



**PART NUMBER: ULE12-10**

**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

## ULE12-10 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    | 10Ah@0.2C                                                 |
| Nominal Energy      | 128Wh                                                     |
| Min. Capacity       | 9.8Ah@0.2C                                                |
| Internal Resistance | ≤35mΩ                                                     |
| Cycle Life          | 2000 Cycles @ 2A 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                    | 2A         |
| Max. Charging Current               | 5A         |
| Discharging Current                 | 5A         |
| Max. Continuous Discharging Current | 10A        |
| Max. Pulse Discharging Current      | 20A(<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)      | 151*65*94mm    |
| Weight                | Approx.1.26Kgs |
| Terminal              | F2             |
| Water Dust Resistance | IP65           |

## CHARACTERISTIC CURVES

