



330AH SBL Lithium



SBL-12V330AHBLH1

The battery is upgraded bluetooth & self-heating version with integrated passive & active balancer, ON/OFF isolation switch. And it comes with screw fixing H8 DIN case design.

Features & Benefits

- **Smart BMS upgraded**

Smart BMS design with passive & active balancer integrated.

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

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

- **Pre-charge & Storage function**

Better protections when starting with a higher power inverter and abnormal history storage.

- **Self-heating**

SBL LiFePO4 battery with Bluetooth and heating version consists of two energy efficient heating elements fully controlled automatically by the BMS, which use the charging current to bring the cells temperature to a safe charging temperature, thus guaranteeing maximum charging and discharging performance even at extreme temperatures to -30°C.

- **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 app connection.

b. If no current (<0.5A) has been detected by BMS, then BMS will fall into hibernation mode when the cells voltage<3300mV and delay 4320mins (3 days) .

App or charging (current detected by BMS is higher than 0.5A) or on/off button can switch on the BMS.

If cells voltage is lower than 3V, then app cannot wake up the battery but only charging or by on/off button.

c. ON/OFF isolation on/off switch.

Press on--> BMS is on

Press off--> BMS is off

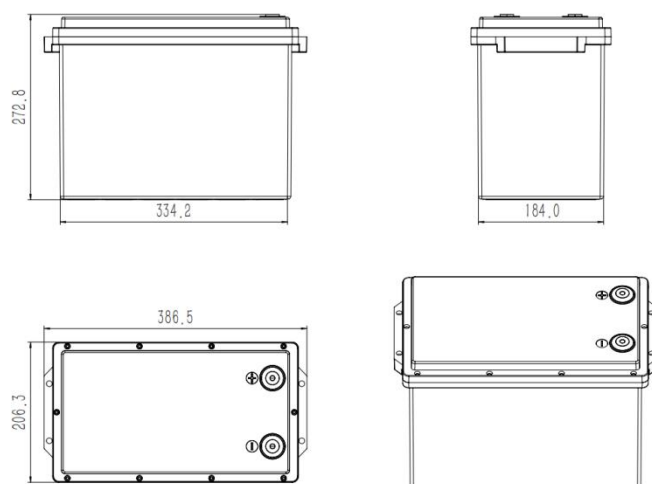
Press on/off needs 3 seconds interval.

If press off to control BMS switching off, charging or app connection cannot wake up hibernation as it is physical control.



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DIMENSIONAL SPECIFICATION



ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8V
Nominal Capacity	330Ah
Capacity @0.2C	>290 min
Energy	4224Wh
Resistance	<10m Ω
Discharge Efficiency	>99%
Cells Self Discharge	<3% per Month
Modules Connections	4S1P

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	345 x 190 x 245mm
Weight	26kg
Terminal Type	M8
Terminal Torque	10-15N-m
Case Material	ABS

CHARGE SPECIFICATIONS

Maximum Charge Current	200A
Recommended Charge Current	$\leq 50A$
Charge Voltage	14.2~14.6V
Charge Cut-off Voltage	14.6V
Reconnect Voltage	14V
Cells Balancing Voltage	3.4V
Cells difference voltage value to open balancing	15mV (passive balancer) 30mV (active balancer)
Passive Balance current	50-100mA
Active Balance current	1-5A
Charge Heating (Temperature <0 $^{\circ}C$, threshold to 10 $^{\circ}C$ and start normal charge. Charge power current need to reach 8A to turn on heaters.	Yes

**DISCHARGE SPECIFICATIONS**

Maximum Continuous Discharge Current	200A
Max. Pulse Discharge Current	300A (5S)
Discharge Cut-off Voltage	11V
Reconnect Voltage	12V
Short Circuit Protection	Yes

Hibernation Mode SPECIFICATIONS

Eneter hibernation cells voltage (no current flow)	<3.2V
Hibernation delay time	4320mins

BMS CONSUMPTION

Without communication (BT)	23mA
With communication (BT)	46mA
Hibernation	0.8mA

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)