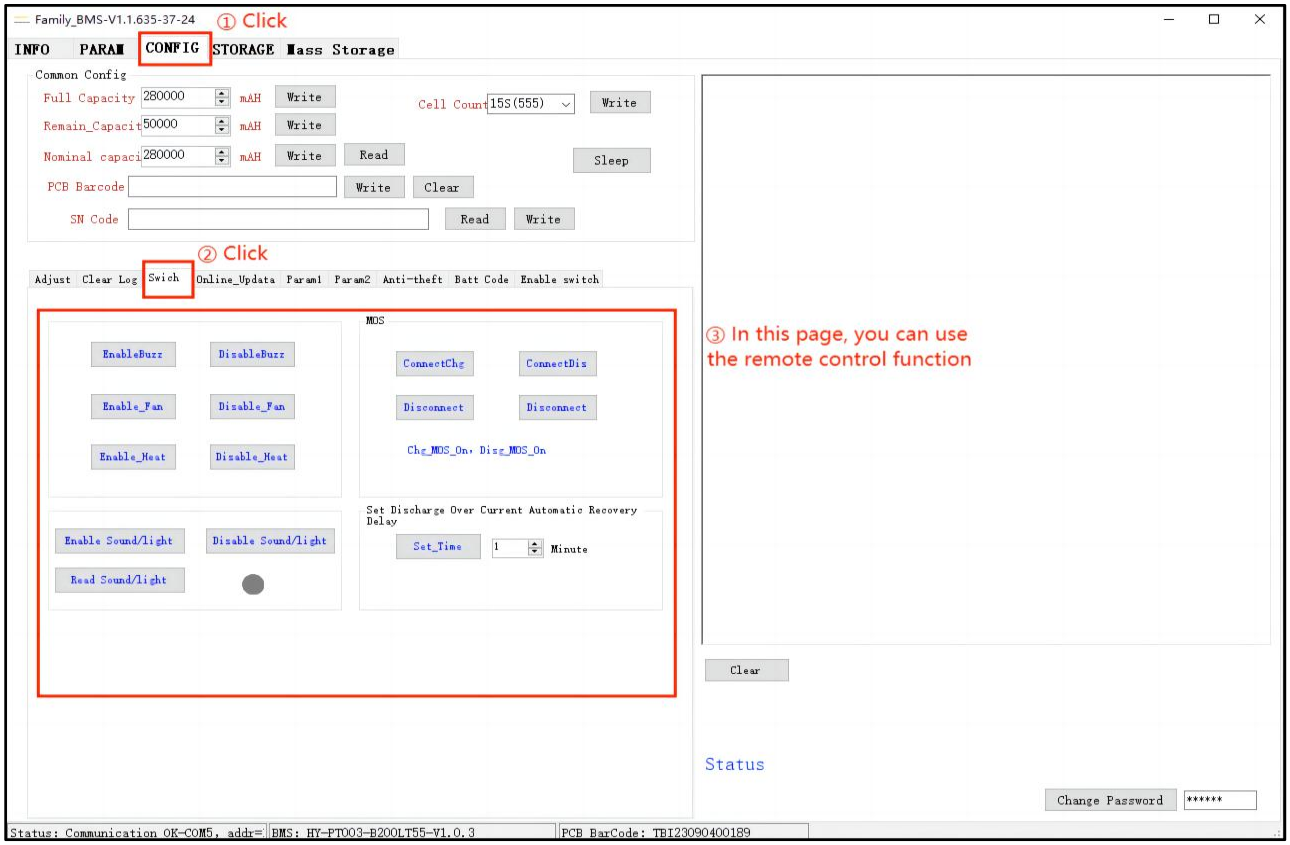
Note: 1. It is impossible to force the battery pack to sleep while charging.

2. If you need to wake up after forced dormancy, there are two operation modes, one is to press the reset (RTS) button on the battery pack, and the other is to charge the BMS.

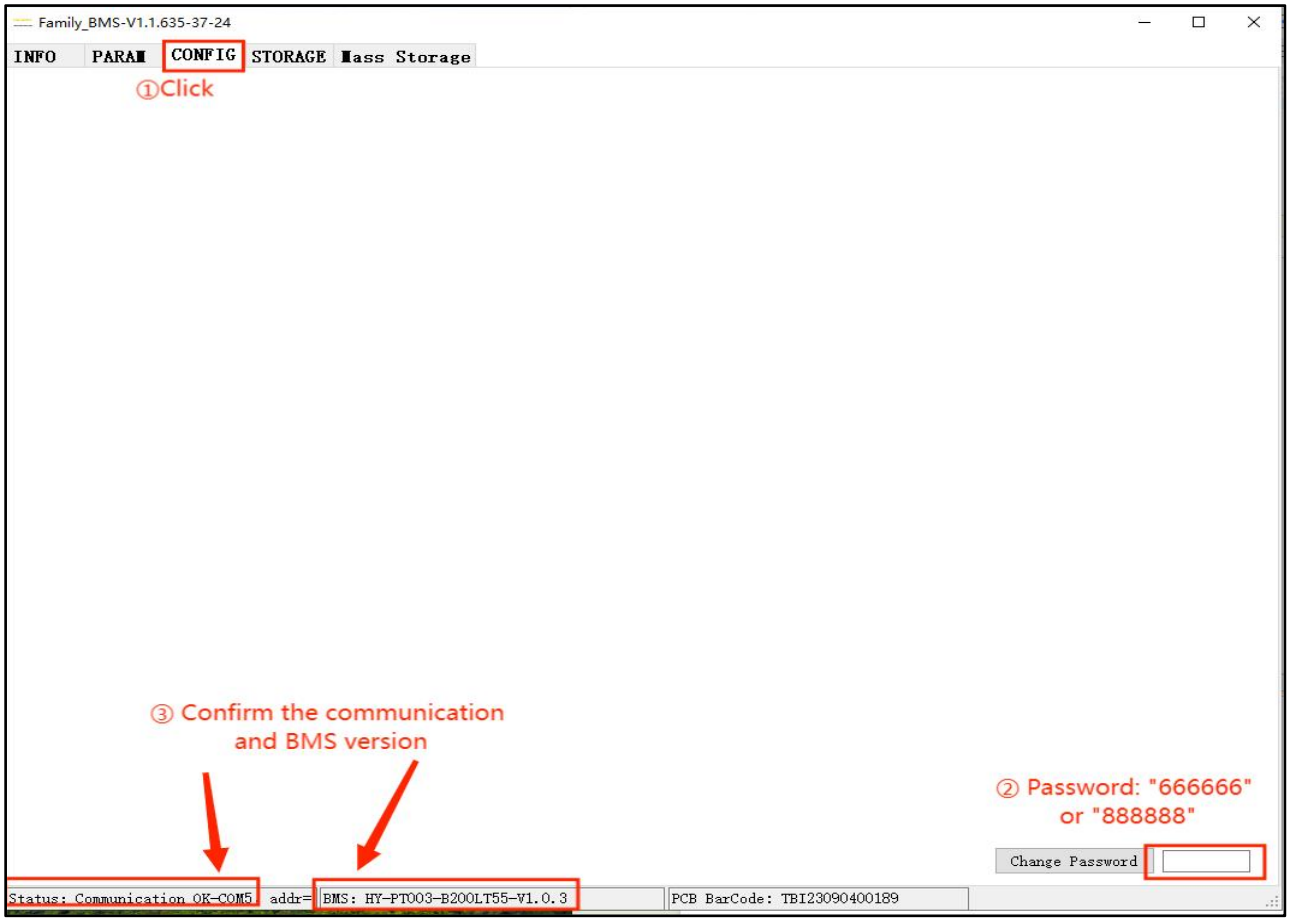
4.5.4 Function "Remote control"

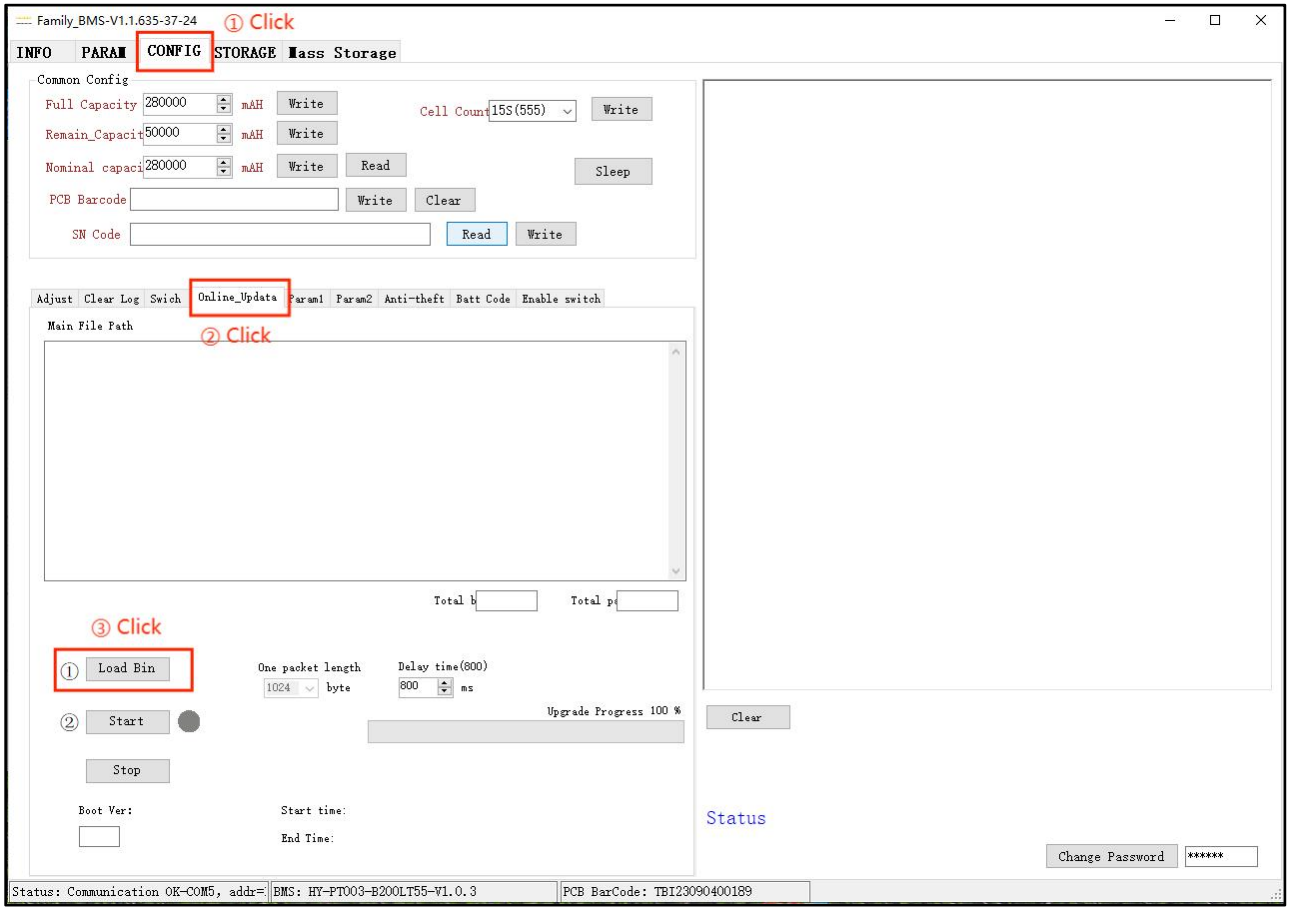
Note: 1. Whether the ordinary remote control function can be used depends on whether the hardware supports this function, and whether the hardware is configured, please refer to the specification.

