REDWAY POWER®

OEM / ODM LITHIUM BATTERY

PM-LV51100-3U

Features

Lithium Iron Phosphate (LiFePO4) High Safety
Premium grade A battery bells.

Wide Inverters Compatibility
Compatible with various inverter brands.

19 Inches Standard Design
Easy installation & maintenance.

Telecom Battery Solution (Optional Upgrade)
4G, GPS, SNMP, Embeded Gyroscope, Anti Theft Protection

APP (Optional Upgrade)
Remote monitoring and upgrade hardware.

Cost Effective
Production and quoting price from our own battery factories.

MODEL	PM-LV51100-3U
Lithium Cell Type	LiFePO4 (LFP)
Nominal Voltage	51.2V
Nominal Capacity	100Ah
Norminal Energy	5.12kWh
Max Charge Voltage	58.4V
Discharge Cut-off Voltage	40V
Max Continuous Charge Current	100A
Max Continuous Discharge Current	100A
Max Parallel Connection	16P (Can be upgraded to 64P upon request)
Self-discharge [1]	2% per month
Round Trip Efficiency	96.9%
Projected Life	20 Years (25°C)
Cycle Life	> 8000 Cycles (80% DOD)
Configuration	16S1P
Cooling	Natural Cooling
Monitoring & Protection	Built-in Smart BMS
BMS Automatic Protection & Alarms	Over Charge/Over Discharge/Over Current/Over Temperature/Low Temperature/Over Load/Over Voltage/Low Voltage/Short Circuit
Monitoring Data	System voltage, current, temperature, SOC, SOH, cell's voltage
Communication	RS485/CAN-bus
Circuit Breaker	Yes
Compatible Inverters	Deye/Victron/GOODWE/Sol-Ark/SRNE/Solis/SAJ/Growatt/Luxpower/Voltronic/SMA/FOX/etc.
Terminal	M6

OPTIONAL UPGRADES [2]

Communication	Bluetooth / APP / WiFi / Modbus / SNMP / 4G / GPS / RS232
Temperature	TACP / Thermal Aerosol Fire Suppression Device
Self-Heating	Built-in Intelligent Self-Heating, Temperature Rise: 10°C(18°F)/hour, Operation Temperature: -18°C~10°C(-0.4°F~50°F)
Others	Active Balance / Anti-Theft Protection (Embeded Gyroscope)

ENVIRONMENTAL SPECIFICATIONS

Ingress Rating	IP21 (Indoor)
Operating Humidity	0%~90% RH Non-condensing
Charge Temperature	0°C~60°C (32°F~140°F)
Discharge Temperature	-20°C~60°C (-4°F~140°F)
Storage Conditions	SOC>30%, -20°C~50°C, <85%RH, One full charge need per two months
Transport Conditions	50% SOC, -20°C~40°C
Max. Elevation	3000 m (9843 ft)

