

# URB12550

## Technical Datasheet



**LITHIUMPOWER**

### Li-Ion LFP Benefits Over SLA

- Uniform voltage during discharge
- No need to provide trickle charging to retain battery's charge
- Significantly lighter weight for the same amount of energy
- Battery does not become gaseous during use
- Nominal voltage is maintained over a wider temperature range

### Features

- Integrated carry handles
- Can be properly charged using a 2 phase SLA charger
- IEC61233, 2nd edition compliant

### Applications

- Scooters / wheelchairs
- UPS battery replacement
- Solar power battery

| Constant Voltage Charge at 23°C | Voltage Regulation | Initial Current | Maximum Current |
|---------------------------------|--------------------|-----------------|-----------------|
| Standby Use                     | 13.6V              | 11A             | 55A             |
| Cycle Use                       | 14.4V              | 28.5A           | 55A             |

### Technical Specifications

|   |  |                     |
|---|--|---------------------|
| <b>Part No</b>                          | URB12550   |                     |
| <b>Chemistry</b>                        | Lithium Iron Phosphate (LFP)   |                     |
| <b>IEC Designation</b>                  | 4IFR27/66-15   |                     |
| <b>Average Voltage</b>                  | 12.8V  |                     |
| <b>Nominal Capacity<sup>1</sup></b>     | 57Ah   |                     |
| <b>Voltage Range</b>                    | 10.0V - 14.4V  |                     |
| <b>Max. Continuous Discharge</b>        | 55A  |                     |
| <b>Max. Pulse Discharge<sup>2</sup></b> | 250 ± 30A  |                     |
| <b>Energy<sup>1</sup></b>               | 729Wh  |                     |
| <b>Energy Density</b>                   | 97Wh/kg, 107Wh/l   |                     |
| <b>Weight</b>                           | Approx. 7.5 ± 0.2kg  |                     |
| <b>Cycle Life</b>                       | >1500 cycles   |                     |
| <b>Operating Temperature</b>            | -20°C to 60°C discharging<br>0°C to 45°C charging  |                     |
| <b>Storage Temperature</b>              | 0°C to 40°C  |                     |
| <b>Internal Resistance</b>              | ≤50mΩ  |                     |
| <b>Self-Discharge @ 23°C</b>            | <5% per month  |                     |
| <b>Memory Effect</b>                    | None   |                     |
| <b>Exterior/Housing</b>                 | Hard plastic, ABS  |                     |
| <b>Terminals/Connector</b>              | M8 Screw Terminals   |                     |
| <b>Size</b>                             | Length:  | 257 ± 3mm (10.12in) |
|   | Width:   | 132 ± 2mm (5.20in)  |
|   | Height:  | 200 ± 3mm (7.87in)  |
| <b>Communications</b>                   | None   |                     |
| <b>State of Charge Indicator</b>        | None   |                     |
| <b>Protection</b>                       | Overcharge:  | 3.90V (per cell)    |
|   | Over Discharge:  | 2.00V (per cell)    |
|   | Over Current:  | 250 ± 30A (15-25ms) |
|   | Over Temperature:  | 65 ± 5°C            |
|   | Short Circuit:   |                     |
|   | Cell Imbalance:  |                     |
| <b>Charging</b>                         | Connect the battery to a DC power source using correct polarity and apply a maximum voltage of 14.4V. Limit the current to the recommended rate of 11.0A and hold 14.4V until the current declines to 1.1A. Maximum charge rate is 55.0A.<br><br>Alternatively, you may apply a maximum charge voltage of 13.6V (limiting the current to 11.0A) and hold indefinitely to maintain the battery in a continuous standby state-of-charge of between 70-90%. |                     |
| <b>Safety</b>                           | Material Safety Datasheet - MSDS00152<br>Refer also to Safety Guide UBM-5112   |                     |
| <b>Certifications</b>                   | CB Scheme<br>ID:BE-42214   |                     |
| <b>Transportation</b>                   | Class 9 International and within U.S. <sup>4</sup> Excepted when shipped by motorcar or rail within U.S.   |                     |
| <b>Harmonized Tariff Schedule</b>       | 8507.60.0000   |                     |

### Notes

1. Using a C/5 discharge rate at 25°C.
2. Maximum pulse width of between 15ms and 25ms.
3. Number of consecutive C/5 rate discharges and recommended charges at 25° ± 5°C until the battery reaches 80% of initial capacity.
4. Transportation regulations, classifications and lithium content are available on the Ultralife website.

# Dimensions