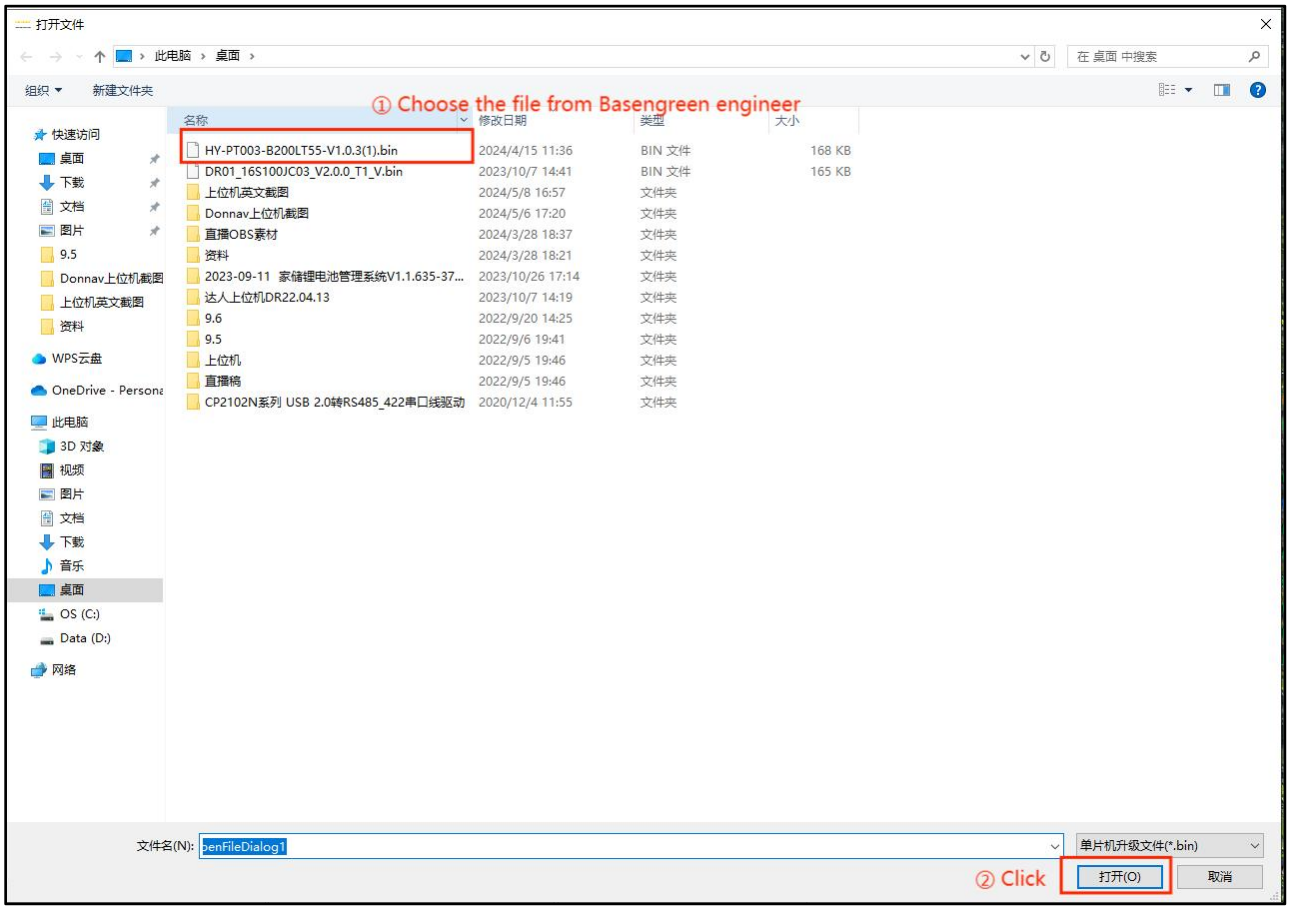
2. This interface is usually recommended only for testing. If required, please confirm with the Basengreen.