COMPLIANCE INFORMATION

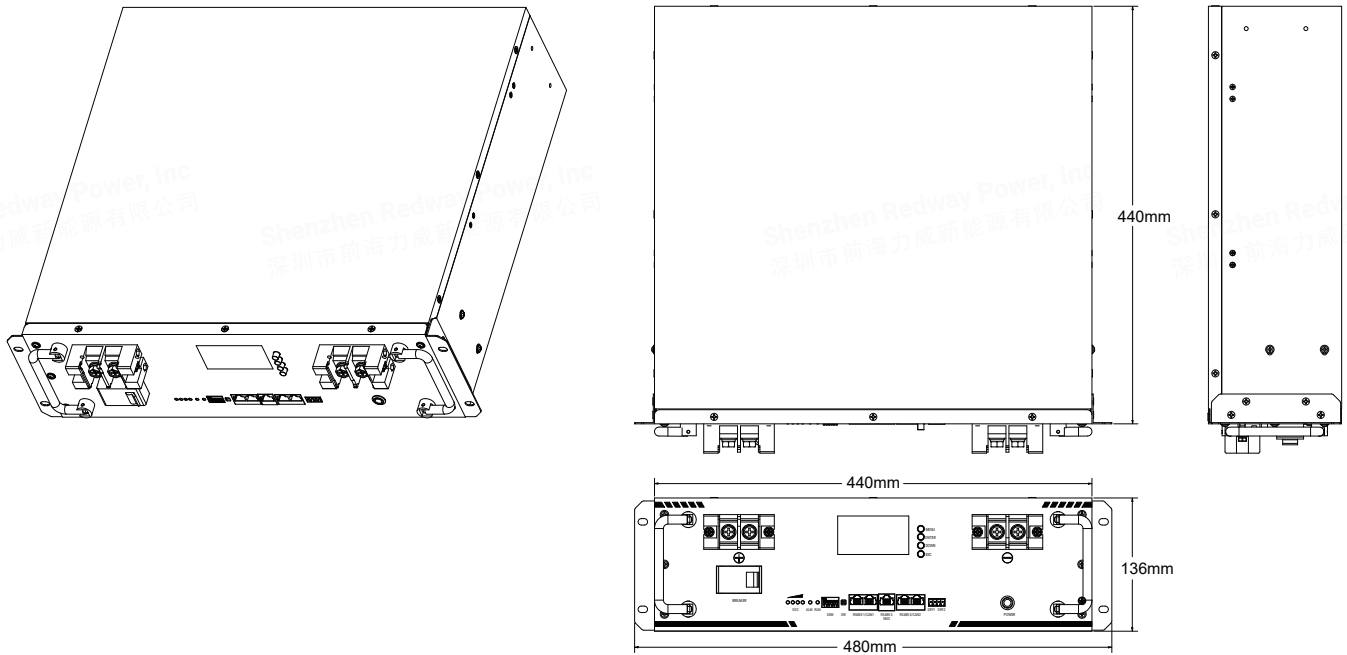|	
Battery Cell	UL 1973, UL 9540A, IEC 62619, RoHS, UN38.3, MSDS

Remark:

*1. (1)At room temperature 25°C, charge-discharge at 100A. (2)Limited charge at 100A for resident energy storage. (3)At the beginning of life.

*2. Optional Upgrades: Not included in the standard version. For more information on these upgrades, please contact our sales team.

