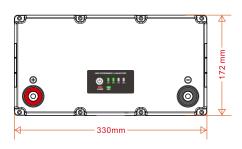


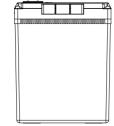
12.8V135Ah G2

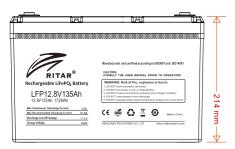
LiFePO₄ BATTERY



Dimension:









Unit: mm

SAFETY

- + Long life type prismatic LiFePO4 cells.
- + Battery certification: UN38.3, MSDS.
- + The cycle life over 3500 times.

DESIGN

- + Detachable case, better than traditional case.
- $\,\,$ + $\,$ Case material ABS+PC, better and stronger than ABS case.
- + IP65 Class, water-proof design.
- + Maintenance free.

BATTERY MANAGEMENT SYSTEM

- + Integrated BMS inside.
- + Independent protection for charge and discharge.
- + OVP, LVP, OCP, OTP, LTP, OTP, Short circuit protection.
- + Support LEDs indicators, Heater parts, Blue-tooth module.

New Generation Li-ion Battery



12.8V135Ah

SPECIFICATION

Model	LFP12.8V135AH G2
Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	135
Total Energy [Wh]	1728
Max. Charging Current [A]	100
Recommended Charging Current [A]	67.5
Charging Voltage [V]	14.2~14.6
Max. Discharging Current [A]	100
End of Dicharge Voltage [V]	11.2
Operating Temperature Range ⁽¹⁾	With internal heater: Charge/Discharge -20~+55°C
Protection	Over charge Over discharge, Over temperature, Low Temperature, Over Current, Short circuit
Cycle Life (2)	>3500 cycles
Designed Calendar Life	10 Years
Dimension (W*D*H, mm)	330*172*214 (BCI Group 31)
Weight [Kg]	19
Operation Humidity	0~95% RH (No condensing)
LED Indicator and Button	SOC, ALM, RUN, ON/OFF
IP Class	IP65
Parallel Support (3)	Yes, Max, 4Sets
Series Support	Yes, Max. 4 Sets
Certification-Battery	UN38.3; MSDS; CE
Internal Bluetooth Module	Yes
Internal Heater (100W)	Yes

Not

(1) Normally the Li-ion battery operation temperature range is: discharge -20~+55°C, charge 0~+55°C, With internal heater it will automatic start to work once the cell temperature is below 5°C and the heater can help to increase cell temperature 4~8°C/hour.

With Heater: Charge / Discharge: -20 ~ +55°C, the charger power should be above than heater parts power consumption.

- (2) 25°C ,0.5C/0.5C, 100%DOD and 80% EOL
- (3) For parallel and series power cable connection, refer to user manual.

The datasheet is subject to change without prior notification

New Generation Li-ion Battery



BMS Detail Information

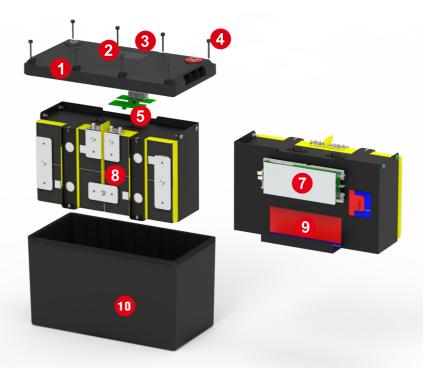
BMS Detail Information	RITAR
Over-Charge Alarm & Protection	
Over-Charge Alarm	3.55V (For cell) 14.2V (For pack)
Over-Charge Protection	3.7V (For cell) 14.8V (For pack)
Over-Charge Protection Delay	1000 ms
Over-Charge Release	3.45V (For cell) 13.8V (For pack)
Over-Discharge Alarm & Protection	
Over-Discharge Alarm	2.8V (For cell) 11.2V (For pack)
Over-Discharge Protection	2.5V (For cell) 10V (For pack)
Over-Discharge Protection Delay	1000 ms
Over-Discharge Release	2.8V (For cell) 11.2V (For pack)
Over Current Alarm & Protection	
Charge Over Current Alarm	60A
Charge Over Current Protection	105A
Charge Over-Current Protection Delay	158
Charge Over Current Protection Release	Automatic release after 1 min and up to 3 times or Discharge
- Discharge Over Current Alarm	105A
Discharge Over Current Protection-1	110A
Discharge Over Current Protection-1 Delay	15S
Discharge Over Current Protection-2	300A
Discharge Over Current Protection-2 Delay	200ms
Discharge Over Current Protection Release	Automatic release after 1min and up to 3 times or Charge
Over Temperature Alarm & Protection	
Charge Low Temperature Alarm	7°C
Charge Low Temperature Protection	0°C
Charge Low Temperature Protection Release	5°C
Charge High Temperature Alarm	50°C
Charge High Temperature Protection	55°C
Charge High Temperature Protection Release	45°C
Discharge Low Temperature Alarm	-10°C
Discharge Low Temperature Protection	-20°C
Discharge Low Temperature Protection Release	-17°C
Discharge High Temperature Alarm	55°C
Discharge High Temperature Protection	60°C
Discharge High Temperature Protection Release	50°C
Short Circuit Protection	
Short Current Protection Delay Time	1500 uS
Short Current Release Method	Release load
Heater Control (for optional heater parts)	
Heater ON	Cell temperature≤ 0°C and charger is connected
Heater OFF	Cell temperature >10°C

New Generation Li-ion Battery



12.8V135Ah

INTERNAL STRUCTURE DIAGRAM



- 1 Detachable cover-ABS+PC
- 2 PC Film
- 3 Bluetooth Module
- 4 Hexagon socket screws
- **5** ON/OFF button and LEDs

- **7** BMS (RD-RJ4S100A)
- 8 Cells, 1P4S
- 9 Heater Parts (100W)
- Case : ABS+PC

Bluetooth module & APP













