



Safety

- Cylindrical LiFePO4 cells (UL1642), UL1973*
- 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 ESS modular cabinet (Install up to 8 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

 SAI GLOBAL ISO 9001 Quality	Weight	50.5 kg	111.30 lbs
	Length	55.5 cm	21.8"
	Width	44.2 cm	17.4"
	Height Inc. Term.	17.3 cm	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 complete list of compatible inverters, communication type and protocols.



OPTIONAL ROLLS ESS MODULAR CABINET

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

Charge

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 $\leq 0.05C$ (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

Detailed Illustration

