LIFEPO4 LITHIUM BATTERY

S48-100LFP STACK-LV



Series	S-SERIES LFP ESS	Warranty	See Warranty Terms
Volts	48	Design	Stackable
Terminal Type		4x M8 Terminals (2+/2-)	
Size & Thread		M8	

Charge | Discharge

Charge Voltage Range	55.2V - 57.6V
Recommended End of Discharge Voltage	48.0 V
End of Discharge Protection Voltage	44.8 V
Recommended Charge Voltage	56.0 V
Recommended Charge Current	

0~10°C (32-50°F)	0.2C	20A
10~35°C (50~95°F)	0.5C	50A
35~50°C (95~122°F)	0.2C	20A

Charge Mode:
Closed Loop: Follow inverter setup.
Open Loop: Charge at recommended voltage & current by temperature following directions in the S48-100LFP STACK-LV Battery Operating Manual.

Max Continuous Charge Current	100 A
Max Continuous Discharge Current	100 A
Charge Temperature Range	0°C~55°C (32~131°F)
Discharge Temperature Range	-20°~60°C (-4~140°F)
Storage Temperature Range	Recommended: -5°~45°C (23~113°F) Limit: -25°C~55°C(-13~131°F)

Capacity

Nominal Capacity	100 AH
Total Energy	5.12 kWh
Nominal Voltage	51.2 V

Safety & Certification

- MH5032778: UL 9540, UL 9540A, UL 1973
- Prismatic LiFePO4 cells [100Ah prismatic cell] (UL 1642)
- IEC62619 (cell), UN38.3 (cell/pack)
- ROHS (cell), CE system certification, IP52 Rating

Design

- Modular, stackable design
- Up to 8 parallel connectivity
- Integrated display
- Battery status indication
- CAN bus & RS-485 connectivity
- External breaker access
- PC & Mobile App Connectivity
- Modular **LFP Stack Base+Top Assembly** (shown)
    - Install up to 8 x S48-100LFP STACK-LV units

Battery Management System (BMS)

- Integrated hardware BMS inside
- Independent charge & discharge protection
- Short-Circuit Protection, Over-Voltage Protection, Low-Voltage Protection, Over-Current Protection, Low-Temperature Protection, Over-Temperature Protection
- Secondary protection – Internal BMS Switch & Relay, External Breaker Access

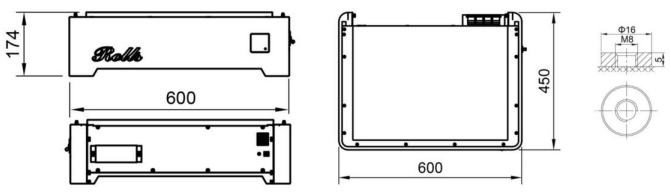
48V LFP Profile

Specifications			
Weight	48.5 kg	107 lbs	
Length	450 mm	17.7"	
Width	600 mm	23.6"	
Height	173 mm	6.81"	

Product measurements & weights are calculated based on sample data. Individual specifications are subject to vary due to the manufacturing process & battery components.

Container	Steel
Handles	Built-in
Internal BMS Model	48100-5G-UL
Expected Cycle Life	>6000 @ 80% DOD (.5C @ 25°C, 80% EOL), >3500 @ 100% DOD (1C @ 25°C, 70% EOL)
Series Connection	No
Parallel Connection	8
Connectivity	1x Link In (internal), 1x Link Out (internal) 1x CAN bus (external) , 1x RS-485 (external) Refer to **S48-100LFP STACK-LV Battery Installation Guide** for compatible inverters, communication types & protocols.

Detailed Illustration



ISO9001 ISO14001 OHSAS18001

Rev.#1 | August 2025