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MECHANICAL SPECIFICATIONS

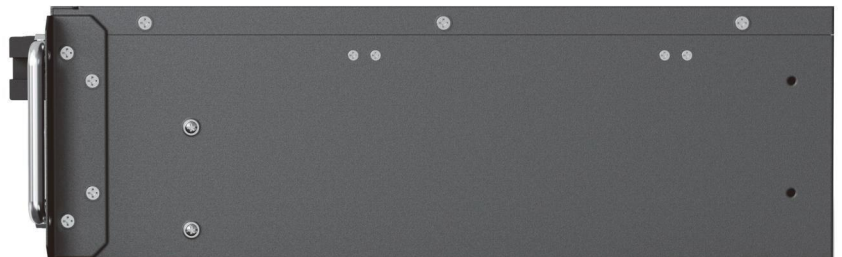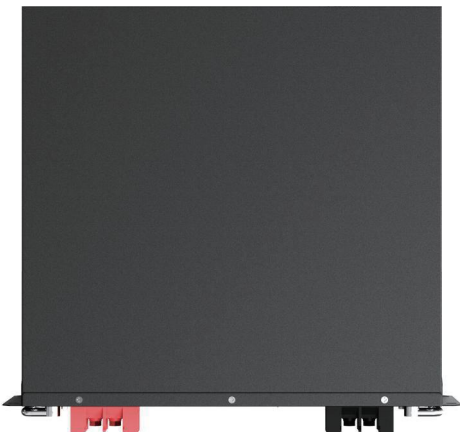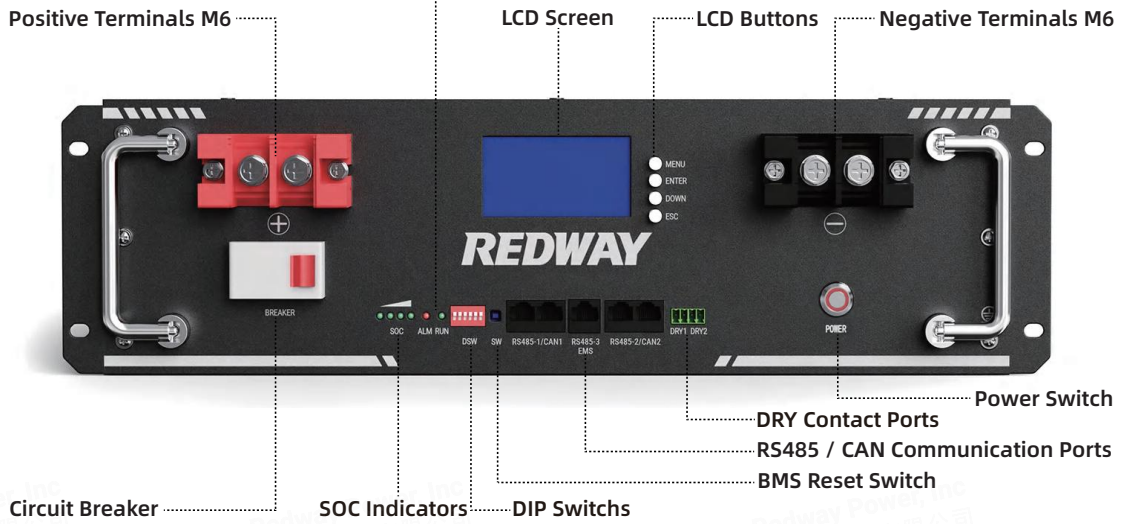|	
Weight	~41 kg
Dimensions (L x W x H)	440 x 440 x 136 mm
Mount Options	On Rack Cabinet
Battery Color	Black

