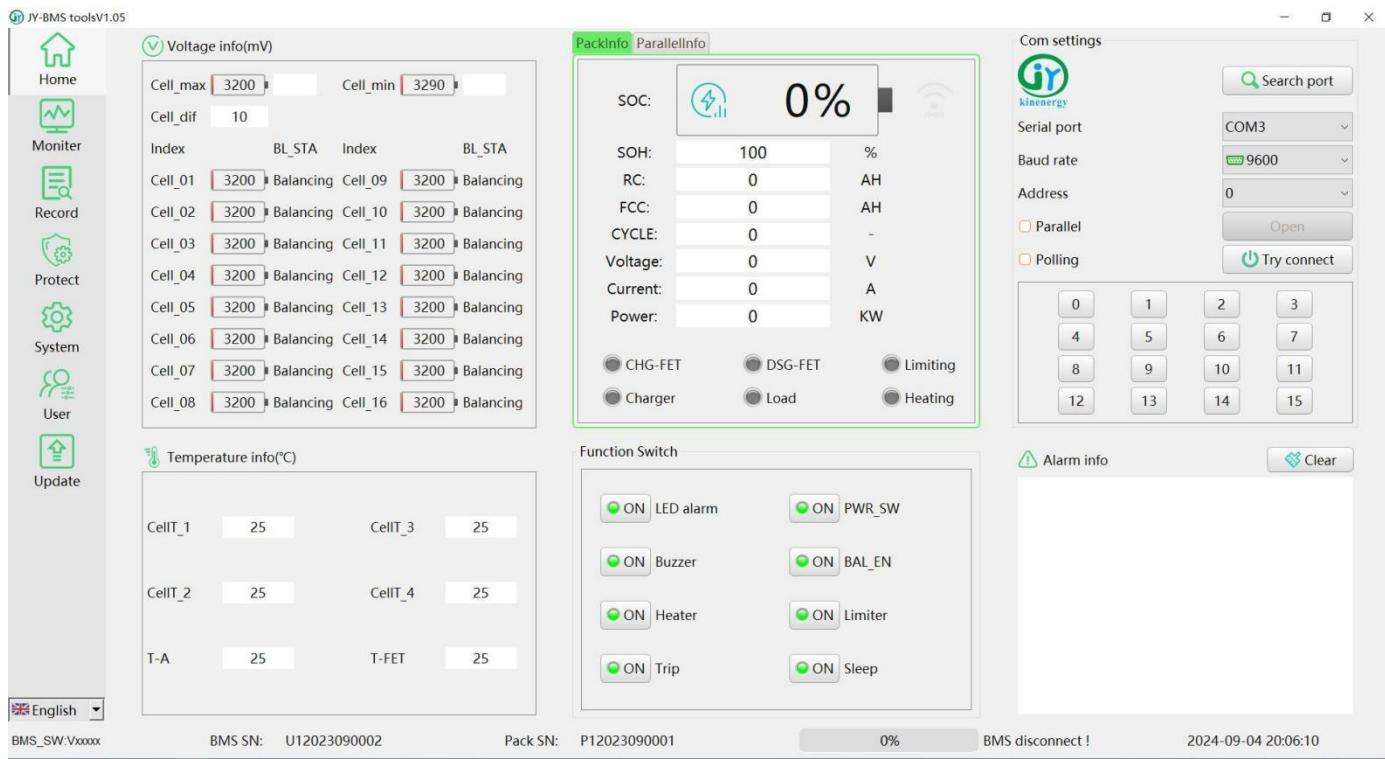


### 3-6.Upper machine instructions

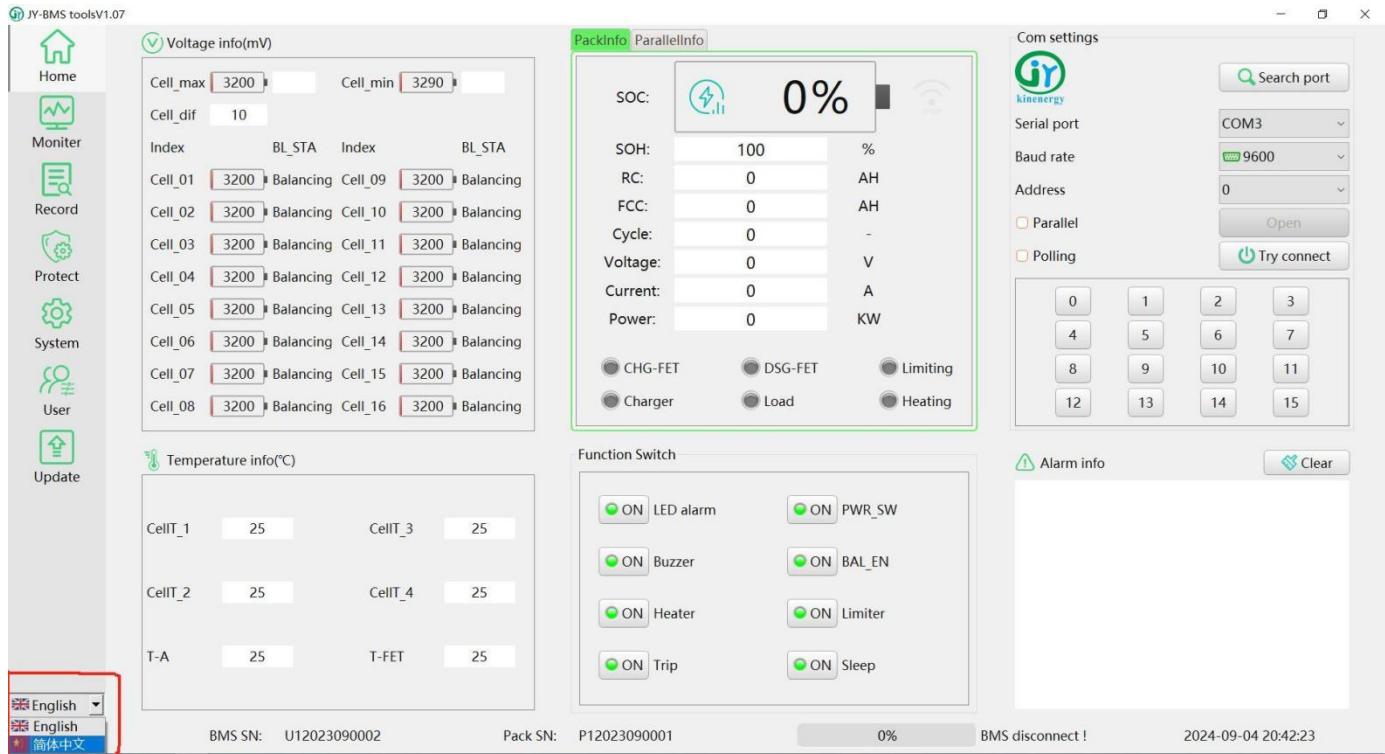
上位机说明选项

#### A、A.Power on the Golden YU upper computer打开金昱上位机

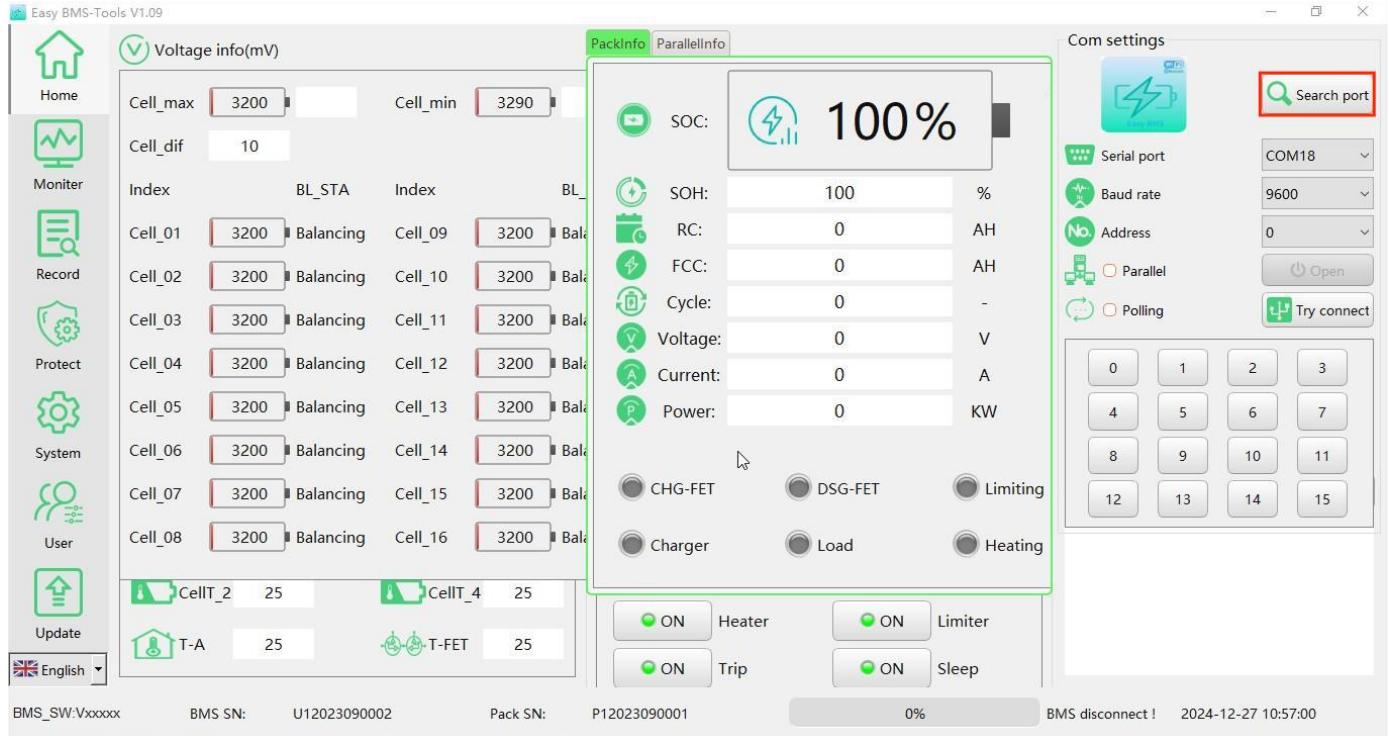


#### B.Switch between Chinese and English modes (skip for users in English mode)

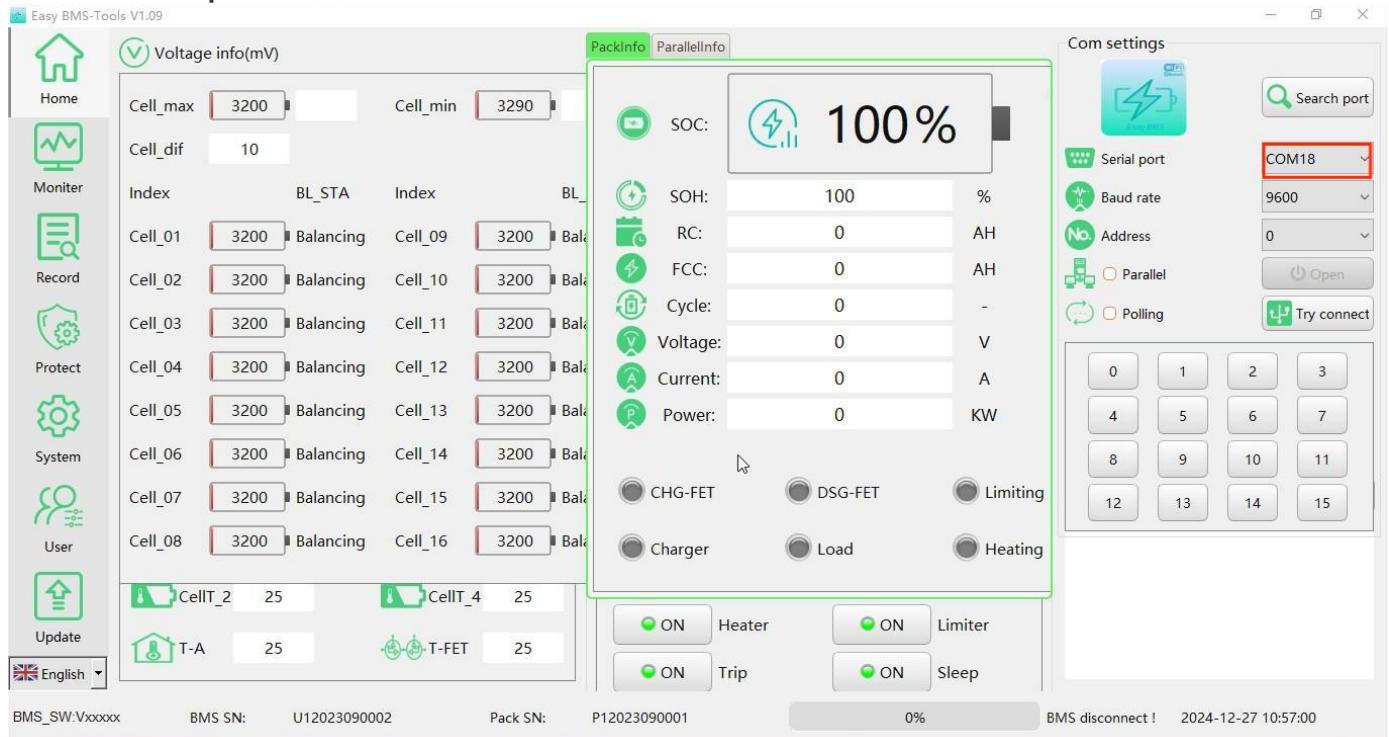
切换中英模式（英文模式用户跳过）



