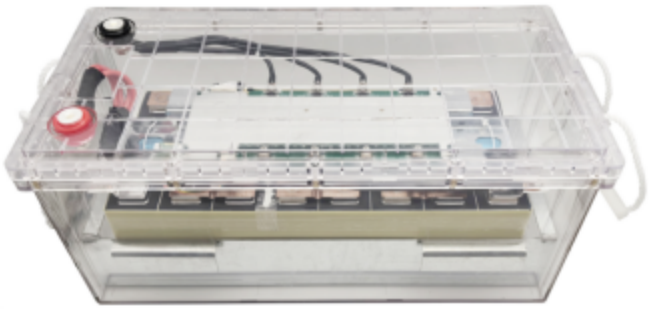
SHENZHEN AYAA TECHNOLOGY CO.,LTD

LiFePO4 Battery
For Lead-Acid Battery Replacement

Version:1.0 Date:2023-11-06

AYAA-24100 （25.6V/100Ah）



▶ Product Features

◆ Using the technology of lithium iron phosphate cell, superior safety, thousands of cycles, 100%DOD, under normal conditions.

◆ Built-in automatic protection for over-charge, over discharge, over current and over temperature.

◆ Free of maintenance .

◆ Internal cell balancing.

◆ Lighter weight: About 40% ~50% of the weight of a comparable lead acid battery.

◆ Replacement for lead-acid battery.

◆ Wider temperature range:-20℃~60℃.

◆ Support for Series application expansion

- Solar/Wind energy Storage
- Golf cart
- Back-up power for UPS/EPS
- Tools

Electrical Characteristics

Nominal Voltage	25.6V
Nominal Capacity	100Ah@0.2C
Min. Capacity	100Ah@0.2C
Nominal Energy	2560Wh
Internal Resistance	⩽40mΩ
Cycle Life	more than 3000 cycles
Self Discharge	⩽3.5% per month at 25℃
Bluetooth	YES

Standard Charging &Discharge

Max.Charging Voltage	28.0~28.8V
Charging Mode	CC-CV
Charging Current	50A
Max.Charging Current	100A
Discharging Current	10A
Max. Continuous Discharging Current	200A
Max.Pulse Discharging Current	250A(<3S)
Discharging Cut-off Voltage	20V

Operating Condition

Charge Temperature	0℃ to 45℃(32℉ to 113℉) @60±25% Relative Humidity
Discharge Temperature	-20℃ to 60℃(-4℉ to 140℉) @60±25% Relative Humidity
Storage Temperature	0℃ to 45℃(32℉ to 113℉) @60±25% Relative Humidity

Structure

Casing	Plastic
Dimension(L*W*H*TH)	522*238*218mm
Weight	Approx.20Kg
Terminal	M8
Water Dust Resistance	IP65

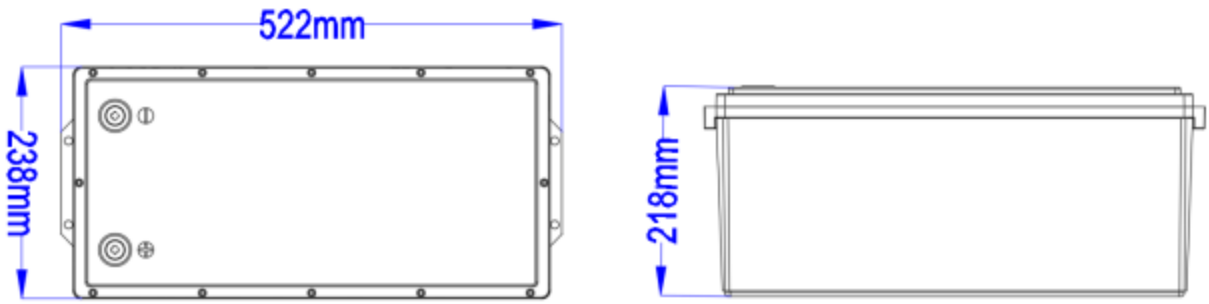
Certifications

■ UL1642 (Cell) ■ IEC62133 (Cell) ■ IEC62619 (Cell) ■CE (Cell) ■UN38.3 (Cell / Pack) ■ ROHS (Cell)

