



SBL-12V50AHBL Lithium

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The battery is bluetooth version with integrated passive balancer.



Features & Benefits

- **Smart BMS protection**

Smart BMS design with passive balancer .

- **New Grade A+ automotive prismatic cells construction**

The new grade A+ automotive prismatic cells construction ensures reliable and excellent quality.

- **Pre-charge function**

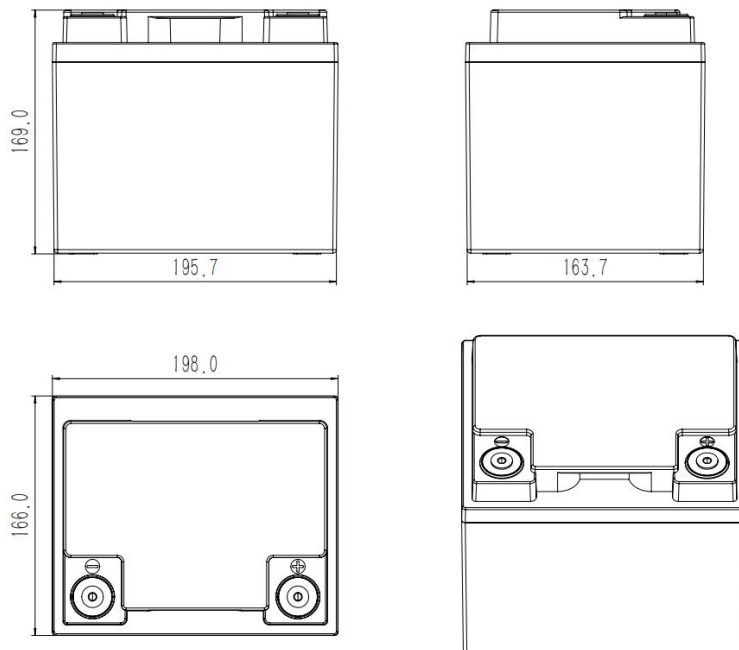
Better protections when starting with a higher power.

- **Automatic Hibernation mode to double protect battery against deep discharging**

a. If the battery has been put into hibernation mode by app which can be waken up by charging or by discharging or by app connection.

b. If no current ($<0.5A$) has been detected by BMS, then BMS will fall into hibernation mode when the cells voltage $<3000mV$ and delay 10mins.

DIMENSIONAL SPECIFICATION



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ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	50Ah
Capacity @0.2C	>290 min
Energy	640Wh
Resistance	<10m Ω
Discharge Efficiency	>99%
Cells Self Discharge	<3% per Month
Modules Connections	4S1P

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	198 x 166x 170mm
Weight	5.95kg
Terminal Type	M8
Terminal Torque	10-15N-m
Case Material	ABS

CHARGE SPECIFICATIONS

Maximum Continuous Charge Current	50A
Recommended Charge Current	$\leq 25A$
Charge Voltage	14.2~14.6V
Charge Cut-off Voltage	14.6V (Pack)/ 3.65V (Cells)
Reconnect Voltage	14V
Cells Balancing Voltage	3.4V
Cells difference voltage value to open balancing	15mV
Balance current	50-100mA

DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	70A
Max. Pulse Discharge Current	170A (5S)
Discharge Cut-off Voltage	10V
Reconnect Voltage	12V
Short Circuit Protection	Yes

BMS CONSUMPTION

Standby	$\leq 4mA$
Working	$\leq 8mA$
Hibernation mode	0.16mA

TEMPERATURE SPECIFICATIONS

Discharge Temperature	-4~149°F (-20 ~65°C)
Charge Temperature	32~149°F (0°C~+65°C)
Temperature Range Storage <1 month	-4~122°F (-20°C~+50°C)
Temperature Range Storage >1 month	23~104°F (-5°C~+40°C)
Temperature Protection of FET (Built-in)	194°F (90°C)

Hibernation Mode SPECIFICATIONS

Enter hibernation cells voltage (no current flow >0.5A)	<3V
Hibernation delay time	10mins