Note:
Dimensions and weight differ slightly for each batch. Contact Green Tech for additional information.

440mm

440mm

136mm

480mm

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Abnormity Alarm / Normal RUN Indicators

Positive Terminals M6

LCD Screen

LCD Buttons

Negative Terminals M6

Power Switch

DRY Contact Ports

RS485 / CAN Communication Ports

BMS Reset Switch

Circuit Breaker

SOC Indicators

DIP Switchs

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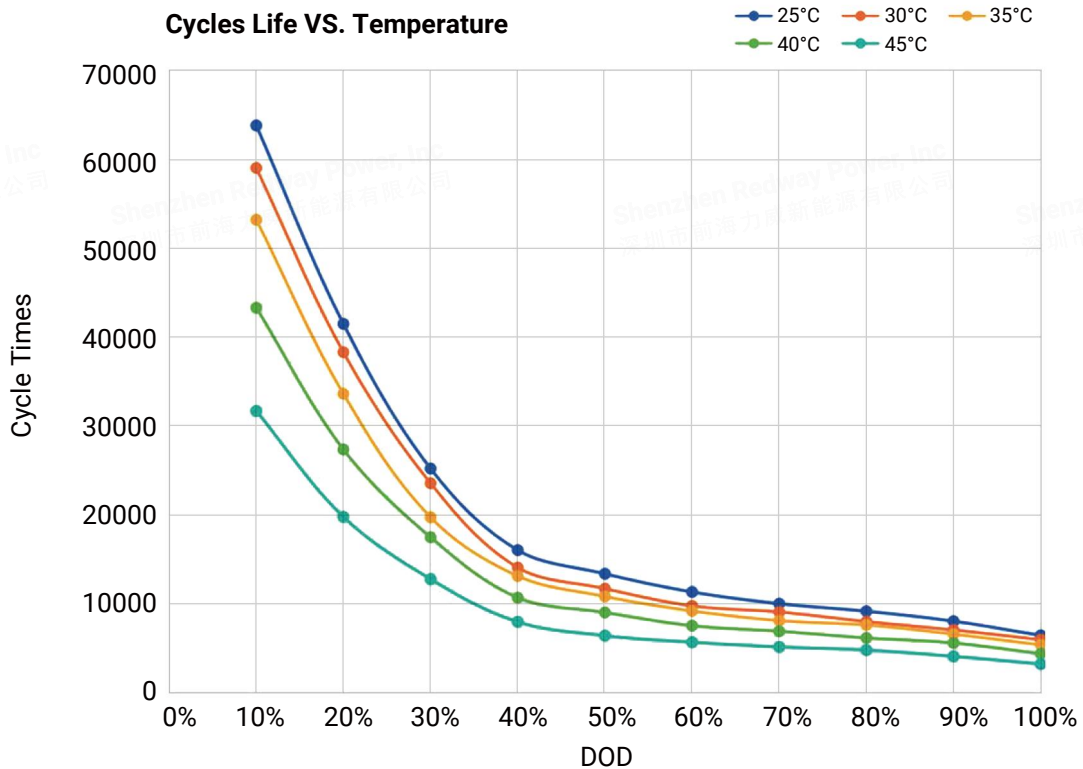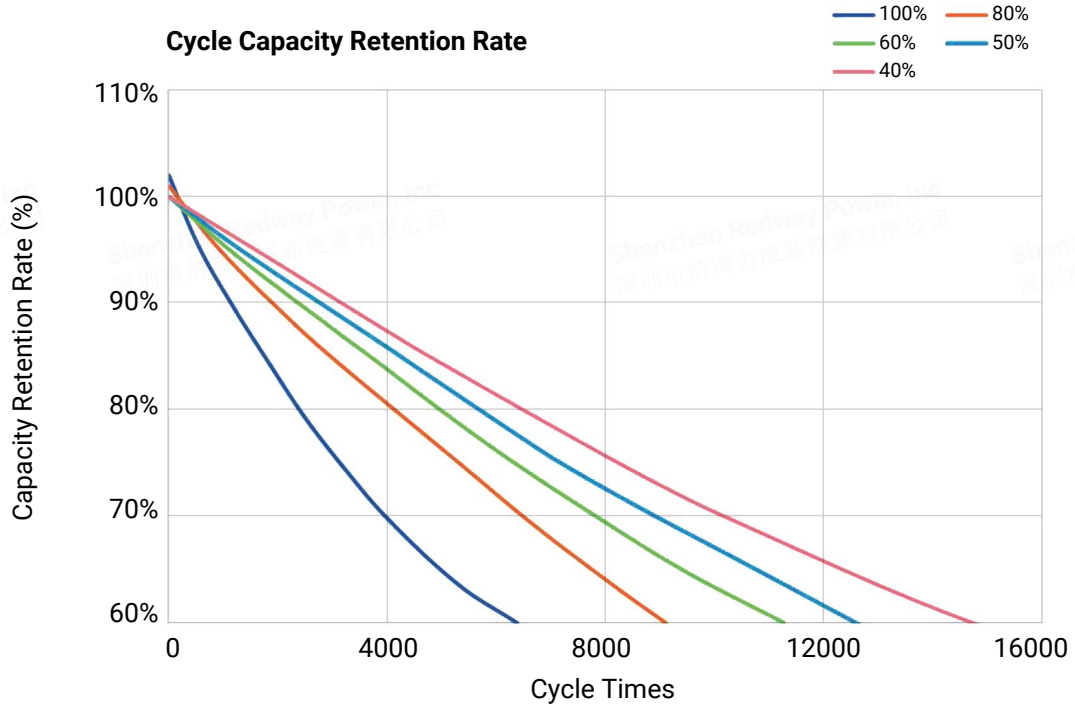LinkedIn: @redway power battery group   Youtube: www.youtube.com/@RedwayPower   Tiktok:www.tiktok.com/@redwaypower