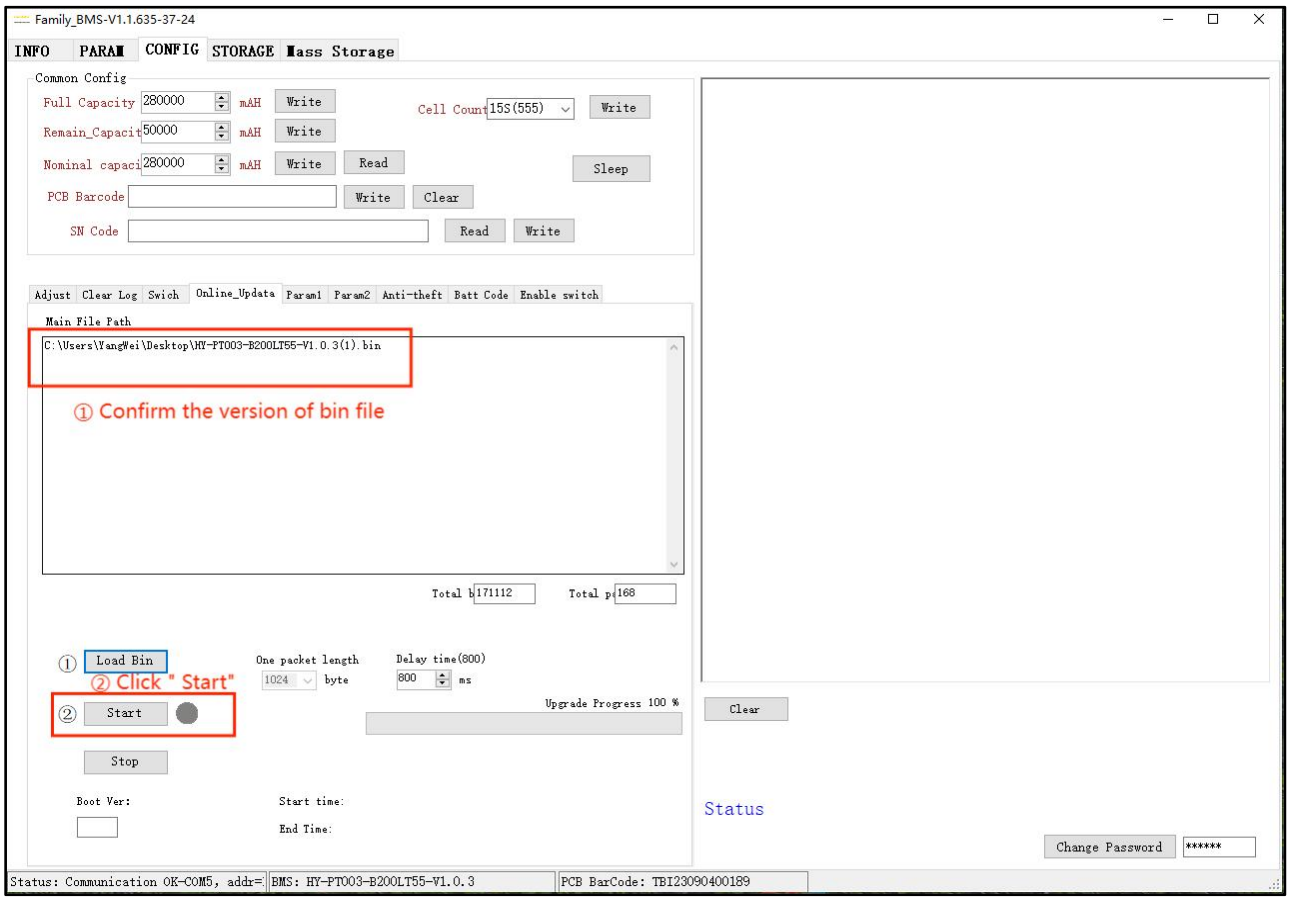


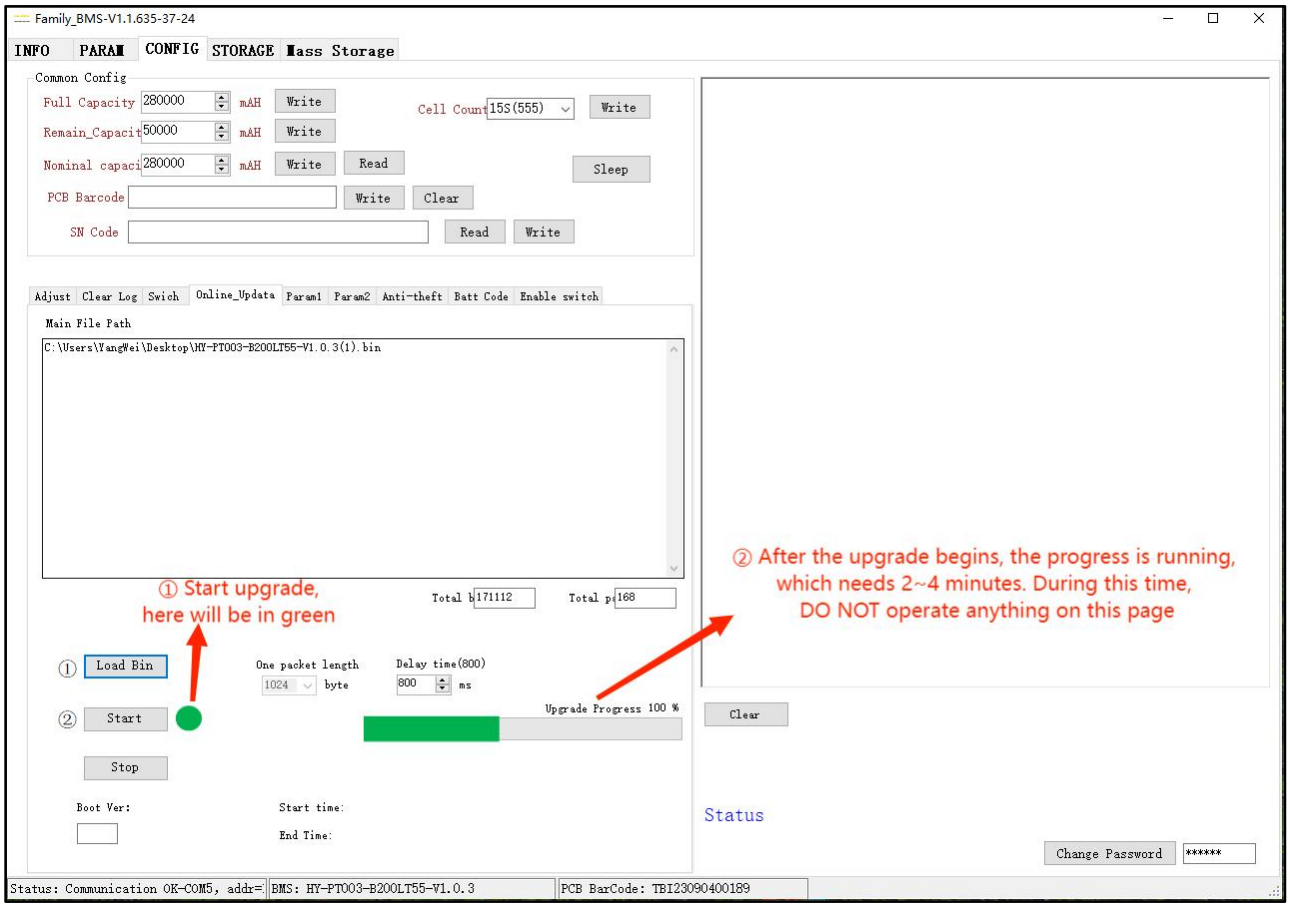
4.5.5 Software upgrade

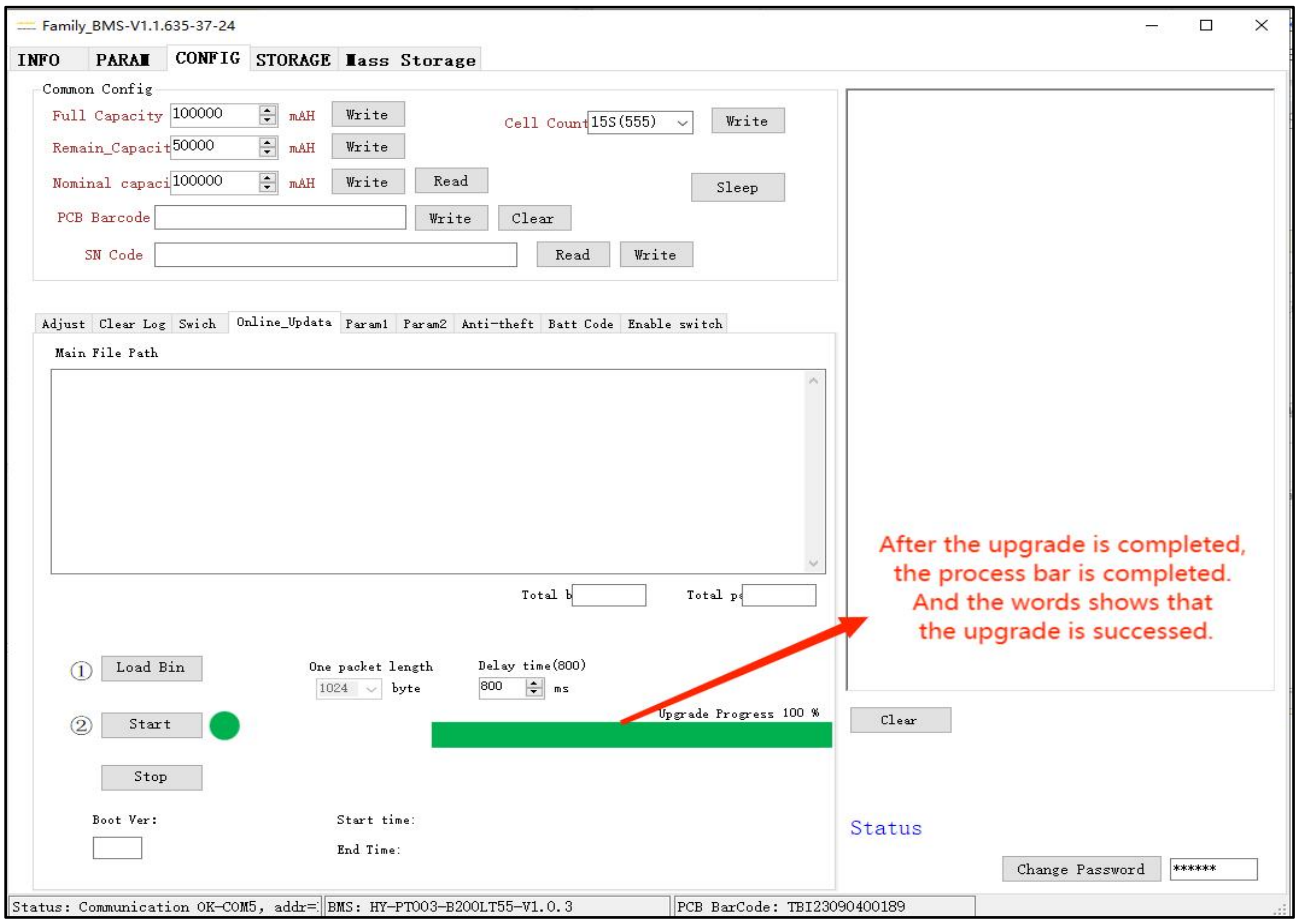


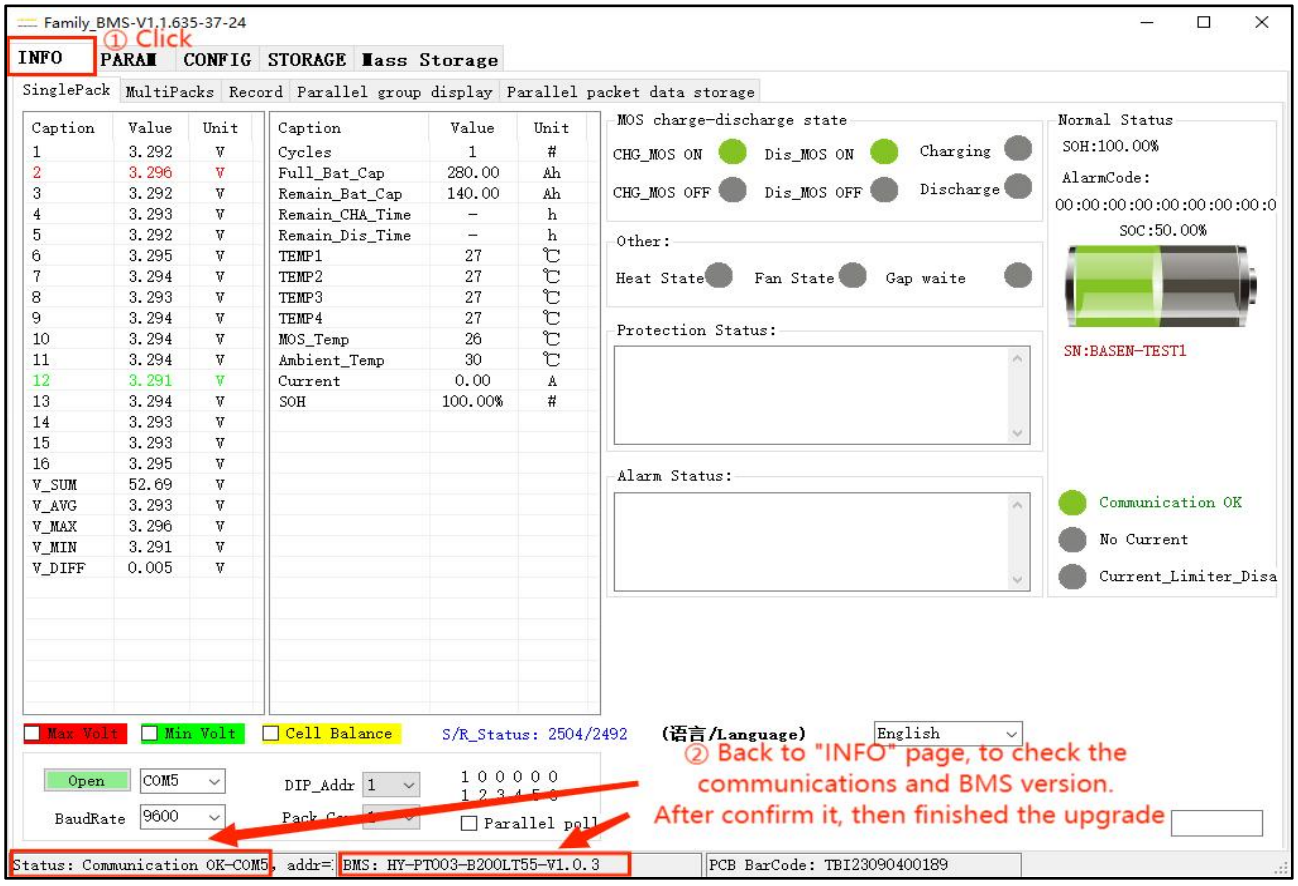

Family_BMS-V1.1.635-37-24
① Click
INFO
PARAM
CONFIG
STORAGE
Mass Storage
Common Config
Full Capacity
Remain_Capacit
Nominal capaci
PCB Barcode
SN Code
Write
Read
Clear
Sleep
Adjust
Clear Log
Swich
Online_Updata
Param1
Param2
Anti-theft
Batt Code
Enable switch
Main File Path
② Click
③ Click
① Load Bin
② Start
Stop
One packet length
Delay time(800)
Upgrade Progress 100 %
Boot Ver:
Start time:
End Time:
Status
Change Password
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189


打开文件
① Choose the file from Basengreen engineer
HY-PT003-B200LT55-V1.0.3(1).bin
DR01_16S100JC03_V2.0.0_T1_V.bin
文件名(N):
单片机升级文件(*.bin)
② Click
打开(O)
取消


Family_BMS-V1.1.635-37-24
INFO
PARA
CONFIG
STORAGE
Mass Storage
Common Config
Full Capacity
280000
mAH
Write
Cell Count
15S(555)
Remain_Capacit
50000
Nominal capaci
Read
Sleep
PCB Barcode
Clear
SN Code
Adjust
Clear Log
Swich
Online_Updata
Param1
Param2
Anti-theft
Batt Code
Enable switch
Main File Path
C:\Users\YangWei\Desktop\HY-PT003-B200LT55-V1.0.3(1).bin
① Confirm the version of bin file
Total b
171112
Total p
168
① Load Bin
One packet length
1024
byte
Delay time(800)
800
ms
② Click " Start"
② Start
Upgrade Progress 100 %
Stop
Boot Ver:
Start time:
End Time:
Status
Change Password
******
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189


