LIFEPO4 LITHIUM BATTERY

S48-100LFP ESS







Series	S-SERIES LFP ESS	Warranty	See Warranty Terms
Volts	48	Design	19" Rack Std.
Terminal Type		M6	

Charge | Discharge	
Charge Voltage Range	56.0 - 58.4V
Recommended End of Discharge Voltage	48.0 V
End of Discharge Protection Voltage	41.6 V
Recommended Charge Voltage	57.6 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:
Charge at recommend voltage & current by temperature until charge current drops to ≤ 0.05C (CC,CV)

Max Continuous Charge Current	50 A
Max Continuous Discharge Current	63 A
Surge Current Limit	500 A (300ms)
Charge Temperature Range	0°C~55°C (32~131°F)
Discharge Temperature Range	-20°~60°C (-4~140°F)
Storage Temperature Range	-5°~45°C (23~113°F)

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

Safety

- Cylindrical LiFePO4 cells [4Ah, 26700] (UL 1642)(UL 1973*)
- IEC62133 (cell), IEC62619(cell), UN38.3 (cell/pack)
- ROHS (cell), CE system certification, IP54 Rating

*Additional certifications may be required for systems larger than 20kWh

Design

- 19″ 4U rack-compatible
- Up to 16 parallel connectivity
- Integrated screen & controls
- State-of-charge (SOC) indication
- CAN bus & RS-485 connectivity
- External breaker access
- Separate BMS breaker
- PC Connectivity
- Optional **Rolls LFP ESS Cabinet** (shown)
    - Install up to 8 x S48-100LFP ESS units per cabinet

Battery Management System (BMS)

- Integrated hardware BMS inside
- Independent charge & discharge protection, secondary protection
- Short-Circuit Protection, Over-Voltage Protection, Low-Voltage Protection, Over-Current Protection, Low-Temperature Protection, Over-Temperature Protection

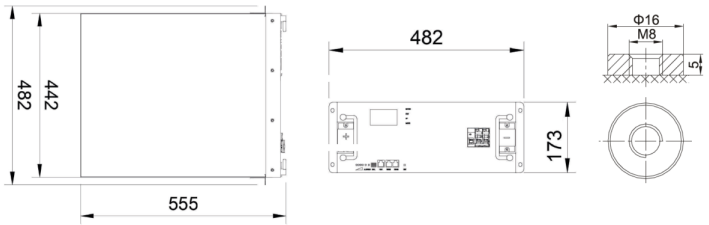
48V LFP Profile

Specifications		
Weight	50.5 kg	111.30 lbs
Length	555 mm	21.8"
Width	442 mm	17.4"
Height Incl. Term.	173 mm	6.8"

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

Handles	Built-in
Internal BMS Model	16S75A
Expected Cycle Life	>6000 @ 80% DOD, >3000 @ 100% DOD
Series Connection	1
Parallel Connection	16
Connectivity	2x RS-485, 1 x CAN bus See Operating Manual for compatible inverters, communication types and protocols

Detailed Illustration



ISO9001 ISO14001 OHSAS18001

Rev.#2 | February 2024