

## Instruction of Master BMS communicate with PC

One . Required hardware

1. A desk computer (or laptop)

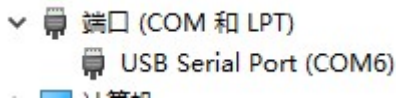
2. Converter of RS485 to USB

UT-891 converter of UTai is recommended, which is compatible with this system.

3. the upper computer software (AF\_BMS MODUBUS )is required

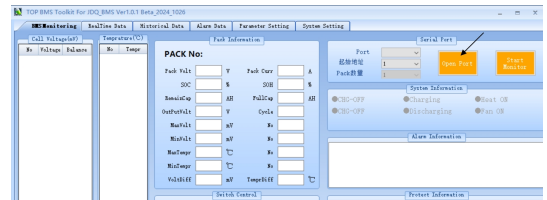


Two . Connect the converter of the USB to RS485 to the computer, and install the converter driver on the computer. In the computer setup, Check the port number automatically assigned by the computer in the device manager. for example , this is COM6.

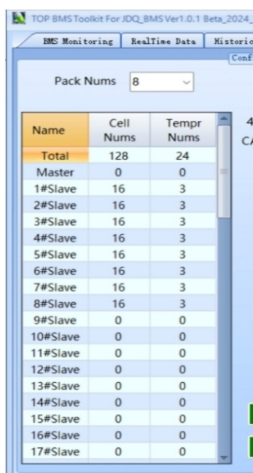


Three . Open the configuration software on your computer.

1 . Select the correct port. Click Open Serial Port.



2. Configure the parameters according to your battery. For example, you used 4 battery packs in series. Each battery pack is 16 cells in series . Modify the parameters of the installation picture. Write the configuration parameters after the modification.



3. The Similar things are done to modification of the protection parameter.  
After the reading is complete, you need to modify the protection parameters.

The screenshot displays the 'Parameter Setting' tab of the TOP BMS Toolkit. The interface is organized into several columns of parameter tables. At the bottom, there are five green buttons: 'Import', 'Export', 'Read', 'Write', and 'Reset'. The status bar at the bottom shows 'SW Ver:1001', 'Pack-1 Read BMS Information', 'AF\_BMS\_VER:5.0.3', and 'PC Time:2024-10-29 07:59:54'.

Parameter	Value	Parameter	Value	Parameter	Value	Parameter	Value
VCell OV Alarm (mV)	3550	Pack OV Alarm (V)	454.4	CHG OT Alarm (°C)	50	DSG OT Alarm (°C)	60
VCell OV Protect (mV)	3650	Pack OV Protect (V)	467.2	CHG OT Protect (°C)	55	DSG OT Protect (°C)	65
VCell OV Release (mV)	3550	Pack OV Release (V)	454.4	CHG OT Release (°C)	50	DSG OT Release (°C)	60
VCell OV Delay (mS)	3000	Pack OV Delay (mS)	3000	CHG UT Alarm (°C)	0	DSG UT Alarm (°C)	-10
VCell UV Alarm (mV)	2800	Pack UV Alarm (V)	358.4	CHG UT Protect (°C)	-10	DSG UT Protect (°C)	-20
VCell UV Protect (mV)	2550	Pack UV Protect (V)	326.4	CHG UT Release (°C)	0	DSG UT Release (°C)	-10
VCell UV Release (mV)	2800	Pack UV Release (V)	358.4				
VCell UV Delay (mS)	3000	Pack UV Delay (mS)	3000				
				VCellDiff Alarm (mV)	500	BMS HW VER	171
				VCellDiff Protect (mV)	800	BMS SW VER	503
CHG OC Alarm (A)	100.0	DSG OC Alarm (A)	300.0			FL 75mV/xxxA	200
CHG OC Protect (A)	150.0	DSG OC Protect (A)	360.0	TemprDiff Alarm (°C)	30	Staby Curr (mA)	300
CHG OC Delay (mS)	3000	DSG OC Delay (mS)	3000	TemprDiff Protect (°C)	40	ZeroDiff Curr (mA)	500
CHG OC Release (S)	600.0	DSG OC Release (S)	300.0			Zero Curr (mA)	0
				SOC low Alarm (%)	10.0		
Start Fan Tempr (°C)	45	UPS MaxVoltage (V)	454.4	SOC Low Protect (%)	1.0		
Stop Fan Tempr (°C)	35	UPS MinVoltage (V)	358.4			Balance Mode	3:Chg Dsg Idele Balar
Start Heat Tempr (°C)	-10	UPS MaxChg Curr (A)	100.0	Remain Capacity	40.5	Balance On VCell (mV)	3400
Stop Heat Tempr (°C)	10	UPS MaxDsg Curr (A)	300.0	Full Capacity	100.0	Balance ΔVCell (mV)	50
				Design Capacity	100.0		

4. Master BMS have several commonly used inverter manufacturers' protocols built in. You can make choices.

5. The modified configuration parameters and protection parameters can be read respectively and saved to the computer file. Configure parameters and protection parameters  
After the data is read from the file, it will be automatically loaded to the parameter table. Then click "Write parameter" respectively. You can set configuration parameters and insure The protection parameters are written into the Master BMS.