Family_BMS-V1.1.635-37-24
INFO
PARA
CONFIG
STORAGE
Mass Storage
Common Config
Full Capacity
280000
mAH
Write
Cell Count
15S(555)
Remain_Capacit
50000
Nominal capaci
Read
Sleep
PCB Barcode
Clear
SN Code
Adjust
Clear Log
Swich
Online_Updata
Param1
Param2
Anti-theft
Batt Code
Enable switch
Main File Path
C:\Users\YangWei\Desktop\HY-PT003-B200LT55-V1.0.3(1).bin
① Start upgrade,
here will be in green
② After the upgrade begins, the progress is running,
which needs 2~4 minutes. During this time,
DO NOT operate anything on this page
Total b
171112
Total p
168
① Load Bin
One packet length
1024
byte
Delay time(800)
800
ms
② Start
Upgrade Progress 100 %
Stop
Boot Ver:
Start time:
End Time:
Status
Change Password
******
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189


Family_BMS-V1.1.635-37-24
INFO
PARAM
CONFIG
STORAGE
Mass Storage
Common Config
Full Capacity 100000 mAH Write
Remain_Capacit 50000 mAH Write
Nominal capaci 100000 mAH Write Read
PCB Barcode Write Clear
SN Code Read Write
Cell Count 15S(555) Write
Sleep
Adjust
Clear Log
Swich
Online_Updata
Param1
Param2
Anti-theft
Batt Code
Enable switch
Main File Path
Total b
Total p
① Load Bin
② Start
Stop
One packet length 1024 byte
Delay time(800) 800 ms
Upgrade Progress 100 %
Boot Ver:
Start time:
End Time:
After the upgrade is completed, the process bar is completed. And the words shows that the upgrade is successed.
Clear
Status
Change Password
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189


Family_BMS-V1.1.635-37-24
① Click
INFO
PARAM
CONFIG
STORAGE
Mass Storage
SinglePack
MultiPacks
Record
Parallel group display
Parallel packet data storage
Caption Value Unit
1 3.292 V
2 3.296 V
3 3.292 V
4 3.293 V
5 3.292 V
6 3.295 V
7 3.294 V
8 3.293 V
9 3.294 V
10 3.294 V
11 3.294 V
12 3.291 V
13 3.294 V
14 3.293 V
15 3.293 V
16 3.295 V
V_SUM 52.69 V
V_AVG 3.293 V
V_MAX 3.296 V
V_MIN 3.291 V
V_DIFF 0.005 V
Caption Value Unit
Cycles 1 #
Full_Bat_Cap 280.00 Ah
Remain_Bat_Cap 140.00 Ah
Remain_CHA_Time - h
Remain_Dis_Time - h
TEMP1 27 ℃
TEMP2 27 ℃
TEMP3 27 ℃
TEMP4 27 ℃
MOS_Temp 26 ℃
Ambient_Temp 30 ℃
Current 0.00 A
SOH 100.00% #
MOS charge-discharge state
CHG_MOS ON
Dis_MOS ON
Charging
CHG_MOS OFF
Dis_MOS OFF
Discharge
Other:
Heat State
Fan State
Gap waite
Protection Status:
Alarm Status:
Normal Status
SOH:100.00%
AlarmCode:
00:00:00:00:00:00:00:00:0
SOC:50.00%
SN:BASEN-TEST1
Communication OK
No Current
Current_Limiter_Disa
Max Volt
Min Volt
Cell Balance
S/R_Status: 2504/2492
(语言/Language)
English
② Back to "INFO" page, to check the communications and BMS version.
After confirm it, then finished the upgrade
Open
COM5
BaudRate 9600
DIP_Addr 1
1 0 0 0 0 0
1 2 3 4 5 6
Parallel poll
Status: Communication OK-COM5, addr=
BMS: HY-PT003-B200LT55-V1.0.3
PCB BarCode: TBI23090400189

Upgrade Notes:

(1) During the upgrade process, do not power off or switch to other operation interface. If there is half of the power off upgrade, refer to article 3 below to repair;

(2) If the corresponding bin file is selected, the program provided by the BMS manufacturer must be used;

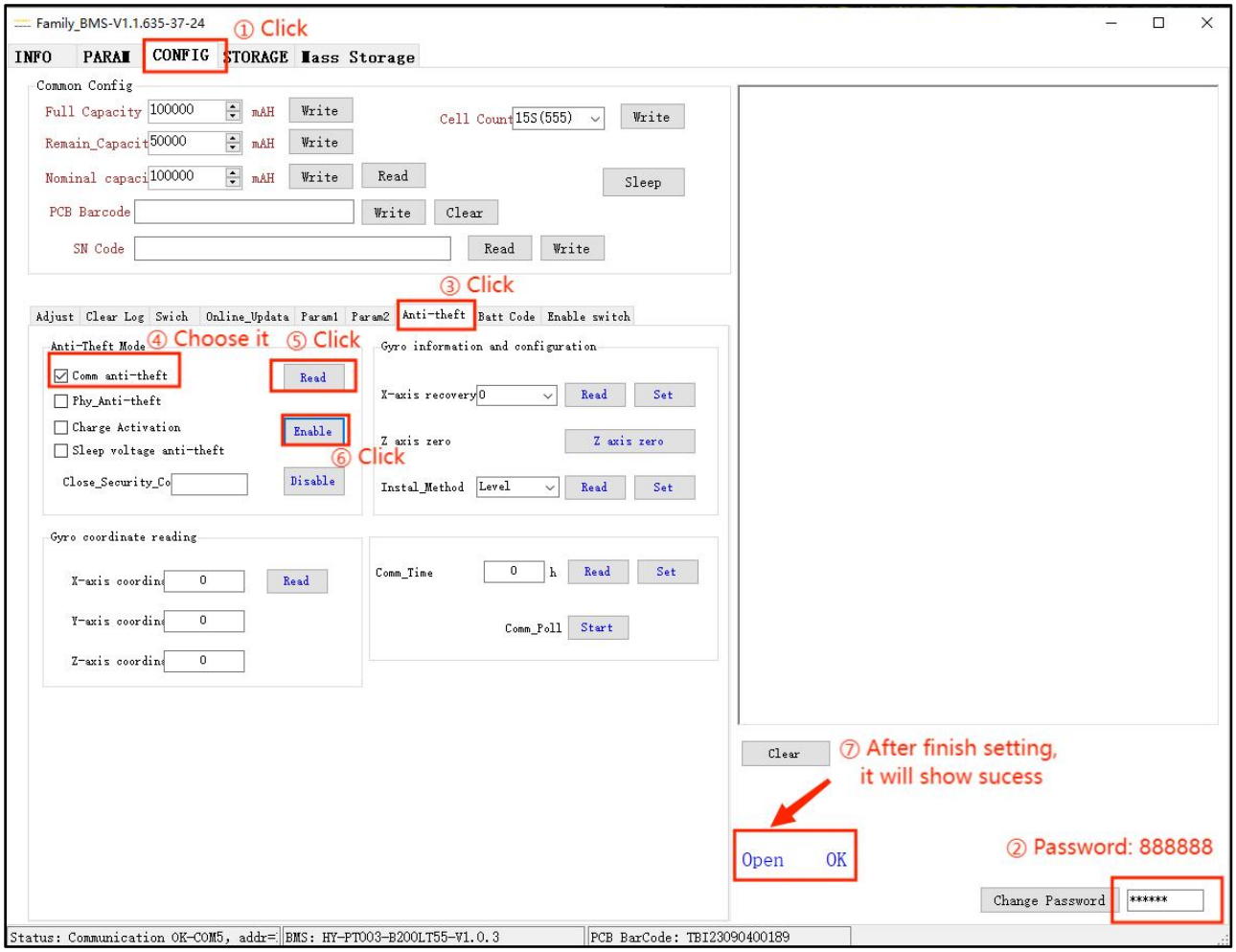
(3) If the upgrade fails and re-operation is suggested. If the communication remains unchanged, the point will start upgrading. Press the board reset (RTS) button to be about 10S, which can connect the board to restart and upgrade again.

4.5.6 Anti-theft Settings

(1) Communication and anti-theft prevention

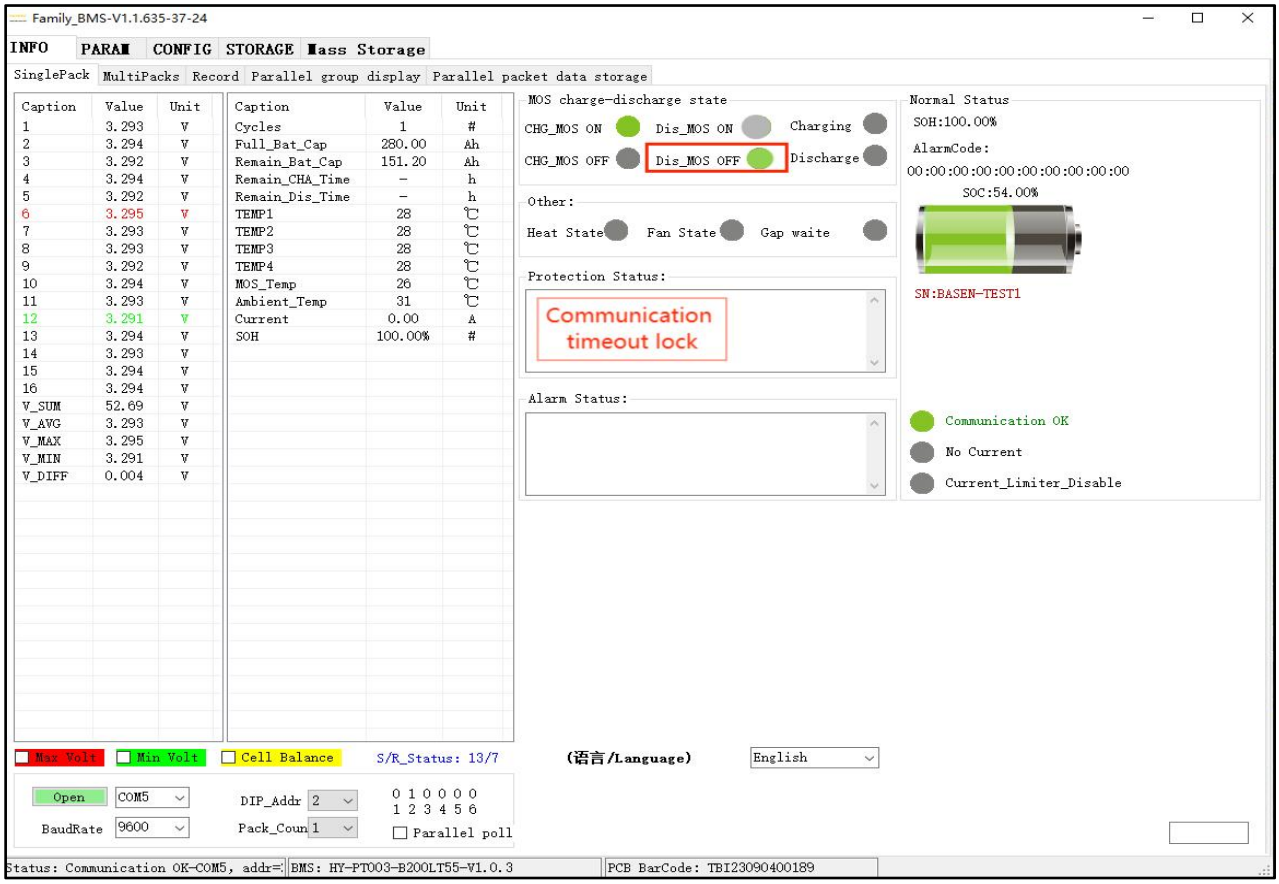
① Communication anti-theft function setting

After the communication anti-theft function is set successfully up, when the communication is interrupted for more than 48 hours, the battery is locked and the discharge MOS is turned off.

