



Connection guide for BMS Tools V1.0

1. Using an RS-485 (RJ45 Pins 1-B,2-A) to USB-A connect to the RS-485 port of the battery and then to a USB-A port on a Windows/Apple MAC computer.
2. Set the battery's dip switch you are connecting to (ID:64 for 6 dip switch version or 4 dip switch version ID:16)
3. Now power on the EG4 PowerPro, EG4 LL-S, EG4 V2 or V1.
4. Confirm that the RS485 cable's COM is set correctly in the BMS Tools program. Refer to Device Manager if needed.

BMS_TOOLS V1.0

COM COM3 Refresh Baud Rate 115200 ID: 1 Start Monitoring

BMS Monitoring BMS Parameter Historical Record BMS Datalog Communication

Model Information

Com State **Online** Model

Version SN

Battery Information

Status Heater SOC % SOH %

Voltage V Current A Capacity AH Remain C AH

Max Vol V Min Vol V Vol Diff V Max C-C A

Max Temp °C Min Temp °C Temp Diff °C Cell Num

Temperature Information(°C)

PCB Temp Ambient Temp

Temp01 Temp02 Temp03 Temp04

Voltage(V)

Cell01 Cell02 Cell03 Cell04 Cell05 Cell06 Cell07 Cell08

Cell09 Cell10 Cell11 Cell12 Cell13 Cell14 Cell15 Cell16

Error Status

Voltage Error

Temperature Error

Current Error

Cell Unbalance

Warn Status

Pack OV

Cell OV

Pack UV

Cell UV

Charge OC

Discharge OC

Temp Anomaly

MOS OT

Charge OT

Discharge OT

Charge UT

Discharge UT

Low Capacity

Other Error

Protect Status

Pack OV

Cell OV

Pack UV

Cell UV

Charge OC

Discharge OC

Temp Anomaly

MOS OT

Charge OT

Discharge OT

Charge UT

Discharge UT

Float Stopped

Discharge SC

5. Change the Baud Rate: to 9600.

BMS_TOOLS V1.0

Monitor Status

COM COM3 Refresh Baud Rate 9600 ID: 1 Start Monitoring

BMS Monitoring BMS Parameter Historical Record BMS Datalog Communication

Model Information

Com State Offline Model

Version SN

Battery Information

Status Heater SOC % SOH %

Voltage V Current A Capacity AH Remain C AH

Max Vol V Min Vol V Vol Diff V Max C-C A

Max Temp °C Min Temp °C Temp Diff °C Cell Num

Temperature Information(°C)

PCB Temp Ambient Temp

Temp01 Temp02 Temp03 Temp04

Voltage(V)

Cell01 Cell02 Cell03 Cell04 Cell05 Cell06 Cell07 Cell08

Cell09 Cell10 Cell11 Cell12 Cell13 Cell14 Cell15 Cell16

Error Status

Voltage Error

Temperature Error

Current Error

Cell Unbalance

Warn Status

Pack OV

Cell OV

Pack UV

Cell UV

Charge OC

Discharge OC

Temp Annaly

MOS OT

Charge OT

Discharge OT

Charge UT

Discharge UT

Low Capacity

Other Error

Protect Status

Pack OV

Cell OV

Pack UV

Cell UV

Charge OC

Discharge OC

Temp Annaly

MOS OT

Charge OT

Discharge OT

Charge UT

Discharge UT

Float Stopped

Discharge SC

6. Change the ID: to (ID:64 for 6 dip switch version or 4 dip switch version ID:16)

BMS_TOOLS V1.0

Monitor Status

COM COM3 Refresh Baud Rate 9600

ID: 64 Start Monitoring

BMS Monitoring BMS Parameter Historical Record BMS Datalog Communication

Model Information

Conn State Offline Model

Version SN

Battery Information

Status Heater SOC % SOH %

Voltage V Current A Capacity AH Remain C AH

Max Vol V Min Vol V Vol Diff V Max C-C A

Max Temp °C Min Temp °C Temp Diff °C Cell Num

Temperature Information(°C)

PCB Temp Ambient Temp

Temp01 Temp02 Temp03 Temp04

Voltage(V)

Cell01 Cell02 Cell03 Cell04 Cell05 Cell06 Cell07 Cell08

Cell09 Cell10 Cell11 Cell12 Cell13 Cell14 Cell15 Cell16

Error Status

Voltage Error

Temperature Error

Current Error

Cell Unbalance

Warn Status

Pack OV

Cell OV

Pack UV

Cell UV

Charge OC

Discharge OC

Temp Annaly

MOS OT

Charge OT

Discharge OT

Charge UT

Discharge UT

Low Capacity

Other Error

Protect Status

Pack OV

Cell OV

Pack UV

Cell UV

Charge OC

Discharge OC

Temp Annaly

MOS OT

Charge OT

Discharge OT

Charge UT

Discharge UT

Float Stopped

Discharge SC

7. Now click Start Monitoring.

BMS_TOOLS V1.0

Monitor Status

COM: COM3 Refresh Baud Rate: 9600 ID: 64 **Start Monitoring**

BMS Monitoring BMS Parameter Historical Record BMS Datalog Communication

Model Information

Conn State: Offline Model: Version: SN:

Battery Information

Status: Heater: SOC: % SOH: %
Voltage: V Current: A Capacity: AH Remain C: AH
Max Vol: V Min Vol: V Vol Diff: V Max C-C: A
Max Temp: °C Min Temp: °C Temp Diff: °C Cell Num:

Temperature Information(°C)

PCB Temp: Ambient Temp:
Temp01: Temp02: Temp03: Temp04:

Error Status

Voltage Error
Temperature Error
Current Error
Cell Unbalance

Warn Status

Pack OV
Cell OV
Pack UV
Cell UV
Charge OC
Discharge OC
Temp Annaly
MOS OT
Charge OT
Discharge OT
Charge UT
Discharge UT
Low Capacity
Other Error

Protect Status

Pack OV
Cell OV
Pack UV
Cell UV
Charge OC
Discharge OC
Temp Annaly
MOS OT
Charge OT
Discharge OT
Charge UT
Discharge UT
Float Stopped
Discharge SC

Voltage(V)

Cell01: Cell02: Cell03: Cell04: Cell05: Cell06: Cell07: Cell08:
Cell09: Cell10: Cell11: Cell12: Cell13: Cell14: Cell15: Cell16:

8. The Com State will now change from Offline to Connected. From here you can monitor the battery in real time.

BMS_TOOLS V1.0

Monitor Status

COM: COM30 Refresh Baud Rate: 9600 ID: 04 Stop Monitoring

BMS Monitoring BMS Parameter Historical Record BMS Datalog Communication

Model Information

Com State: Online Model: LFP-51.2V100AH-V1.0

Version: 202715 SN: 2023-10-13

Battery Information

Status: Standby Heater: Heat off SOC: 99 % SOH: 100 %

Voltage: 53.86 V Current: 0.00 A Capacity: 100 AH Remain C: 99 AH

Max Vol: 3.370 V Min Vol: 3.365 V Vol Diff: 0.005 V Max C-C: 5 A

Max Temp: 35 °C Min Temp: 35 °C Temp Diff: 0 °C Cell Num: 16

Temperature Information(°C)

PCB Temp: 35 Ambient Temp: 34

Temp01: 35 Temp02: 35 Temp03: 35 Temp04: 34

Voltage(V)

Cell01: 3.367 Cell02: 3.369 Cell03: 3.368 Cell04: 3.366 Cell05: 3.366 Cell06: 3.366 Cell07: 3.365 Cell08: 3.367

Cell09: 3.365 Cell10: 3.367 Cell11: 3.366 Cell12: 3.366 Cell13: 3.366 Cell14: 3.370 Cell15: 3.366 Cell16: 3.368

Error Status

Voltage Error
Temperature Error
Current Error
Cell Unbalance

Warn Status

Pack OV
Cell OV
Pack UV
Cell UV
Charge OC
Discharge OC
Temp Annaly
MOS OT
Charge OT
Discharge OT
Charge UT
Discharge UT
Low Capacity
Other Error

Protect Status

Pack OV
Cell OV
Pack UV
Cell UV
Charge OC
Discharge OC
Temp Annaly
MOS OT
Charge OT
Discharge OT
Charge UT
Discharge UT
Float Stopped
Discharge SC

8. On the Historical Record tab, you can monitor real time information while the BMS Tools V1.0 is communicating with the battery. To see BMS Parameter, BMS Datalog, and the Communication Tab please refer to the BMS Tools V1.0 RS232 connection guide.

BMS_TOOLS V1.0

Monitor Status

COM: COM3 Baud Rate: 9600 ID: 64 Stop Monitoring

BMS Monitoring BMS Parameter **Historical Record** BMS Datalog Communication

Date_Time	Status	Heater	Warning	protection	ErrorEode	CycleNum	Current_I	MAX_Curren	Total_Voltage	SOC	SOH	Temp_PCB	Temp_internal	Temp_MAX	Temp_01	Temp_02	Temp_03	Temp_04	Vol_Cell01	Vol_Cell02	Vol_Cell
2023-10-20 15:45:06	Standby	off	0000	0000	0000	0	0.00	5	53.55	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:45:04	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:45:02	Standby	off	0000	0000	0000	0	0.00	5	53.55	99	100	34	34	35	35	35	35	33	3.346	3.349	3.348
2023-10-20 15:45:00	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:58	Standby	off	0000	0000	0000	0	0.00	5	53.55	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:56	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:54	Standby	off	0000	0000	0000	0	0.00	5	53.55	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:50	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:48	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:46	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:44	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	33	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:42	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348
2023-10-20 15:44:40	Standby	off	0000	0000	0000	0	0.00	5	53.56	99	100	34	34	35	35	35	35	33	3.347	3.349	3.348

Save Clear