



| 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 $\leq 0.05\text{C}$ (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)

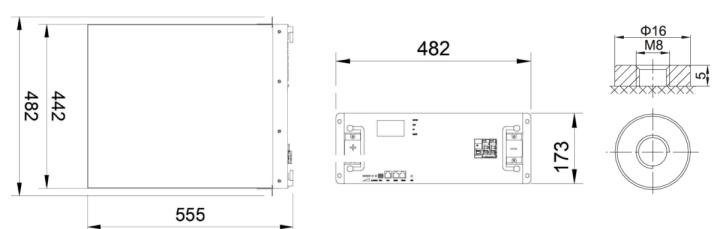
- Integrated hardware BMS inside
- Independent charge & discharge protection, secondary protection
- Short-Circuit Protection, Over-Voltage Protection, Low-Voltage Protection, Over-Current Protection, Low-Temperature Protection, Over-Temperature Protection

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