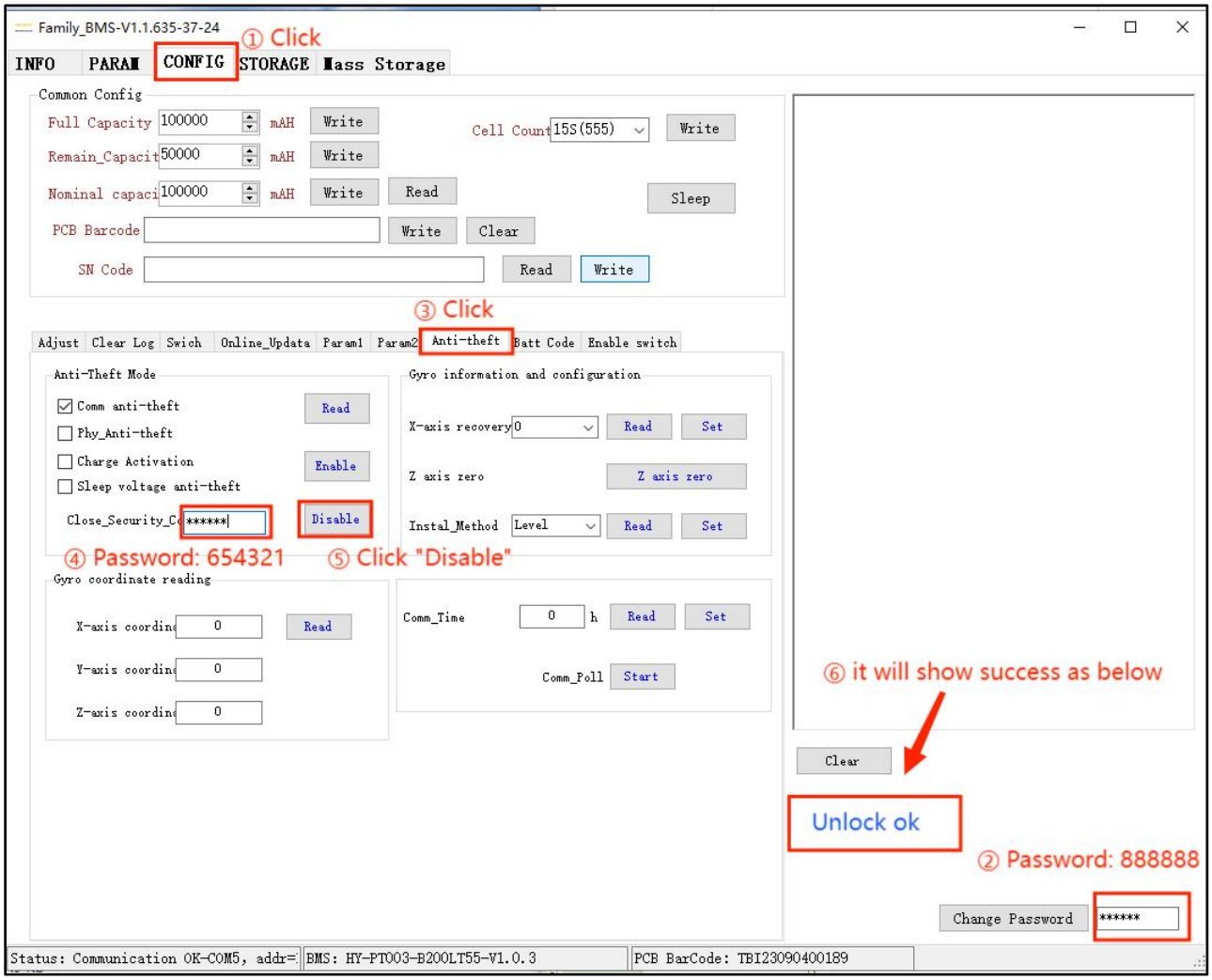


② Communication anti-theft function is triggered

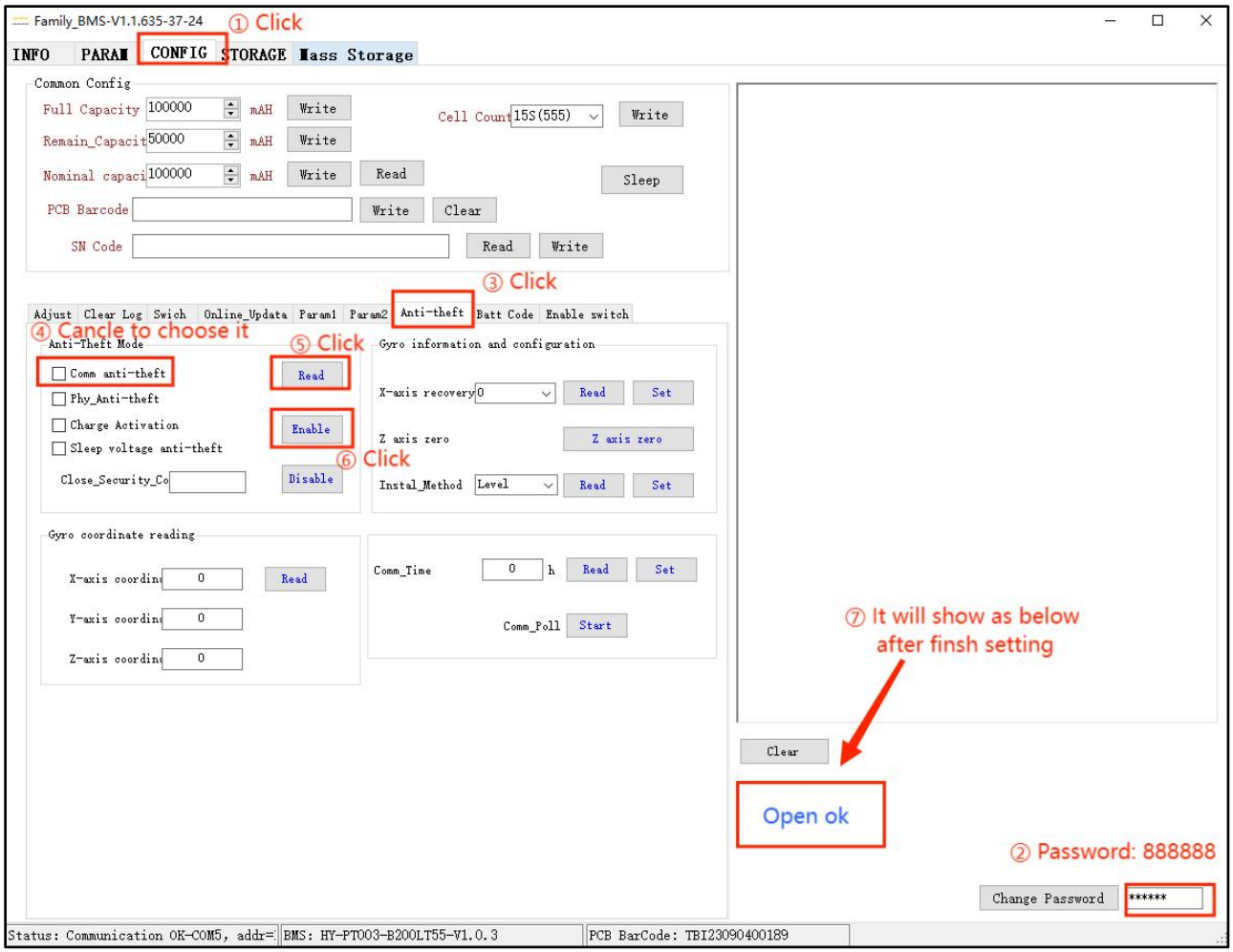
After the communication anti-theft function is enabled, when the communication is interrupted for more than 48 hours, the communication anti-theft is triggered, turn off and discharge the MOS, and report the "communication timeout locked", which can be viewed in the monitoring interface.



