

LR Series LiFePO4 Battery



■ INTRODUCTION

The LR series is a 51.2V rack-mounted LiFePO4 battery for system integrators, telecom and server racks — 5.12 and 11.78 kWh modules that also mount on the wall where rack space is short.

RS232/RS485/CAN communication, user-changeable inverter protocols and support for up to 15 modules in parallel make the LR a flexible building block for storage projects. An LCD display shows status at a glance; models without display are available.

■ KEY FEATURES

- True-capacity LiFePO4 battery in a high-strength metal shell
- SOC & SOH estimation, real-time status monitoring
- Ultra-low standby loss with multiple sleep/wake-up modes
- Up to 15 modules in parallel — RS485 host monitoring & CAN
- User-changeable inverter communication protocols
- Rack-mount chassis, wall-mount compatible
- LCD display (optional without display)
- Adjustable over-current protection, short-circuit protection, buzzer alarm
- Cell balancing; capacity & cycle-count calculation

TECHNICAL SPECIFICATIONS

Model	Usable Capacity	Nominal Voltage	Max Discharge	Max Output	Rec. Charge Current	Cycle Life
LR100AH/51.2V	5120 Wh	51.2V	100A	5120W	50A	≥6,000
LR230AH/51.2V	11776 Wh	51.2V	200A	10240W	115A	≥6,000

Model	Installation	Dimensions D×W×H (mm)	Net Weight (kg)
LR100AH/51.2V	Rack (wall-mount compatible)	452×440×133	45
LR230AH/51.2V	Rack	592×440×223	100

Specification	Value
Battery Chemistry	LiFePO4
Usable Capacity	5.12–11.78 kWh
Nominal Voltage	51.2V DC
Voltage Range	43.2–58.4V DC
Cycle Life	≥6,000 cycles (standard charge/discharge @ 25°C)
Depth of Discharge (DoD)	≥95%
Parallel Expansion	1–15 modules
Max Charging Voltage	58.4V ±0.2V DC
Recommended Charging Voltage	57.6V ±0.2V DC
Recommended Charging Current	50A / 115A
Charge Current Limiting	10A / 20A
BMS Protection	Over-charge/discharge voltage & current, short circuit, over/under-temperature, MOS over-temperature, cell failure (cell ΔV >1V)
Communication	RS232, RS485, CAN (standard)
Inverter Protocols	Pylon, Growatt, Voltronic Power, Pengcheng, Schneider, SRNE
Operating Temperature	Discharge -10~+50°C; Charge 0~+60°C
Storage Temperature	>1 month 0~35°C; ≤1 month -20~45°C
IP Rating	IP21 (indoor)
Terminal Type	M6
Shell Material	Metal
Installation	Rack-mounted (wall-mount compatible)
Certifications	UN 38.3 tested (accredited labs, per model); IEC 62619 + CE certified (per model); annual sea/road transport appraisal — documents on request