

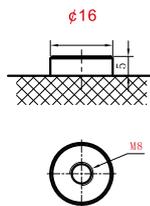
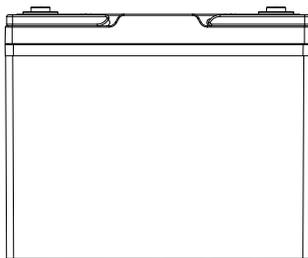
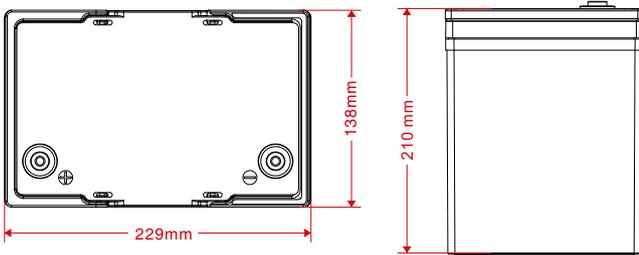
# 12.8V100Ah Mini



## LiFePO4 BATTERY



### Dimension:



Unit: mm

### SAFETY

- + Long life type prismatic LiFePO4 cells.
- + Cell certification: ROHS, IEC62619, UL1973, UL9540A
- + Battery certification: UN38.3, MSDS, IP65, ISTA 2A
- + The cycle life over 3500 times

### DESIGN

- + ABS container, replace VRLA battery perfectly.
- + IP 65 Class,
- + Maintenance free.

### BATTERY MANAGEMENT SYSTEM

- + Integrated Hardware BMS inside.
- + Independent protection for charge and discharge.
- + OVP, LVP, OCP, OTP, LTP, Short circuit protection.

# 12.8V100Ah Mini

## SPECIFICATION

Model	R-LFP12.8V100AH
Cell and Connection	3.2V100Ah, 1P4S
Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	100
Total Energy [Wh]	1280
Max. Charging Current [A]	100
Recommended Charging Current [A]	50
Charging Voltage [V]	14.2~14.6
Max. Discharging Current [A]	100 / 300A@5s
End of Discharge Voltage [V]	11.2
Operating Temperature Range	Charge: 0 ~ +50°C Discharge: -20 ~ +55°C
Protection	Over charge, Over discharge, Over temperature, Low Temperature, Over Current, Short circuit
Cycle Life <sup>1</sup>	>3500 cycles
Designed Calendar Life	10 Years
Communication Port	/
LED Indicator and Button	/
Dimension (W*D*H, mm)	229*138*210
Weight [Kg]	9.9
Operation Humidity	0~95% RH (No condensing)
IP Class	IP65
Parallel Support <sup>2</sup>	Yes, Max, 4Sets
Series Support	Yes, Max. 4 Sets
Certification-Cell	UN38.3; ROHS; IEC62619; UL1973
Certification-Battery	UN38.3; MSDS, IP65, ISTA 2A, Salt Spray test (ISO 9227:2022) ;

Note:

- 0.5C /0.5C ,25°C, 80%DOD to 80% of initial capacity.
- For parallel and series connection, refer to user manual.

# 12.8V100Ah -100A

## BMS Detail Information

### Over-Charge Protection

Over-Charge Protection	3.75V± 25mV(For cell)
Over-Charge Protection Delay	500~1500 ms
Over-Charge Release	3.55V± 50mV(For cell)

### Over-Discharge Protection

Over-Discharge Protection	2.2V± 80mV(For cell)
Over-Discharge Protection Delay	500~1500 ms
Over-Discharge Release	2.7V± 100mV(For cell)

### Over Current Protection

Charge Over Current Protection	110A± 10A
Charge Over-Current Protection Delay	500~1500 ms
Charge Over Current Protection Release	Disconnect charger or Discharge
Discharge Over Current Protection	550A± 50A
Discharge Over Current Protection Delay	500~1500 ms
Discharge Over Current Protection Release	Disconnect load or Charge

### Over Temperature Protection

Charge Low Temperature Protection	0±2°C
Charge Low Temperature Protection Release	3±2°C
Charge High Temperature Protection	50±2°C
Charge High Temperature Protection Release	47±2°C
Discharge High Temperature Protection	67±2°C
Discharge High Temperature Protection Release	52±2°C
BMS High Temperature Protection	90±5°C
BMS High Temperature Protection Release	65±15°C

### Short Circuit Protection

Short Current Protection Delay Time	200~300 uS
Short Current Release Method	Disconnect load

# 12.8V100Ah -100A

## INTERNAL STRUCTURE DIAGRAM



- |                               |                          |
|-------------------------------|--------------------------|
| ① Cover-ABS                   | ④ BMS (RD-ZY4S100A-JP)   |
| ② Handle                      | ⑤ Cells, 3.2V100Ah, 1P4S |
| ③ Hexagon socket screws M8*12 | ⑥ Case : ABS             |