

| | | | |
|-------------------|--------------|------------------------------|--------------------|
| Series | S-SERIES LFP | Warranty | See Warranty Terms |
| Volts | 24 | Design | Grp 24 |
| Terminal Type | | M8 | |
| Included Hardware | | M8 stainless bolts & washers | |

Charge | Discharge

| | | | |
|--------------------------------------|--------------|-----|--|
| Charge Voltage Range | 28.0 - 29.2V | | |
| Recommended End of Discharge Voltage | 24.0 V | | |
| End of Discharge Protection Voltage | 20.0 V | | |
| Recommended Charge Voltage | 28.8 V | | |
| Recommended Charge Current | | | |
| -20~0°C (-4~32°F) | 0.1C | 10A | |
| 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)
- DO NOT USE TEMPERATURE COMPENSATION
- No BTS (Battery Temperature Sensor)

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

Capacity

| | |
|------------------|----------|
| Nominal Capacity | 50 AH |
| Total Energy | 1.28 kWh |
| Nominal Voltage | 25.6 V |

Safety

- Cylindrical LiFePO4 cells [ITR26-70/40E 4.6Ah, 26700] (UL1642)
- IEC62133 (cell), IEC62619(cell), UN38.3 (cell/pack)
- ROHS (cell), CE system certification, IP65 Rating

Design

- Standard-size (BCI) ABS container for easy VRLA replacement
- Fast charge/discharge performance
- Display & integrated controls
- Visual state-of-charge (SOC)
- External fuse access
- Internal heating for -20°C (-4°F) to 0°C (32°F) charging *
- Bluetooth Connectivity & dedicated IOS & Android App
- Maintenance-free operation

* Note: When connected in series, internal heating may increase charge imbalance requiring external rebalancing.

Battery Management System (BMS)

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

* Note: When connected in series, internal heating may increase charge imbalance requiring external rebalancing.

Refer to [R-Series & S-Series LFP Battery Operating Manual](#)

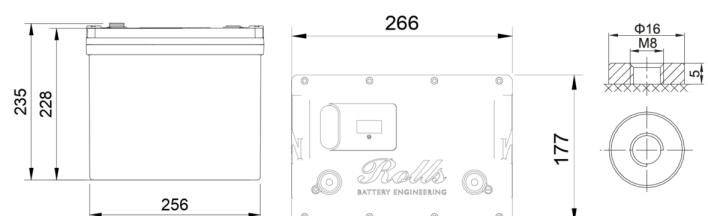
24V LFP Profile

| Specifications | | |
|--------------------|---------|----------|
| Weight | 10.5 kg | 23.1 lbs |
| Length | 266 mm | 10.47" |
| Width | 177 mm | 6.97" |
| Height | 228 mm | 8.98" |
| Height Incl. Term. | 234 mm | 9.25" |

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

| | |
|---------------------|--|
| Container | ABS |
| Cover | ABS |
| Handles | Integrated Top Mount |
| Internal BMS Model | 8S50ATX-V2 |
| Expected Cycle Life | >6000 @ 80% DOD, >3000 @ 100% DOD |
| Series Connection | 2 UNITS MAX (48V) |
| Parallel Connection | 4 UNITS MAX (48V) or 6 UNITS MAX (24V) |
| Connectivity | Up to 2S4P (in 48V configuration) or 1S6P (in 24V configuration) |

Detailed Illustration





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