Cycle Life Testing Report

The data source is based on reliable laboratory measured data for computational deduction.
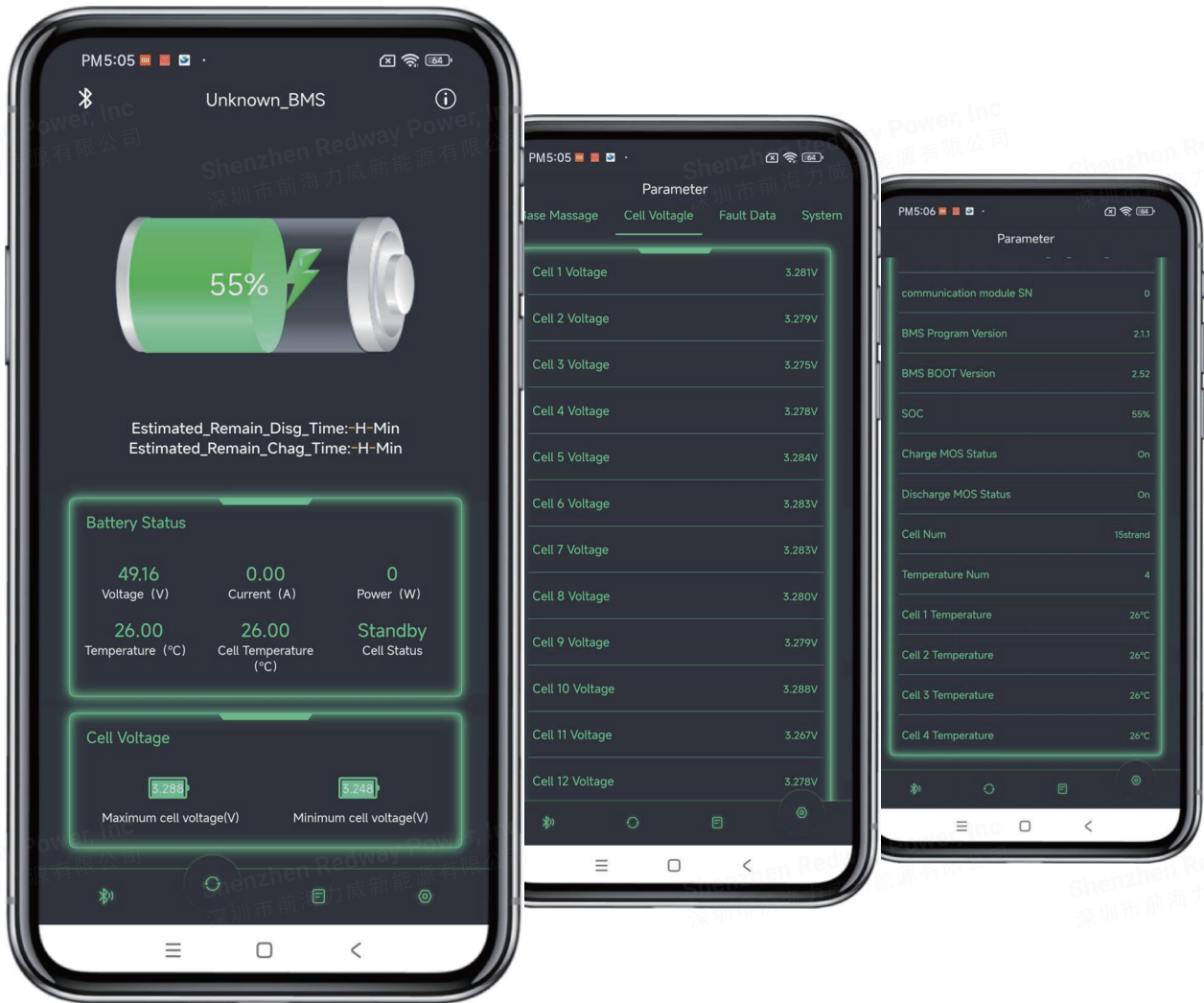
Battery Test Environment and Conditions	
Temperature	25°C
Charge & Discharge Rate	0.5C
EOL	60%
DOD	X%

Cycle Capacity Retention Rate

Legend: 100% 80% 60% 50% 40%

Cycles Life VS. Temperature

Legend: 25°C 30°C 35°C 40°C 45°C

Bluetooth APP Interface (Demo)

This Bluetooth APP can be operated by both Android and IOS. It establish a Bluetooth connection between your smart phoneandthebattery,usages includes below: managing the battery pack, gathering the data and displaying them, conducting modifications on settings. Bluetooth APP can achieve below functions:

1. Friendly APP interface, customizable interface UI.
2. Display the basic data of battery pack.
3. Modifying the communication between BMS and inverter.
4. Setting Alert Parameters and Switch On/Off.
5. Supports Android and iOS mobile operating systems.
6. Capable of real-time viewing and recording of battery status information.
7. Readable and writable real-time parameters of the BMS system.

8. Bluetooth module upgrades can be implemented through the APP.
9. Software upgrades for the BMS module.
10. Capable of networking and operating Bluetooth.
11. Wi-Fi configuration via Bluetooth.
12. Support Single and Parallel operation.
13. Shift between Chinese and English.

Note:

* This is just a demonstration interface, the standards for voltage and capacity vary among different batteries.
* The App interface is subject to change due to continous software updates.

REDWAY
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