

RANGER SERIES

Premium LiFePO4 Battery

12.8 V / 100 Ah
12.8 V / 120 Ah
12.8 V / 200 Ah
12.8 V / 300 Ah



Engineered for Total Protection

- Built with IP67-rated waterproof and dustproof enclosures
- Integrated safety valve and insulated casing to prevent short circuits
- Certified to UN38.3, CE, IEC62619, UL1973, and E-Mark for full transport and system compliance

Flexible System Configuration

- Designed to support up to 4 units in series (for 48V systems)
- Combine series and parallel setups for higher capacity — up to 16 units in parallel
- Drop-in lead-acid replacement form factor with multiple sizing options

Intelligent & Connected Power

- Equipped with Bluetooth, CAN, and RS485 interfaces for smart monitoring
- App connectivity for SOC checks, LED status readouts, and remote diagnostics
- Supports firmware upgrades via cloud OTA for future-proof performance

Smart Battery Management System

- Intelligent BMS manages charge/discharge protection, thermal stability, and current control
- High current handling: up to 150 A discharge and 1200A peak
- Optional low-temperature heating enables charging in environments down to -20°C

Ranger 12.8 V Series Technical Parameters

Model	100 Ah	120 Ah	200 Ah	300 Ah
Nominal voltage	12.8 V			
Nominal energy @0.2C	1 280 Wh	1 536 Wh	2 560 Wh	3 840 Wh
Nominal capacity@0.2C	100 Ah	120 Ah	200 Ah	300 Ah
Internal resistance @1kHz AC	≤30 mΩ			
Allowed MAX. charge current	100 A @25°C	100 A @25°C	200 A @25°C	300A @25°C
Allowed MAX. discharge current	150 A @25°C	150 A @25°C	200 A @25°C	300 A @25°C
Recommend charge current	50 A	50 A	100 A	150 A
Recommend discharge current	100 A	100 A	100 A	150 A
Peak/Surge current limit	500 A @3s	500 A @3s	800 A @5s	1 000 A @5s
Short circuit protection	1 000 A @500μs	1 000 A @500μs	1 200 A @500μs	1 200 A @500μs
Charge voltage	14.2 V			
Floating voltage	13.8 V			
End of discharge	11.2 V			
Communication	Bluetooth, CAN and RS485			
IP rating	IP67			
Cycle life	≥6000 cycles, @25°C, @0.2C, @80%DOD			
Weight	≈ 12 kg (26.6 lbs)	≈ 14.0 kg (30.8 lbs)	≈ 23 kg (50.81 lbs)	≈ 37.5 kg (82.7 lbs)
Dimensions(W*H*D)	308*168*211 mm (12.1*6.6*8.3 inch)	308*168*211 mm (12.1*6.6*8.3 inch)	485*172*231 mm (19.0*6.7*9.0 inch)	500*265*231 mm (19.6*10.4*9.0 inch)
Parallel and series connection	Support Max. 16 in parallel or Max. 4 in series			
Terminal and torque	M8 bolt 8-10N·M			
Operation altitude	< 3000m			
Operation temperature	Charge -20~60°C (-4°F~140°F) , Discharge -20~60°C(-4°F~140°F)			
Self-discharge rate (shutdown)	≤3% Per month			
Recommended storage temperature	-10°C~40°C (14°F~104°F)			
Recommended humidity	5~85%RH			
Cetifications	Pack: UN38.3, CE, IEC62619, E-Mark, UL1973, IEC62133 Cell: UN38.3, UL9540A, IEC62619			

* The actual product may differ slightly from the pictures.

* The specifications are subject to change without prior notice.