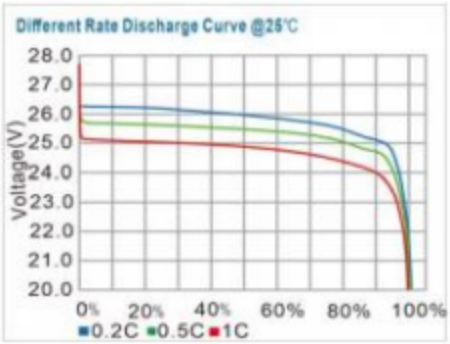
LiFePO4 Battery
For Lead-Acid Battery Replacement

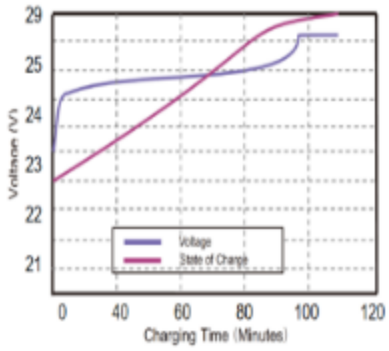
Version:1.0 Date:2023-11-06

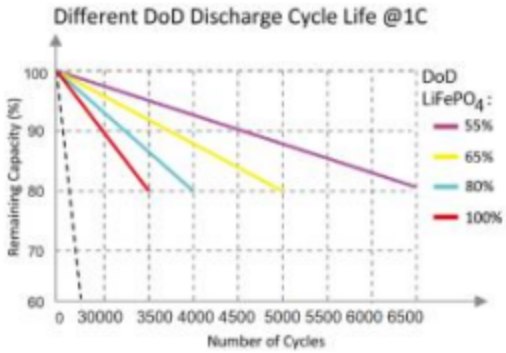
Dimensions



Characteristic Curves



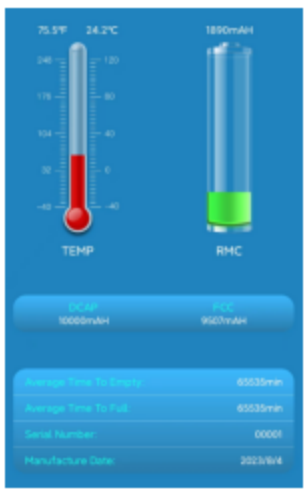


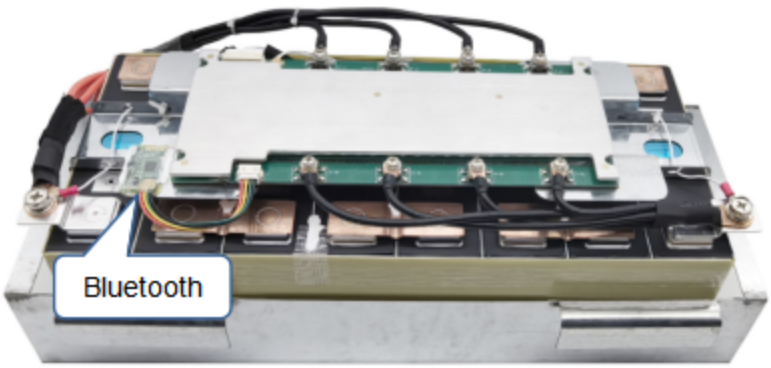


Market Application

Low-speed car | Golf cart | Light EV | Robotics | Cleaning | Solar &Wind | Lighting

Bluetooth interface





LiFePO4 Battery
For Lead-Acid Battery Replacement

Version:1.0 Date:2023-11-06

BMS Parameter

Model	PCM-L08S200-K35
Communication Interface	SMBUS BQ78350R1（100Ah） With Bluetooth
Normal mode. Load >Sleep Current	≤300uA
Full Sleep mode.Load < Sleep Current	≤80uA
Maximal continuous charging current	200A
Maximal continuous discharging current	200A
Balance voltage for single cell	3.6V±0.50V
Balance current for single cell	60±5mA
Over charge detection voltage	3.90±0.05V
Over charge detection delay time	700-1500ms
Over charge release voltage	3.55±0.1V
Over discharge detection voltage	2.00± 0.1V
Over discharge detection delay time	70-150ms
Over discharge release voltage	2.7± 0.1V
Discharge-over current detection current	700 ± 50A
Discharge-over current detection Detection delay time	170-410ms
charge temperature protection	0~+60℃
discharge temperature protection	-20~+65℃
SIZE	260*110*11mm

Battery assembly process details