③ Communication anti-theft function to unlock

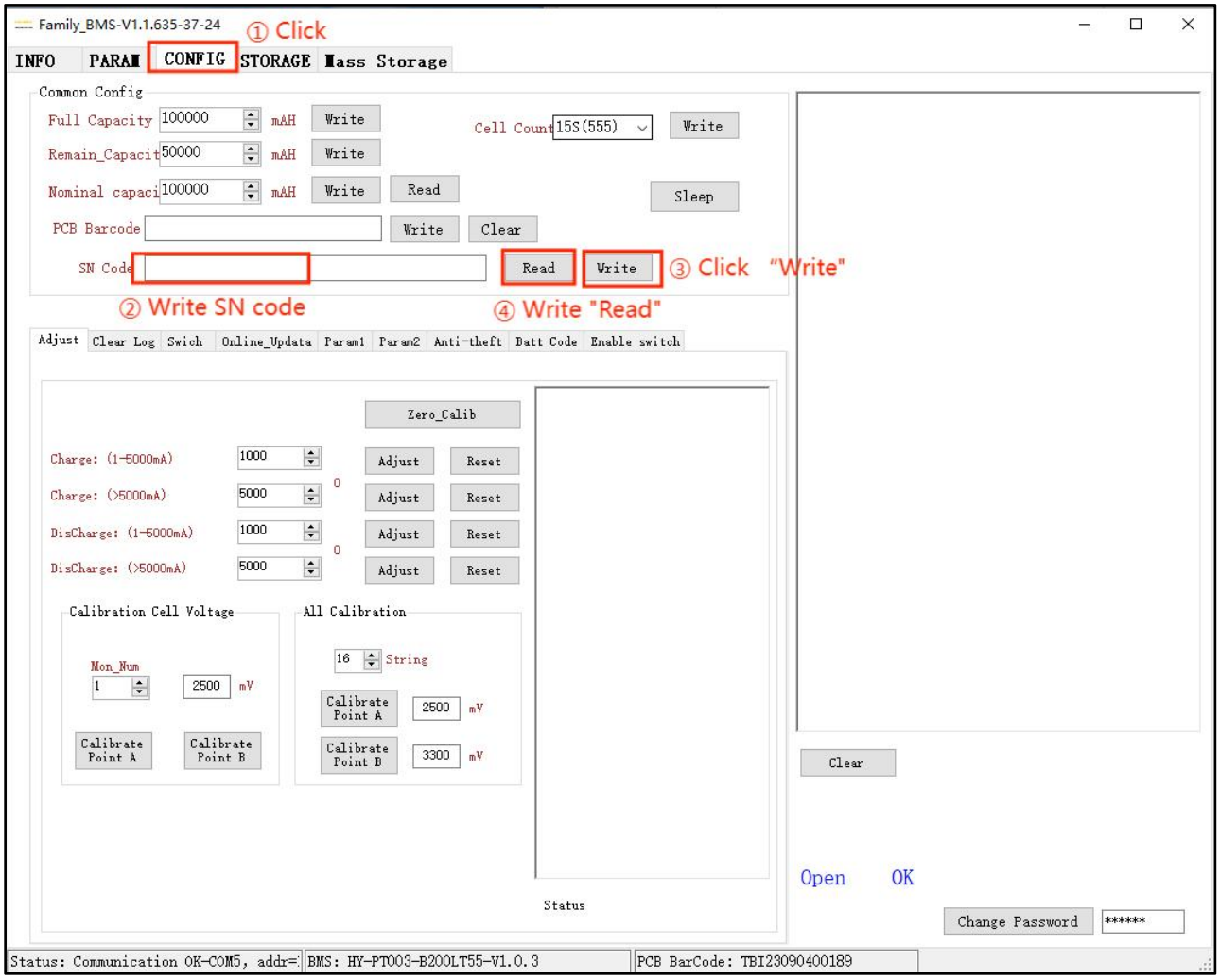


④ Communication anti-theft function is turned off

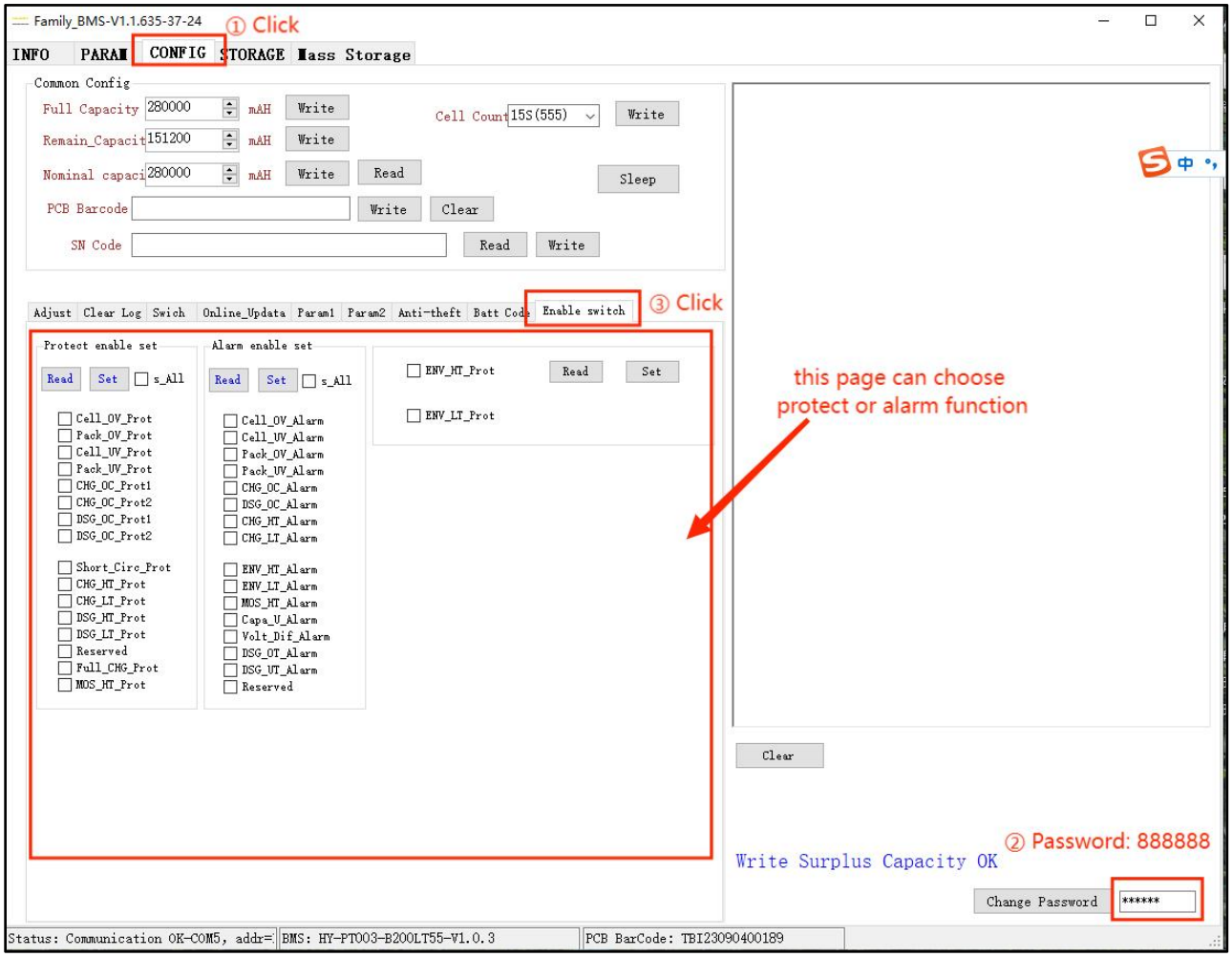


4.5.7 Write to the battery SN CODE

Note: Write SN code is usually written in the SN code part.



4.5.8 Opening and closing of the protection and alarm functions

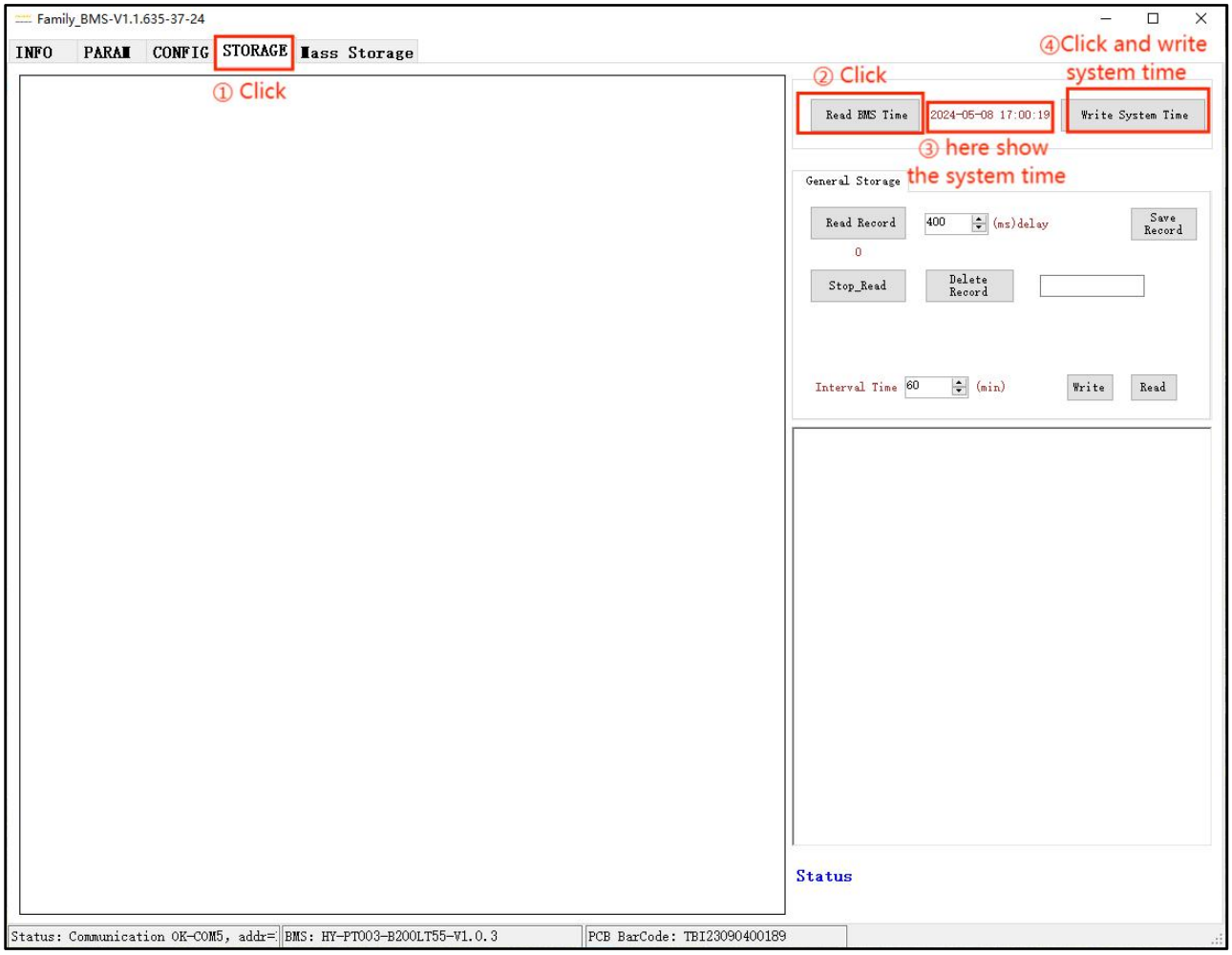


4.6 "STORAGE" INTERFACE FUNCTION SETTING

These functions include reading historical data, clearing historical data, exporting historical data, setting the storage interval time and other functions.