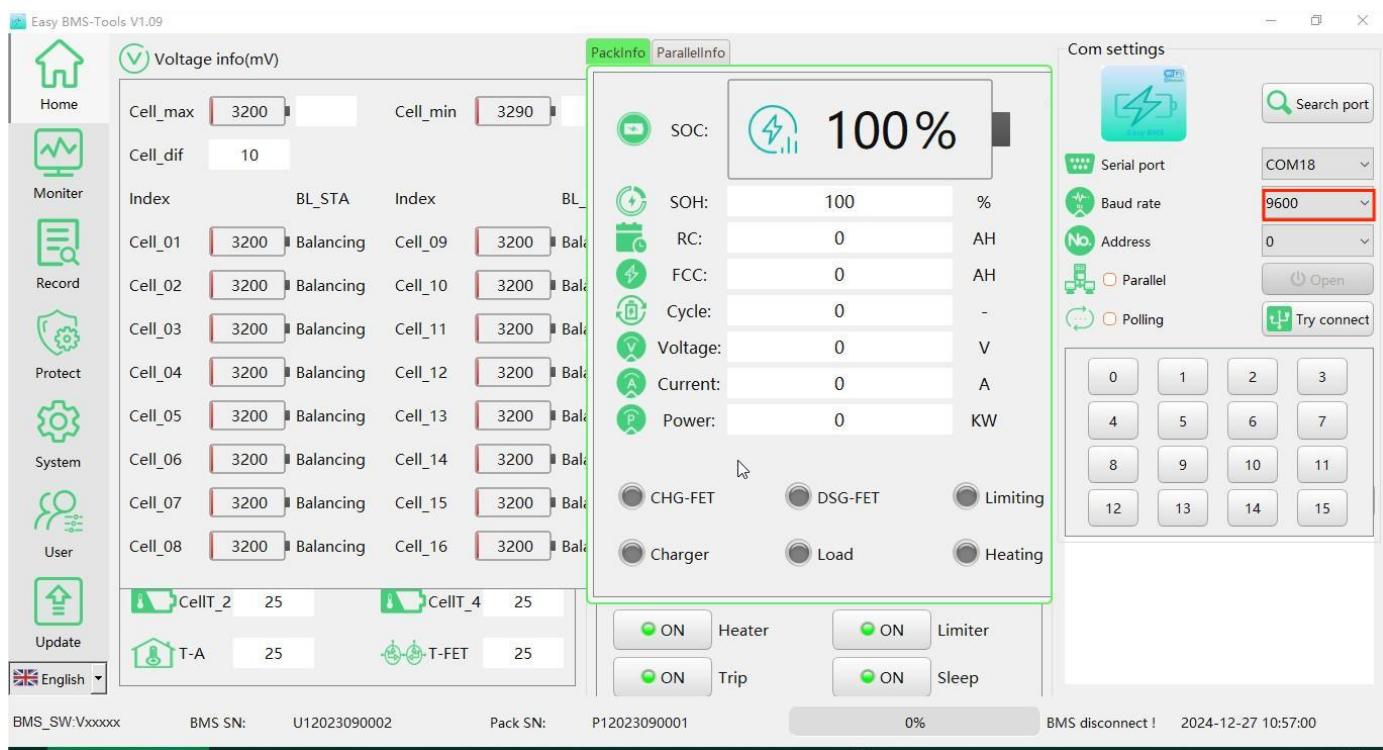
### C.Search serial port 搜索串口



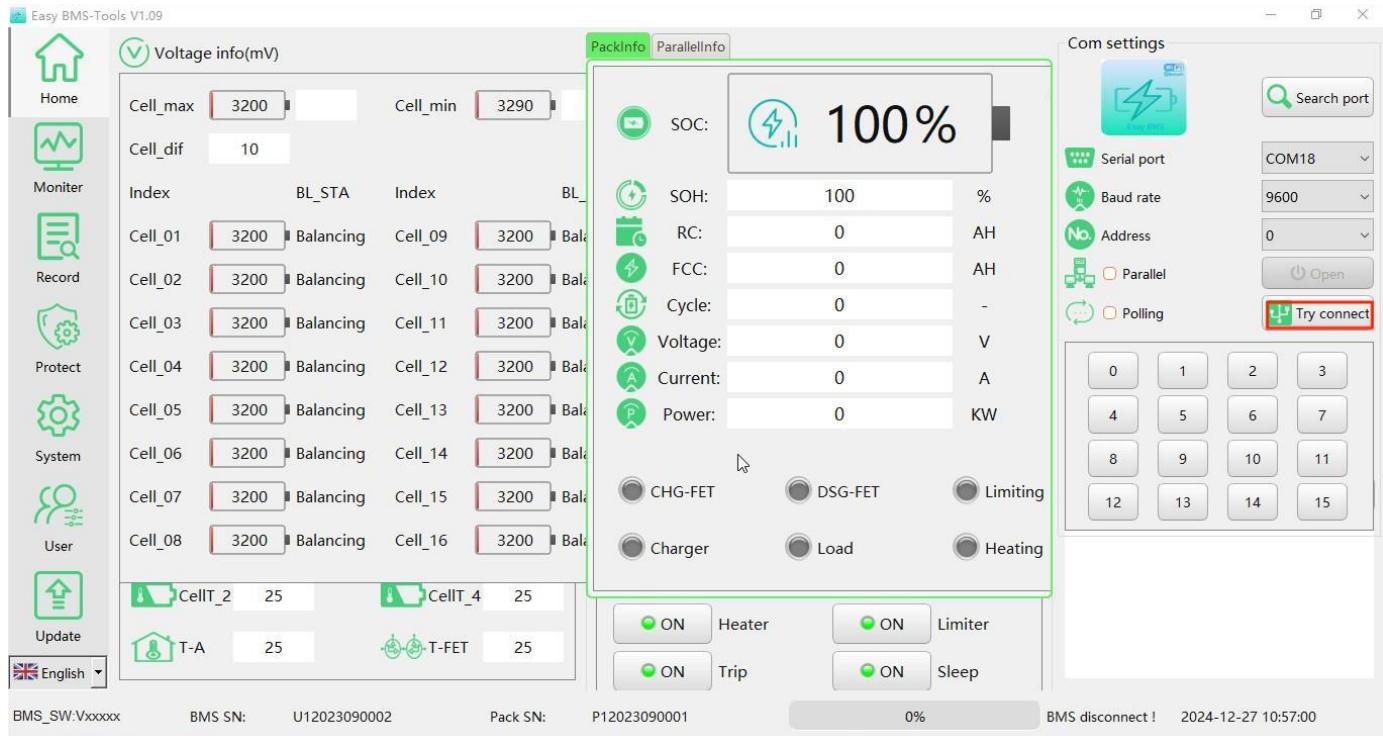
### D.Select serial port 选择串口



### E.Select baud rate 选择波特率



### F.Try to connect 尝试连接



### G.Connection succeeded 连接成功



### 3-7 Basic information of the master station homepage 上位机主页的基本信息



#### 1 Switching between Chinese and English modes on the host computer

上位机中英文切换模式

#### 2 BMS tests the highest and lowest voltages of a certain series of cells in the battery pack and their voltage difference.

BMS 检测电池包某串电芯最高电压和最低电压与其之间的压差

#### 3 BMS monitors the current voltage status of all cells in real time.

BMS 实时检测所有电芯当前电压状态

#### 4 BMS detects the current temperature of 4 cell channels, ambient temperature, and MOSFET temperature.

BMS 检测当前的 4 路电芯温度、环境温度、MOS 管温度

#### 5 Switching between single-unit battery mode and parallel battery mode status information

单机电池模式与并机电池模式状态信息切换

**6 Current battery information, BMS charge and discharge enable, current limiting, external load, charger access, and heater film status detection**

当前电池信息以及 BMS 充放电使能、限流、外部负载、充电器接入、加热膜状态检测

**7 Current BMS enable switch status**

当前 BMS 使能开关状态

**8 Connect to the upper computer: Search for the serial port and then select the serial port and baud rate (9600-11200), and click Try to Connect! If you need to connect in parallel, please check the parallel mode, and then sequentially poll and monitor the status the parallel batteries.**

