# **RENOGY**

Deep Cycle Lithium Iron Phosphate Battery CORE 48V | 50Ah







# RENOGY CORE SERIES Deep Cycle Lithium Iron Phosphate Battery

Renogy 48V 50Ah battery is an advanced energy storage solution designed for exceptional performance and durability. Whether you need a dependable power source for outdoor adventures or a backup battery for critical systems, the 48V 50Ah battery is the perfect choice for your energy storage needs.

### **KEY FEATURE**

#### • Expandable Capacity for 19.2kWh of Backup Power

Renogy 48V 50Ah battery offers an expandable capacity that can reach up to 19.2kWh of backup power, providing a robust and reliable source of energy when the grid fails or when off-grid adventures call. With its expandable design, you can easily scale up your power storage capabilities to meet your growing needs, whether it's for powering your RV, home, or outdoor equipment. The ability to expand the capacity ensures that you'll never be left without power, even during extended outages or remote excursions. Plus, with its high-performance characteristics and reliable backup powe.

#### Impressive 6000 Cycle Life

This battery system boasts an outstanding cycle life of 6000 cycles per cell, ensuring long-lasting performance and durability. The high cycle count means you can rely on this battery for years of reliable service, making it a cost-effective and sustainable energy solution. Whether you're using it for daily power needs or emergency backup, the impressive cycle life ensures that you'll get maximum value and performance from your battery investment.

#### Automatic Heating Functionality

To ensure safer charging in colder environments, this battery is equipped with an automatic heating function that activates when the temperature drops below 32°F. This innovative feature automatically warms up the battery to optimal charging conditions, preventing damage from cold temperatures and ensuring a smooth, efficient charging process. With this automatic heating functionality, you can rest assured that your battery will maintain its performance and durability, even in the harshest winter conditions.



#### • IP65 Water-Resistant

Renogy 48V 50Ah battery offers seamless transportation and rapid deployment, ensuring you're never without power. Packing a powerful punch, this battery delivers ample energy to keep your devices fully charged and ready for action. Boasting a high capacity and dependable performance, it serves as a reliable backup power source for your RV or an indispensable energy partner for all your outdoor excursions.

#### • BMS Protections

Renogy 48V 50Ah battery offers comprehensive protections that ensure the safety and stability of your battery. This advanced system constantly monitors various parameters such as voltage, current, and temperature to prevent overcharging, over-discharging, over-current, and overheating. The BMS also ensures that the battery is balanced, extending its lifespan and overall performance. Whether you're using it for RV, outdoor adventures, or any other application, the BMS protections provide a reliable safeguard for your battery.

## **TECHNICAL SPECIFICATIONS**

| Model                                         | RBT4850LFPSH                                                                    |
|-----------------------------------------------|---------------------------------------------------------------------------------|
| Rated Capacity                                | 50Ah                                                                            |
| Nominal Voltage                               | 48V                                                                             |
| Voltage Range                                 | 42-55.5V                                                                        |
| Energy                                        | 2400Wh                                                                          |
| Cycle Life (0.5C Charge/0.5C Discharge, 25°C) | >6000 Cycles (80% DOD, 80% EOL)                                                 |
| Connection                                    | Parallel (Up to 8)                                                              |
| Self-Heating                                  | Yes                                                                             |
| Charge Cut-off Voltage                        | 54V                                                                             |
| Maximum Continuous Charge Current             | 50A                                                                             |
| Maximum Continuous Discharge Current          | 50A                                                                             |
| Certifications                                | MSDS、UN38.3、FCC、IC、UKCA、CE、PSE、ROHS                                             |
| Operation Temperature Range                   | Charge: 32°F to 131°F / 0°C to 55°C<br>Discharge: -4°F to 140°F / -20°C to 60°C |
| Storage Temperature Range                     | -13°F to 149°F / -25°C to 65°C                                                  |
| Standard Operation Temperature                | 77°F±9°F (25°C±5°C)                                                             |
| Relative Humidity                             | 5% to 95%                                                                       |
| Dimension (L x W x H)                         | 15.1 × 7.6 × 9.8 in / 384 × 195 × 248 mm                                        |
| Weight                                        | 51.4 lbs / 23.3 Kg                                                              |
| Terminal Bolt                                 | 2 x M8                                                                          |
| Protection Rating                             | IP65                                                                            |
| Housing Material                              | ABS                                                                             |
| Built-in Bluetooth                            | No                                                                              |
| Communication Port                            | No                                                                              |
| Material & Workmanship Warranty               | 5 Years                                                                         |