



MACOS Bms Test Connection guide

1. Use an RS-485 cable, RJ45 (Pins 1-B,2-A) to USB-A, to connect one end to the RS-485 port on the battery and the other end to a USB-A port on an Apple computer. An USB-A to USB-C adapter can be used if a newer Apple computer is being used.
2. You cannot monitor the batteries using BMS Test while communicating with an inverter. Remove any inverter RJ45 communication cables before connecting.
3. On the Config-info tab, make sure the Port Number: is set to the correct Com # relating to the RS-485 cable, next press the connect button under the port settings, at the very bottom the green port opened successfully! status will flash.

The screenshot displays the 'Config-info' tab of the BMS Test software. The interface includes a top navigation bar with tabs: Config-info (active), BatInfo, ParameterSetting, HistoricalData, Config, and ProgramUpgrade. The main area contains several configuration sections:

- Language:** A dropdown menu set to 'English'.
- show communication frame:** A toggle switch set to 'Hide'.
- Save record configuration:** Includes an 'Auto save' checkbox and a 'Number of recreated files' dropdown set to '600'.
- Port Settings:** This section is highlighted with an orange border. It contains:
 - Port Number:** A dropdown menu showing '/dev/cu.Bluetooth-Incoming-Port' and '/dev/cu.usbserial-AQ02H5FY'. A 'PortRefresh' button is next to it.
 - App BaudRate:** A dropdown menu set to '9600'.
 - Boot BaudRate:** A dropdown menu set to '115200'.
 - Data Bits:** A dropdown menu set to '8'.
 - Parity:** A dropdown menu set to 'None'.
 - Stop Bits:** A dropdown menu set to '1'.
 - Byte Interval:** A dropdown menu set to '60'.
 - Connect:** A button highlighted with an orange border.
- Select battery type:** A dropdown menu set to 'LiFePO4 battery'.

At the bottom of the interface, a status bar shows 'Status: Address added successfully!' in green text on the left, 'BMS:' in blue text on the left, and 'Time: 2023-09-13 07:51:18' in green text on the right.

4. Click on the BatInfo tab.

To monitor only (1) Lifepower4 battery at a time confirm that the Packs Number is set to 1.

Now change the Start Adr: to the dip switch ID: you would like to monitor. Then click Add address to sequence.

The battery information will now be populated.

ConfigInfo

BatInfo

ParameterSetting

HistoricalData

Config

ProgramUpgrade

SinglePack

MultiPacks

Packs Number: 1

Start Adr: 0

Add address to sequence

Address for testing:

☒ Adr 0

65.06 %

CMOS/DMOS state

CMOS: On

DMOS: On

State: Idle

Heater: Off

Limiter: Off

SN:

Address of display information: 0

Sn

Alarm status

1

None

SN

Protection status

1

None

Total_Volt: 52.97 V

Current: 0.0 A

Vax_Volt: 3.317 V

Min_Volt: 3.307 V

Max_Diff: 0.01 V

Max_Temp: 22.0 °C

Min_Temp: 22.0 °C

MOS_Temp: 23.0 °C

ENV_Temp: 23.0 °C

Name	Value	Unit
Cell_1	3.317	V
Cell_2	3.31	V
Cell_3	3.316	V
Cell_4	3.313	V
Cell_5	3.312	V
Cell_6	3.307	V
Cell_7	3.309	V
Cell_8	3.311	V
Cell_9	3.308	V
Cell_10	3.308	V
Cell_11	3.309	V
Cell_12	3.307	V
Cell_13	3.316	V
Cell_14	3.312	V
Cell_15	3.309	V
Cell_16	3.312	V
Avg_Volt	0	V
Max_Volt	3.317	V
Min_Volt	3.307	V
Max_Diff	0.01	V
Cycles	56	N
Total_Volt	52.97	V
Current	0.0	A
Full_Bat_Cap	99.8	Ah
Remain_Bat_Cap	65.06	Ah
Temp_1	22.0	°C
Temp_2	22.0	°C
Temp_3	22.0	°C
Temp_4	22.0	°C
MOS_Temp	23.0	°C
ENV_Temp	23.0	°C
SOC	65.06	%
SOH		%
Alarm_status		
Protection_status		

Status: Address added successfully!

BMS: Time: 2023-09-13 14:12:56

5. To monitor multiple lifepower4 batteries at the same time. Click on Packs Number: and change this to the amount of batteries in the bank you are wanting to monitor.
Then click Add address to sequence.

The screenshot shows the BMS_Test application window. The top menu bar includes ConfigInfo, BatInfo, ParameterSetting, HistoricalData, Config, and ProgramUpgrade. The left sidebar contains a 'Packs Number' dropdown menu (highlighted with a red box) and an 'Add address to sequence' button. The main area displays a battery icon with a 99.10% charge indicator, various battery parameters (Total_Volt, Current, Max_Volt, Min_Volt, Max_Diff, Max_Temp, Min_Temp, MOS_Temp, ENV_Temp), CMOS/DMOS state, and a table of cell data. The table has columns for Name, Value, and Unit. Cell 8 is highlighted in red. The status bar at the bottom shows 'Status: Address 0 read remote measurement information failed!' and 'BMS: QT-YS00-16SV100A-V3.30'.

Name	Value	Unit
Cell_1	3.332	V
Cell_2	3.332	V
Cell_3	3.332	V
Cell_4	3.331	V
Cell_5	3.332	V
Cell_6	3.332	V
Cell_7	3.332	V
Cell_8	3.333	V
Cell_9	3.332	V
Cell_10	3.333	V
Cell_11	3.332	V
Cell_12	3.332	V
Cell_13	3.332	V
Cell_14	3.332	V
Cell_15	3.332	V
Cell_16	3.331	V
Avg_Volt	0	V
Max_Volt	3.333	V
Min_Volt	3.331	V
Max_Diff	0.002	V
Cycles	141	N
Total_Volt	53.31	V
Current	0.0	A
Full_Bat_Cap	99.5	Ah
Remain_Bat_Cap	99.1	Ah
Temp_1	22.0	°C
Temp_2	22.0	°C
Temp_3	22.0	°C
Temp_4	22.0	°C
MOS_Temp	22.0	°C
ENV_Temp	22.0	°C
SOC	99.1	%

6. To now view the multiple batteries on the same page, click on the Multipacks tab. The battery's information will now be populated into columns corresponding to dip switch ID. You can currently monitor up to 16 Lifepower4 batteries using BMS Test using the Multipacks tab.

SN	PACK_0	PACK_1	PACK_2	PACK_3	PACK_4	PACK_5													
Addr	0	1	2	3	4	5													
Rx/Tx	1/1	1/1	1/1	1/1	1/1	1/1													
PCB_BARCODE																			
PACK_BARCODE																			
DateTime	2023-09-13 14:18:54	2023-09-13 14:18:55	2023-09-13 14:18:56	2023-09-13 14:18:52	2023-09-13 14:18:53	2023-09-13 14:18:54													
Cell_1	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_2	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_3	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_4	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_5	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_6	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_7	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_8	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_9	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_10	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_11	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_12	3.31	3.31	3.31	3.31	3.31	3.31													
Cell_13	3.311	3.311	3.311	3.311	3.311	3.311													
Cell_14	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_15	3.312	3.312	3.312	3.312	3.312	3.312													
Cell_16	3.311	3.311	3.311	3.311	3.311	3.311													
Avg_Volt	0	0	0	0	0	0													
Max_Volt(V)	3.316	3.314	3.316	3.313	3.312	3.312													

Status: Address added successfully!

BMS: QT-YS00-16SV100A-V3.26

Time: 2023-09-13 14:18:56