连接上位机方式：搜索串口然后选择串口和波特率（9600-115200）并点击尝连接！需并机请勾选并机模式，再依次轮询监控并机电池状态

**9 Check the current number of monitorable battery packs**

**9 检测当前可监控电池包数量**

**10 indicates the current battery pack warning protection information.**

提示当前电池包告警保护信息

**11 Display the current BMS software version information, serial number, and battery pack serial number**

显示当前 BMS 软件版本信息、序列号、电池包序列号

**12 Display the current BMS connection status with the host computer**

显示当前 BMS 与上位机的联机状态

### 3-8 Data recording of upper computer monitoring 上位机监控数据记录

The screenshot shows the software interface for monitoring BMS data. On the left, there is a vertical toolbar with icons for Home, Monitor (which is selected and highlighted with a red box), Record, Protect, System, User, and Update. The main area is a data grid with columns: Date, Address, Voltage(V), Current(A), SOC(%), SOH(%), FCC(AH), RM(AH), Cycles, AlarmSates, and Protect1. The data grid contains 16 rows of data from December 27, 2024, at 10:59:53 to 11:00:08. At the bottom of the interface, there are buttons for Recorded data (with a green dot), Number of records (set to 5000), Export, Clear, and a language dropdown set to English. Status information at the bottom includes BMS\_SW:V1.01.46, BMS SN: 210524120288, Pack SN: A0189-1-2412-0025, a 60% progress bar, BMS is connected!, and the date/time 2024-12-27 11:00:08.

	Date	Address	Voltage(V)	Current(A)	SOC(%)	SOH(%)	FCC(AH)	RM(AH)	Cycles	AlarmSates	Protect1
49	2024-12-27 10:59:53	0	52.76	0.00	49	100	300	149	1		
50	2024-12-27 10:59:54	0	52.75	0.00	49	100	300	149	1		
51	2024-12-27 10:59:55	0	52.76	0.00	49	100	300	149	1		
52	2024-12-27 10:59:56	0	52.75	0.00	49	100	300	149	1		
53	2024-12-27 10:59:57	0	52.75	0.00	49	100	300	149	1		
54	2024-12-27 10:59:58	0	52.75	0.00	49	100	300	149	1		
55	2024-12-27 10:59:59	0	52.75	0.00	49	100	300	149	1		
56	2024-12-27 11:00:00	0	52.75	0.00	49	100	300	149	1		
57	2024-12-27 11:00:01	0	52.75	0.00	49	100	300	149	1		
58	2024-12-27 11:00:02	0	52.75	0.00	49	100	300	149	1		
59	2024-12-27 11:00:03	0	52.75	0.00	49	100	300	149	1		
60	2024-12-27 11:00:04	0	52.75	0.00	49	100	300	149	1		
61	2024-12-27 11:00:05	0	52.76	0.00	49	100	300	149	1		
62	2024-12-27 11:00:06	0	52.75	0.00	49	100	300	149	1		
63	2024-12-27 11:00:07	0	52.75	0.00	49	100	300	149	1		
64	2024-12-27 11:00:08	0	52.75	0.00	49	100	300	149	1		

**Check the record data option, the host computer sends real-time data records once per second, with**

**a maximum of 20,000 that can be saved. The data can also be exported and cleared.**

勾选记录数据选项，上位机以每秒发送一次实时数据记录，可选项最高 20000 条保存记录、并有导出和清处数据功能。

### 3-9 Historical records of the master computer 上位机历史记录

Easy BMS-Tools V1.09

	Date	Voltage(V)	Current(A)	SOC(%)	SOH(%)	FCC(AH)	Cycles	AlarmSates
1	2024-12-17 02:07:15	45.13	0.00	0	100	300	1	Low battery;
2	2024-12-17 02:06:43	44.96	0.00	0	100	300	1	
3	2024-12-17 02:06:06	44.80	0.00	0	100	300	1	Cell ...
4	2024-12-17 02:05:40	43.97	-60.06	0	100	300	1	Cell ...
5	2024-12-17 02:04:45	44.79	-60.06	0	100	300	1	Cell ...
6	2024-12-17 02:03:59	45.36	-60.06	1	100	300	1	Cell ...
7	2024-12-17 01:37:44	50.39	-59.99	9	100	300	1	Low battery;

Home    Monitor    Record    Protect    System    User    Update

English    Read    Numbers: 164    Pause    Export    Delete record

BMS\_SW:V1.01.46    BMS SN: 210524120288    Pack SN: A0189-1-2412-0025    40%    BMS is connected!    2024-12-27 11:00:46

The history record can automatically save BMS alarm information, and clicking to read it will list it.  
历史记录可自动保存 BMS 告警信息，点击读取即可列出

