



PART NUMBER: ULE12-84

**CHEMISTRY:** LiFePO4

#### **FEATURES & BENEFITS**

- Long cycle life
- Maintenance Free
- Temperature stability
- Low-self-discharge rate
- Ideal for portable devices
- Comprehensive safety mechanism
- High energy density and light weight design
- Sophisticated Battery Management System

## **ULE12-84 LITHIUM-ION BATTERY**

# ULTRASONIC ENERGY: PRECISION POWER FOR PEAK PERFORMANCE

ULTRASONIC ENERGY represent the forefront of advanced energy storage technology, designed for both reliability and performance. Each unit is equipped with a built-in Battery Management System (BMS), ensuring optimal cell balancing and protecting the pack from hazards such as overcharge, over-discharge, over-current, short circuits, and excessive temperatures. These safety features, coupled with an ultra-low self-discharge rate, contribute to a significantly extended lifespan and enhanced product longevity.

ULTRASONIC ENERGY are engineered for fast charging and discharging, offering superior efficiency. With an IP65 rating, these batteries are fully protected against dust and water ingress, making them ideal for demanding environments. ULTRASONIC ENERGY are the perfect choice for applications where safety, durability, and high-performance energy storage are paramount.



#### **CERTIFICATIONS**

■ UL1642 (Cell) ■ IEC62133 (Cell)

■ IEC62619 (Cell)

CE(Cell)

■ UN38.3 (Cell / Pack)

ROHS (Cell)

#### MARKET APPLICATION













Lighting

Solar &Wind

Robotics

Light EV

Low-speed car

Golf cart



#### **ELECTRICAL CHARACTERISTICS**

| Nominal Voltage     | 12.8V  |
|---------------------|--|
| Nominal Capacity    | 84Ah@0.2C  |
| Nominal Energy      | 1075.2Wh   |
| Min. Capacity       | 82.3Ah@0.2C  |
| Internal Resistance | ≤20mΩ  |
| Cycle Life          | 2000 Cycles @ 16.8A Charging/Discharging ,Until 70% Capacity |
| Self Discharge      | ≤3.5% per month at 25°C                                      |

### STANDARD CHARGING & DISCHARGE

| Max. Charging Voltage               | 14.0~14.4V |
|-------------------------------------|------------|
| Charging Mode                       | CC-CV      |
| Charging Current                    | 16.8A      |
| Max. Charging Current               | 42A        |
| Discharging Current                 | 42A        |
| Max. Continuous Discharging Current | 84A        |
| Max. Pulse Discharging Current      | 210A(<3S)  |
| Discharging Cut-off Voltage         | 10.8V      |

### **OPERATING CONDITION**

| Charge Temperature    | 0°C to 45°C(32°F to 113°F) @60±25% Relative Humidity   |
|-----------------------|--|
| Discharge Temperature | -20°C to 60°C(-4°F to 140°F) @60±25% Relative Humidity |
| Storage Temperature   | 0°C to 45°C(32°F to 113°F) @60±25% Relative Humidity   |

#### **STRUCTURE**

| Casing                | Plastic        |
|-----------------------|----------------|
| Dimension(L*W*H)      | 260*169*210mm  |
| Weight                | Approx.10.3Kgs |
| Terminal              | M8             |
| Water Dust Resistance | IP65           |

### **CHARACTERISTIC CURVES**





