# 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)<br>Limit: -25°C~55°C(-13~131°F) |

## Capacity

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|---|---|
| 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

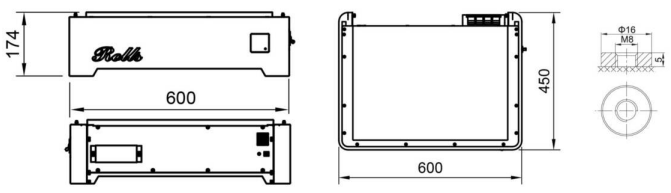
## 48V LFP Profile

| 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)<br>1x CAN bus (external) , 1x RS-485 (external)<br>Refer to **S48-100LFP STACK-LV Battery Installation Guide** for compatible inverters, communication types & protocols. |

## Detailed Illustration




ISO9001 ISO14001 OHSAS18001

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