### 3-10 BMS protection parameters BMS 保护参数

Easy BMS-Tools V1.09

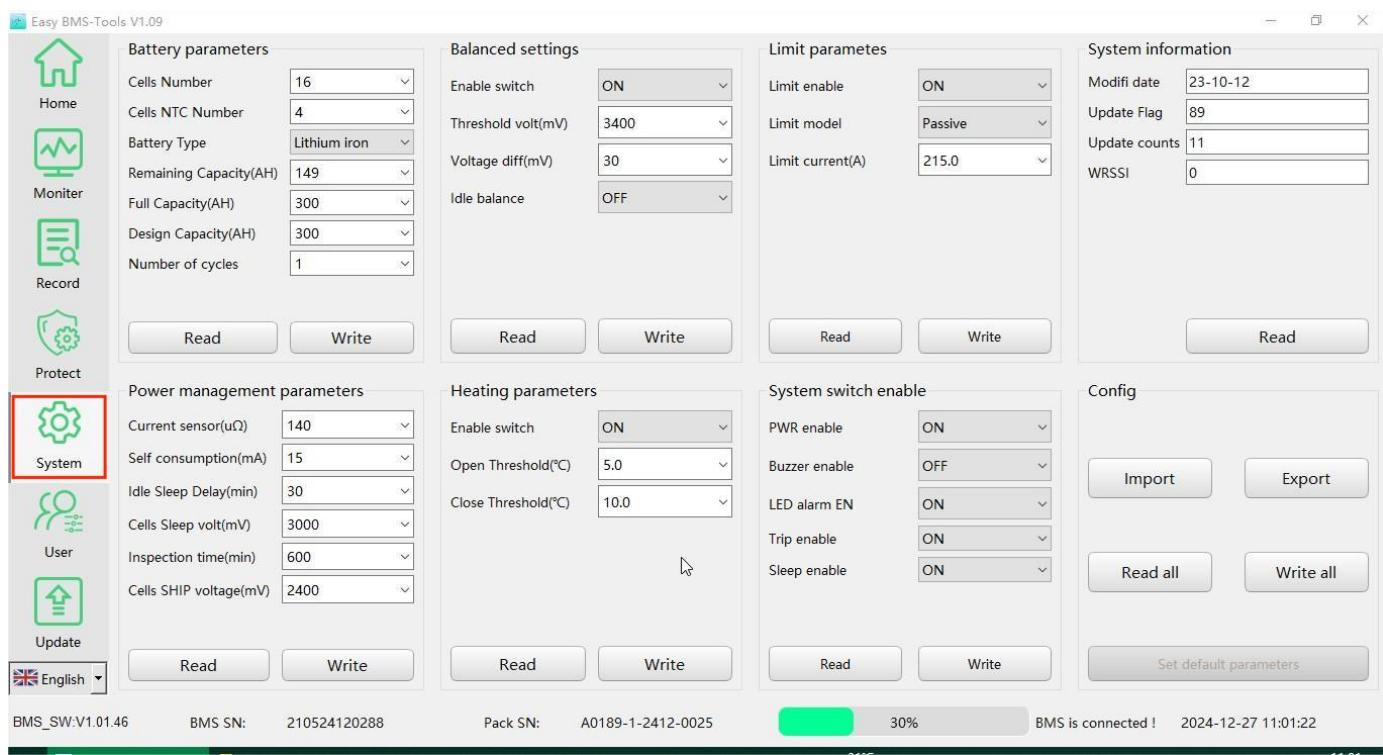
Primary protection Secondary protection

Over voltage 1	Over current charge 1	Cell over temperature	Cells under temperature	Ambient temperature	
Cell OV alarm(mV) 3550	OCC alarm(A) 205.0	OTC alarm(°C) 50.0	UTC alarm(°C) 0.0	OTA alarm(°C) 65.0	
Cell OVP(mV) 3650	OCC Protect(A) 210.0	OTC_P(°C) 55.0	UTC_P(°C) -5.0	OTA_P(°C)	
Delay (S) 1	OCC Delay (S) 2	Delay (S) 5	Delay (S) 5	Delay (S)	
Release(mV) 3450	OCC Release(A) 200.0	Release(°C) 45.0	Release(°C) 5.0	Release(°C) 60.0	
Pack OV alarm(V) 56.80	OCC Latchlimit 3	OTD alarm(°C) 55.0	UTD alarm(°C) -15.0	UTA alarm(°C) -40.0	
Pack OVP(V) 58.40	ReleaseTime(S) 30	OTD_P(°C) 60.0	UTD_P(°C) -20.0	UTA_P(°C)	
Delay (S) 1		Delay (S) 5	Delay (S) 5	Delay (S)	
Release(V) 55.20		Release(°C) 50.0	Release(°C) -10.0	Release(°C) -35.0	
Read    Write		Read    Write		Read    Write	
Under voltage 1	Over current discharge 1	MOSFET temperature	SOC cut-off	Config	
Cell UV alarm(mV) 2800	OCD alarm(A) -205.0	FET alarm(°C) 90.0	SOC alarm(%) 15	Import    Export	
Cell UVP(mV) 2700	OCD Protect(A) -210.0	FET OTF(°C) 110.0	SOC cut off(%) 10		
Delay (S) 1	OCD Delay (S) 2	Delay (S) 3	Delay (S)		
Release(mV) 2900	OCD Release(A) -200.0	Release(°C) 85.0	Release(%)		
Pack UV alarm(V) 44.80	OCD Latchlimit 3		Diff alarm(mV) 500	Read all    Write all	
Pack UVP(V) 43.20	ReleaseTime(S) 30			Set default parameters	
Delay (S) 1					
Release(V) 46.40					
Read    Write		Read    Write		Read    Write	