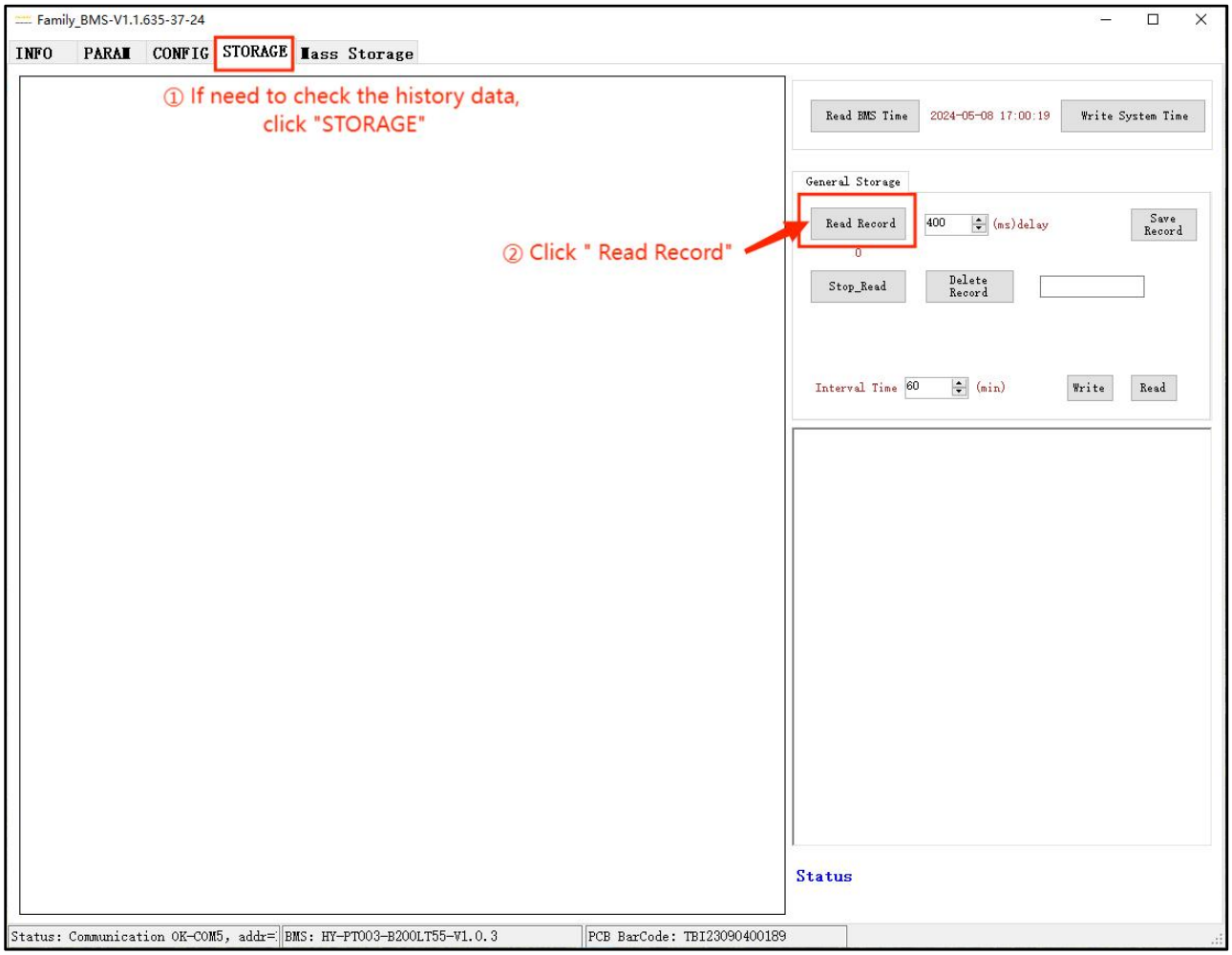
4.6.1 Read and write for the system time

Note: If the displayed system time is inconsistent with the computer time, manually calibrate by clicking 'Write System Time'. Ensure the computer time for the upper monitor system is accurate.

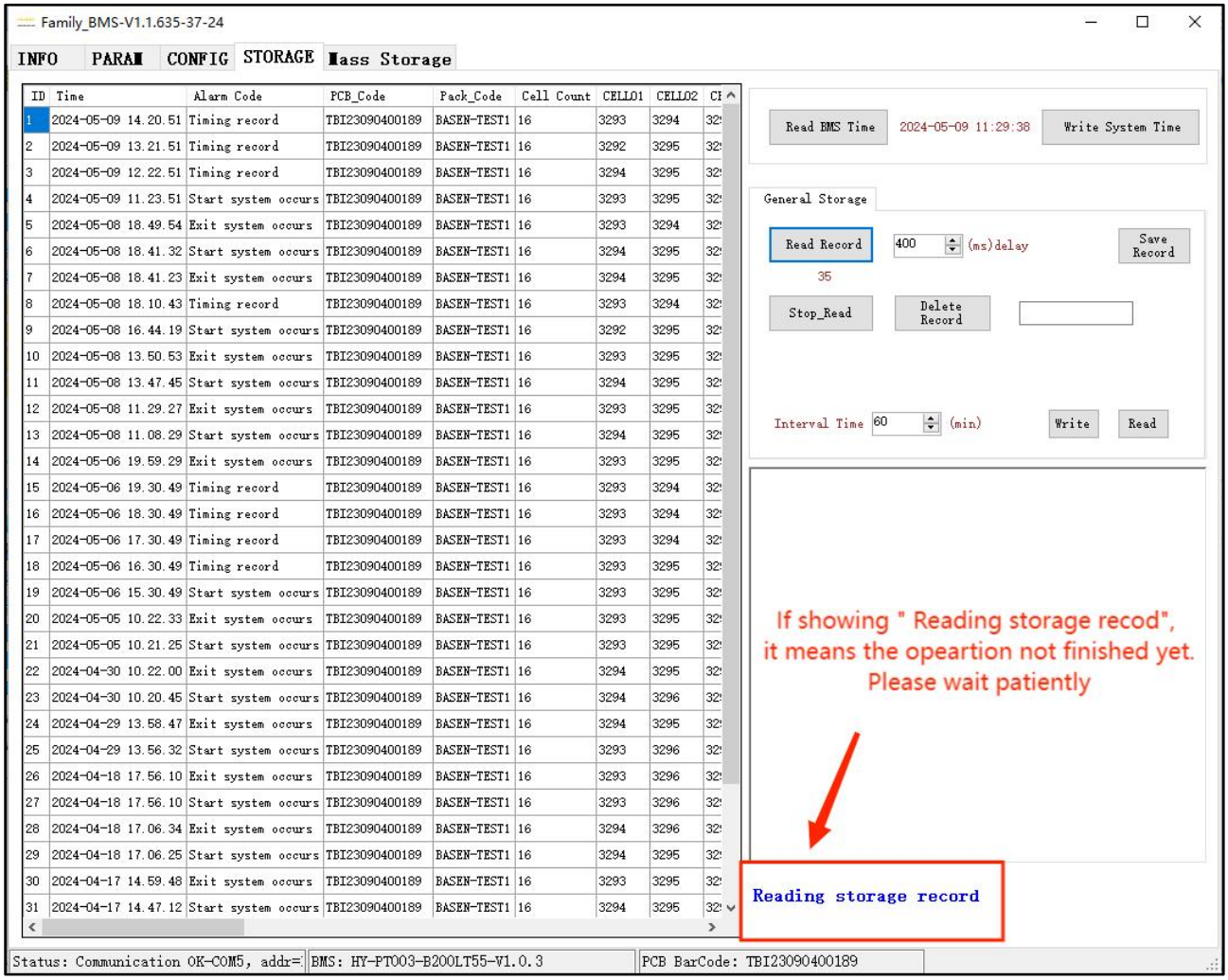


4.6.2 Reading of historical data

Note: If you need to read the complete historical data, you can only click the "Read Record" button once. Please wait patiently. After the data reading is completed, "Read Storage Record End" will be displayed.



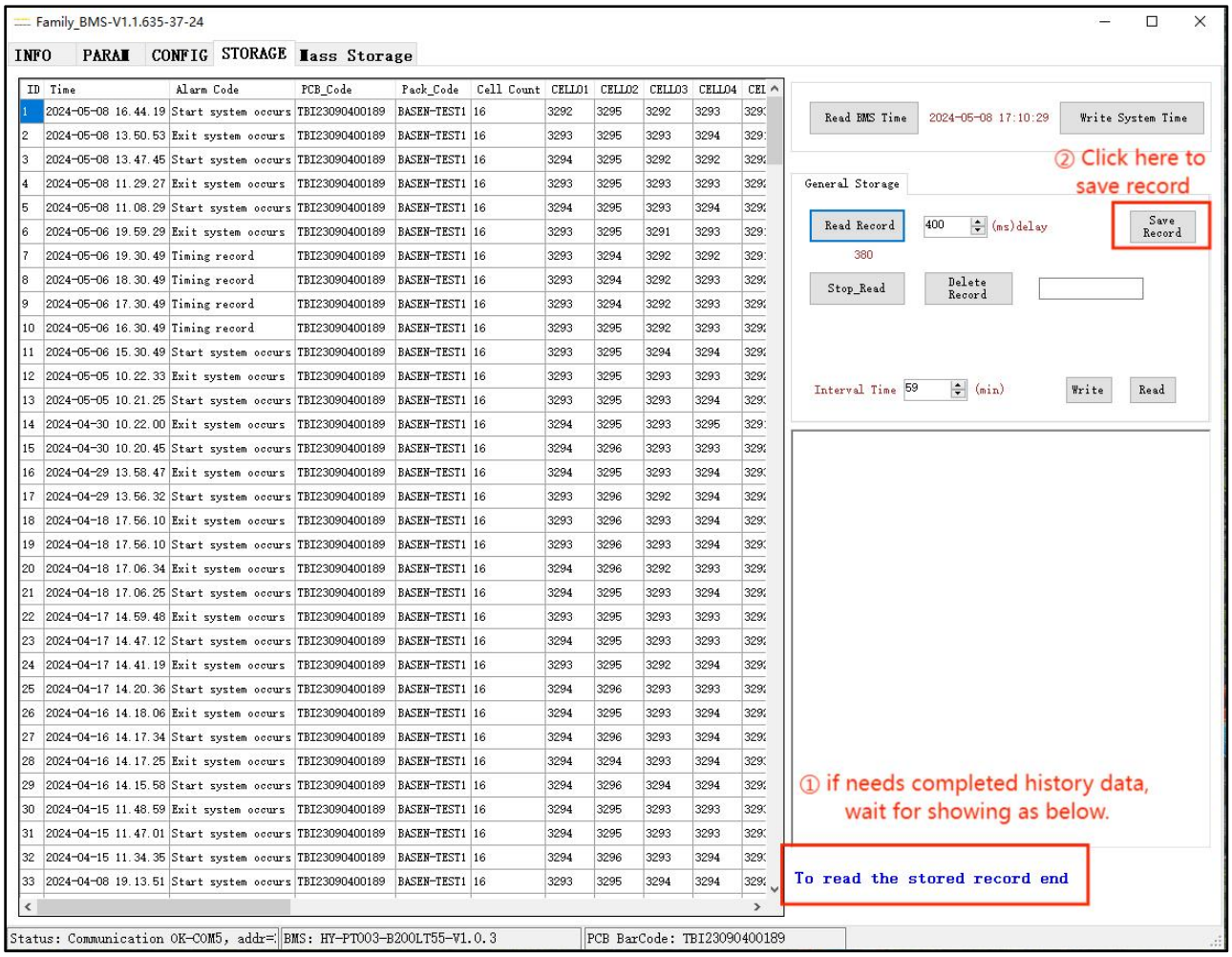
"Read stored data Record" will appear.



