



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

### Safety

- Cylindrical LiFePO4 cells [ITR26-70/40E 4Ah, 26700] (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 (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	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 compatible inverters, communication types and protocols

### Detailed Illustration