Home    Monitor    Record    Protect    System    User    Update

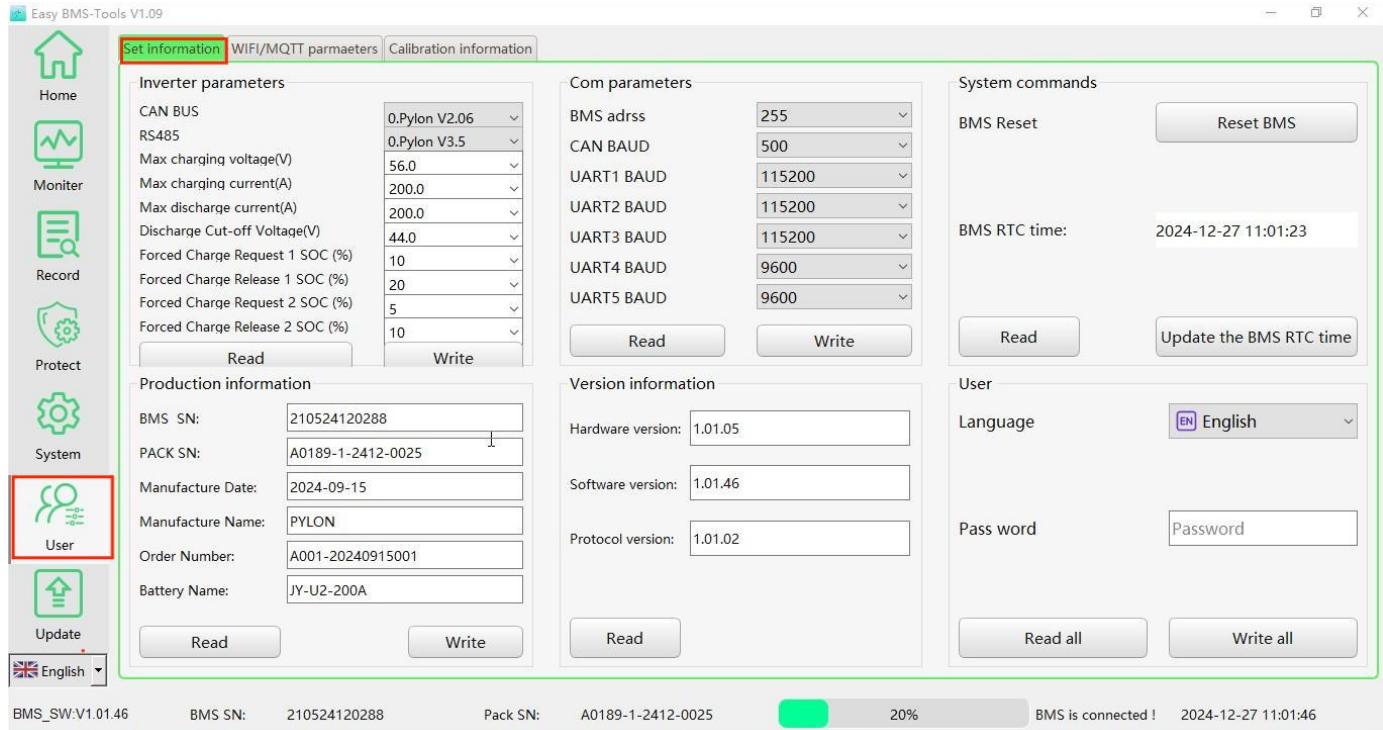
English    Read    BMS SN: 210524120288    Pack SN: A0189-1-2412-0025    80%    BMS is connected!    2024-12-27 11:01:05

### 3-11 System parameters 系统参数



### 3-12 User parameters 用户参数

#### A. Setting information 设置信息



#### B. WIFI/MQTT Parameters WIFI/MQTT 参数

