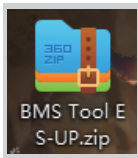


BMS Tool – Quick Guide

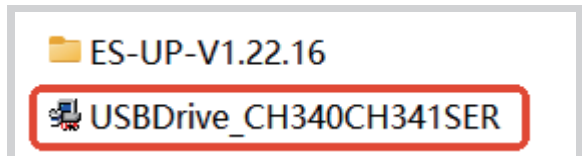
1. Download the software package from the following website (only supports Windows system)

<http://app.eco-worthy.com:7777/Download/BMS-Tool&Drive-for-Windows.zip>

2. Unzip the file

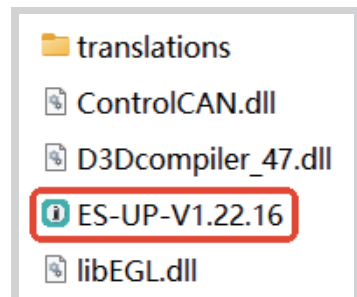
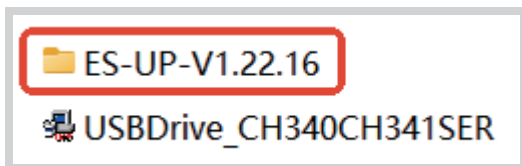


3. Install the “USBDrive”

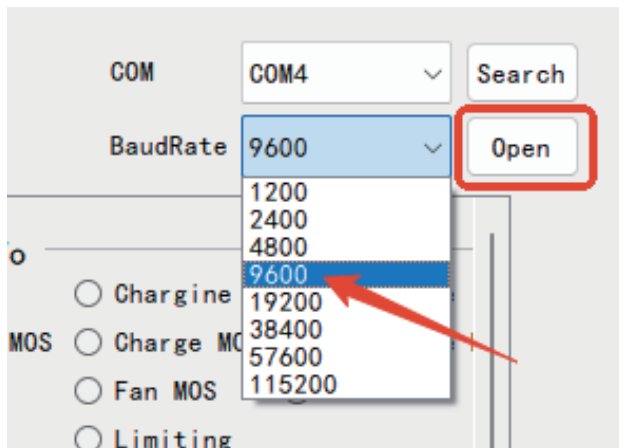
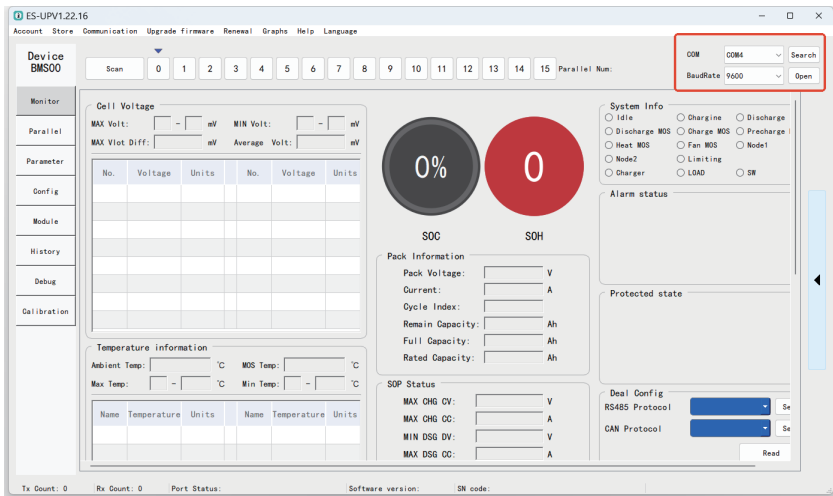


4. Use RS485 to USB cable to connect the battery and computer

5. Open the software “ES-UP-V1.22.16”



6. Select COM and BaudRate



7. Click “Read” to obtain BMS data

ES-UPV1.22.16 Account Store Communication Upgrade Firmware Renewal Graphs Help Language

Device BMS01 Scan 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 Parallel Num: 1 COM COM7 BaudRate: 9600 Search Close

Monitor

Cell Voltage

MAX Volt: 7 ~ 3332 mV MIN Volt: 1 ~ 3330 mV
MAX Volt Diff: 2 mV Average Volt: 3330 mV

Parameter

No.	Voltage	Units	No.	Voltage	Units
1	3330	mV	9	3331	mV
2	3332	mV	10	3330	mV
3	3331	mV	11	3331	mV
4	3331	mV	12	3330	mV
5	3331	mV	13	3330	mV
6	3331	mV	14	3331	mV
7	3330	mV	15	3330	mV
8	3330	mV	16	3330	mV

Temperature information

Ambient Temp: 29.5 °C MOS Temp: 26.7 °C
Bat Temp: 1 ~ 25.3 °C Min Temp: 3 ~ 25 °C

Name	Temperature	Units	Name	Temperature	Units
T1	25.3	°C	T3	25.0	°C
T2	25.2	°C	T4	25.0	°C

Data Recording

System Info

Idle ☒ Charge ☐ Discharge ☐
☐ Rest ☐ Charge ☐ Fast ☐ Mode1 ☐ Mode2 ☐ Limiting ☐ Charger ☐ LOAD ☒ SW

Alarm status

Protected state

Deal Config

RS485 Protocol: PULON Set
CAN Protocol: PULON Set

Read

Tx Count: 34 Rx Count: 31 Port Status: Open (COM7 - 9600) Software version: V1 SN code: JBD48100000

ES-UPV1.22.16 Account Store Communication Upgrade Firmware Renewal Graphs Help Language

Device BMS01

Monitor

Cell Overvoltage

Cell OV alarm value: 3000 mV Set
Cell OV Alarm Release: 3400 mV Set
Cell OV Alarm Delay: 3000 ms Set
Cell OV Protect: 3000 mV Set
Cell OV Protect Release: 3400 mV Set
Cell OV Protect Delay: 3000 ms Set