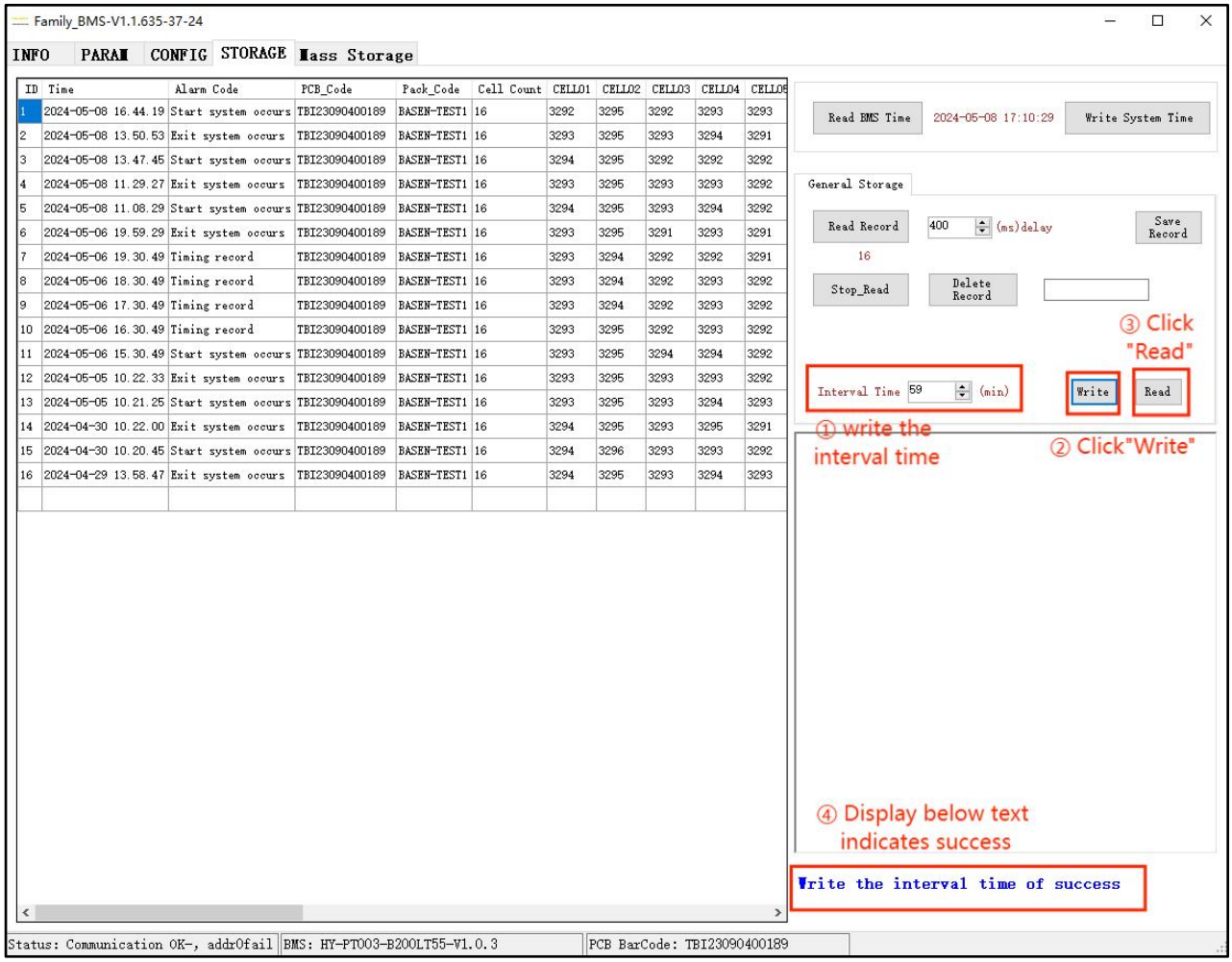
ID	Time	Alarm Code	PCB_Code	Pack_Code	Cell Count	CELL01	CELL02	CI
1	2024-05-09 14.20.51	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	32
2	2024-05-09 13.21.51	Timing record	TBI23090400189	BASEN-TEST1	16	3292	3295	32
3	2024-05-09 12.22.51	Timing record	TBI23090400189	BASEN-TEST1	16	3294	3295	32
4	2024-05-09 11.23.51	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
5	2024-05-08 18.49.54	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3294	32
6	2024-05-08 18.41.32	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
7	2024-05-08 18.41.23	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
8	2024-05-08 18.10.43	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	32
9	2024-05-08 16.44.19	Start system occurs	TBI23090400189	BASEN-TEST1	16	3292	3295	32
10	2024-05-08 13.50.53	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
11	2024-05-08 13.47.45	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
12	2024-05-08 11.29.27	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
13	2024-05-08 11.08.29	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
14	2024-05-06 19.59.29	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
15	2024-05-06 19.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	32
16	2024-05-06 18.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	32
17	2024-05-06 17.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	32
18	2024-05-06 16.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3295	32
19	2024-05-06 15.30.49	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
20	2024-05-05 10.22.33	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
21	2024-05-05 10.21.25	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
22	2024-04-30 10.22.00	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
23	2024-04-30 10.20.45	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3296	32
24	2024-04-29 13.58.47	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
25	2024-04-29 13.56.32	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3296	32
26	2024-04-18 17.56.10	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3296	32
27	2024-04-18 17.56.10	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3296	32
28	2024-04-18 17.06.34	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3294	3296	32
29	2024-04-18 17.06.25	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32
30	2024-04-17 14.59.48	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	32
31	2024-04-17 14.47.12	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	32

4.6.3 Conservation of historical data

To save the complete historical data, please perform the operation as shown in the figure below.



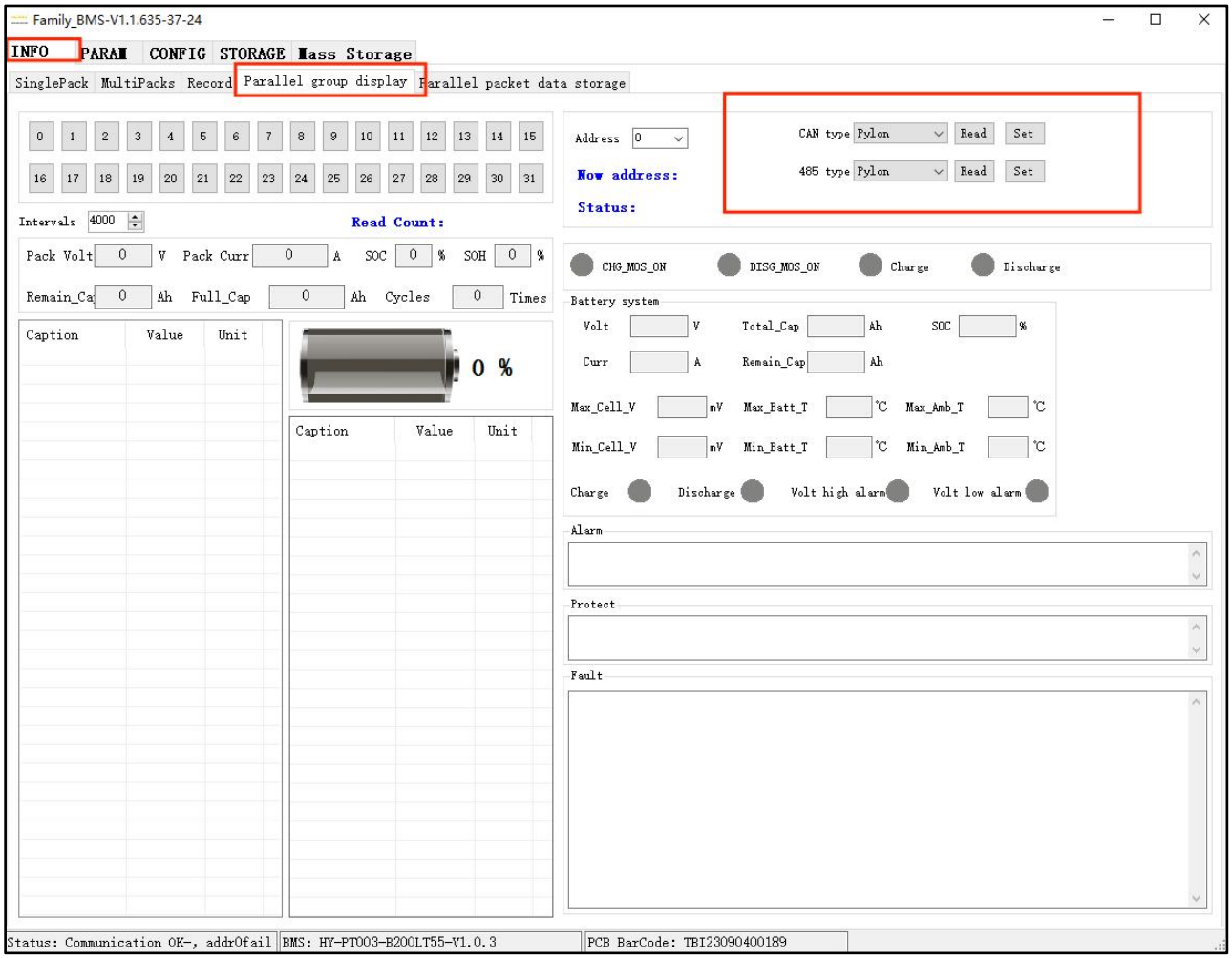
4.6.4 Interval modification



ID	Time	Alarm Code	PCB_Code	Pack_Code	Cell Count	CELL01	CELL02	CELL03	CELL04	CELL05
1	2024-05-08 16.44.19	Start system occurs	TBI23090400189	BASEN-TEST1	16	3292	3295	3292	3293	3293
2	2024-05-08 13.50.53	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	3293	3294	3291
3	2024-05-08 13.47.45	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	3292	3292	3292
4	2024-05-08 11.29.27	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	3293	3293	3292
5	2024-05-08 11.08.29	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	3293	3294	3292
6	2024-05-06 19.59.29	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	3291	3293	3291
7	2024-05-06 19.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	3292	3292	3291
8	2024-05-06 18.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	3292	3293	3292
9	2024-05-06 17.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3294	3292	3293	3292
10	2024-05-06 16.30.49	Timing record	TBI23090400189	BASEN-TEST1	16	3293	3295	3292	3293	3292
11	2024-05-06 15.30.49	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	3294	3294	3292
12	2024-05-05 10.22.33	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	3293	3293	3292
13	2024-05-05 10.21.25	Start system occurs	TBI23090400189	BASEN-TEST1	16	3293	3295	3293	3294	3293
14	2024-04-30 10.22.00	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	3293	3295	3291
15	2024-04-30 10.20.45	Start system occurs	TBI23090400189	BASEN-TEST1	16	3294	3296	3293	3293	3292
16	2024-04-29 13.58.47	Exit system occurs	TBI23090400189	BASEN-TEST1	16	3294	3295	3293	3294	3293

4.6.5 The BMS inverter needs to be selected

In the “INFO” interface, open the “Parallel group display” and show that the customer sees the CAN type and 485 type, and selects the protocol according to their own needs to confirm the communication between BMS and the inverter



5. PRECAUTIONS FOR USE

1. Open the software by default to the operator management permission, can only do data reading and other functions, if you want to modify the parameters, then you want to log in the administrator permission first.

2. The software only supports the PC Windows system, and other platforms (Android or IOS) cannot run.

3. Before using the software, it is best to install office 2007 version above office 2007 to facilitate the data export into EXCEL table.

4. The above upper machine operation interface as a reference, different versions of the upper machine operation page will be different, the specific operation steps should be based on the actual operation interface.