Cell Undervoltage

Cell UV Alarm: 2800 mV Set
Cell UV Alarm Release: 2900 mV Set
Cell UV Alarm Delay: 3000 ms Set
Cell UV Protect: 2800 mV Set
Cell UV Protect Release: 3000 mV Set
Cell UV Protect Delay: 3000 ms Set

Battery Overvoltage

Batt OV Alarm: 57.40 V Set
Batt OV Alarm Release: 54.40 V Set
Batt OV Alarm Delay: 3000 ms Set
Batt OV Protect: 56.40 V Set
Batt OV Protect Release: 54.40 V Set
Batt OV Protect Delay: 3000 ms Set

Battery Undervoltage

Batt UV Alarm: 45.40 V Set
Batt UV Alarm Release: 48.00 V Set
Batt UV Alarm Delay: 1000 ms Set
Batt UV Protect: 44.80 V Set
Batt UV Protect Release: 48.00 V Set
Batt UV Protect Delay: 3000 ms Set

Charge Over Current

CHG OC Alarm: 100.00 A Set
CHG OC Alarm Release: 3000 ms Set
CHG OC Protect: 120.00 A Set
CHG OC Protect Release: 2000 ms Set
CHG OC Release Delay: 600 s Set
CHG OC Lock Times: 65535 Set

CHG Over Current 2

CHG OC2 Protect: 130.00 A Set
CHG OC2 Protect Release: 500 ms Set
CHG OC2 Release Delay: 600 s Set

Discharge Over Current

DSG OC Alarm: 100.00 A Set
DSG OC Alarm Release: 3000 ms Set
DSG OC Protect: 120.00 A Set
DSG OC Protect Release: 2000 ms Set
DSG OC Release Delay: 60 s Set
DSG OC Lock Times: 3 Set

Discharge Over Current 2

DSG OC2 Protect: 140.00 A Set
DSG OC2 Protect Release: 200 ms Set
DSG OC2 Release Delay: 60 s Set

Charge Low Temperature

CHG LT Alarm: 0.0 °C Set
CHG LT Alarm Release: 10.0 °C Set
CHG LT Protect: 0.0 °C Set
CHG LT Protect Release: 5.0 °C Set

Discharge Low Temperature

DSG LT Alarm: 0.0 °C Set
DSG LT Alarm Release: 48.0 °C Set
DSG LT Protect: 0.0 °C Set
DSG LT Protect Release: 5.0 °C Set

MOS Over Temperature

MOS OT Alarm: 95.0 °C Set
MOS OT Alarm Release: 80.0 °C Set
MOS OT Protect: 105.0 °C Set

Ambient Over Temperature

Ambient OT Alarm: 60.0 °C Set
Ambient OT Release: 50.0 °C Set
Ambient OT Protect: 65.0 °C Set

Voltage Different Over

Volt Diff Alarm: 600 mV Set
Volt Diff Alarm Release: 500 mV Set
Volt Diff Protect: 800 mV Set

SOC Low

SOC Low Alarm: 10 % Set
SOC Low Alarm Release: 15 % Set

Read Import Export Write parameters

Tx Count: 469 Rx Count: 465 Port Status: Open (COM7 - 9600) Software version: V1 SN code: JBD48100000

ES-UPV1.22.16 Account Store Communication Upgrade Firmware Renewal Graphs Help Language

Device BMS01

Monitor

RS485 Protocol: PULON Set CAN Protocol: PULON Set

MAX CHG CV: 57.6 V Set MAX CHG CC: 100 A Set
MIN DSG DV: 45.6 V Set MAX DSG CC: 100 A Set

Balancing

Balancing Mode: 10LE Set BMS软件地址: 0 Set
Balance Open Volt: 3400 mV Set Balance Open VO/H: 30 mV Set

Pack SN Code

SNS SN Code: UP165019000110524090501811 Set
SN Code: JBD48100000 Set
Bar Code: JBD Set
BMS MFG: 2024 Set
PACK MFG: 2024 Set

Tip: Read the PACK parameter successfully

Idle Sleep Parameter

Sleep Voltage: 300.0 mV Set Sleep Delay Time: 2880 min Set
Sleep Current: 1.0 A Set 静态休眠延迟时间: 4905 min Set

Function Config

Not Parameter ☐ Buzzer ☐ Anti Theft ☐ GPS ☐ 报警 ☐ Fume 02 ☐ Fume 03 ☐ Fume 04 ☐ Set

Capacity algorithm

Capacity not standby ☐ Close SOC Trace ☐ Fume 01 ☐ Fume 02 ☐ Set

SOC Parameter

SOC: 92 Set Cycle-Index: 1 Times Set
Cycle Coeff: 80 % Set Cycle Sampling Factor: 150 Set

SOC Parameter

Rated Capacity: 100 AH Set Full Capacity: 92.85 AH Set
Remain Capacity: 90.85 AH Set SOC: 97.84 % Set
Total CHG Ah: 186.7 AH Set Total DSG Ah: 130.5 AH Set
Full CHG Voltage: 57.28 V Set Full CHG Current: 1500 mA Set

Thermal Management Parameter

Hot Start Td: 0.0 °C Set Hot Stop Temp: 10.0 °C Set

Read Import Export Write parameters

Tx Count: 435 Rx Count: 432 Port Status: Open (COM7 - 9600) Software version: V1 SN code: JBD48100000

8. Read and adjust the battery communication protocol in the bottom right corner of the Monitor page

Deal Config

RS485 Protocol	PYLON ▼	Set
CAN Protocol	PYLON ▼	Set

Read