



# LDP Series Lithium Iron Phosphate Battery

**Ideal LiFePO4 battery Solution For Energy Storage System**

# LDP Series Lithium Batteries LiFePO<sub>4</sub> Battery Solution for Energy Storage System



Safer



Smarter



Simpler



EverExceed LDP series lithium iron phosphate batteries are **safer, smarter, simpler** alternative to lead-acid batteries in your marine, solar, RV, energy storage, floor cleaning machines, golf carts, e-scooters, fishing boats, and many other applications. The batteries have built-in smart BMS (battery management system) which provides complete protection and offer a drop-in solution for lead acid battery replacement. They can be used individually or assembled in series to create larger system.

## Features and Benefits

### More reliable :

15 years design life

### Longer life :

EverExceed LDP series lithium batteries provide up to 10 times longer life than lead-acid batteries, and they still provide 80% of the rated capacity after 6,000 cycles. Warranty is 3 years, 5 years optional.

### Light weight:

EverExceed Lithium iron phosphate batteries have 3 times higher energy density compared to lead acid batteries, so the battery weight is reduced considerably. It has only approx.30-50% weight of equivalent lead acid battery, which making it easy handling, more robust.

### High safety:

Built-in supersmart Battery Management System (BMS), guarantees the safe operation during whole service life. The BMS is built with perfect automatic protection against over-voltage, over-current, over-discharge, short-circuit.

### More usable capacity:

Provide 100% of usable energy, regardless of the rate of discharge. so for longer trips you can discharge the battery more than the traditional lead acid, addressing Your Energy Anxiety.

### Fast charging:

Provides up to 1C rate charging ability, 5 times more than that of lead-acid, and can be fully charged in 1-2 hours, greatly improve the efficiency of use.

### Temperature tolerant:

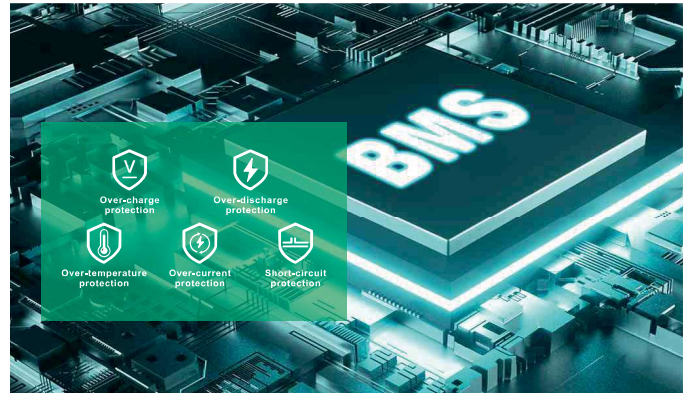
-20°C (-4°F) and +60°C (140°F).

Lithium batteries can handle a wide variety of conditions and are even 2.5X more efficient at low temperatures than lead-acid while being able to safely operate up to 140°F (60°C).

### Cobalt-free:

Adopt lithium iron phosphate technology which is a totally environment friendly green energy storage solution.

## Superior safety



## Application

Wheel chair, sweeper, electric vehicle, robot; Solar/wind energy storage system; UPS backup power; Recreational vehicles; Golf carts; Solar street light;



## Why choose EverExceed LiFePO4 batteries?

### Perfect replacement of lead acid batteries

#### Safer

- Adopt tier 1 & grade A LFP battery cells;
- Excellent deep cycle ability: ≥6000 cycles;
- 15+ years design life, 5 years warranty(optional);  
UL2054, CE, RoHS, UN38.3, etc.

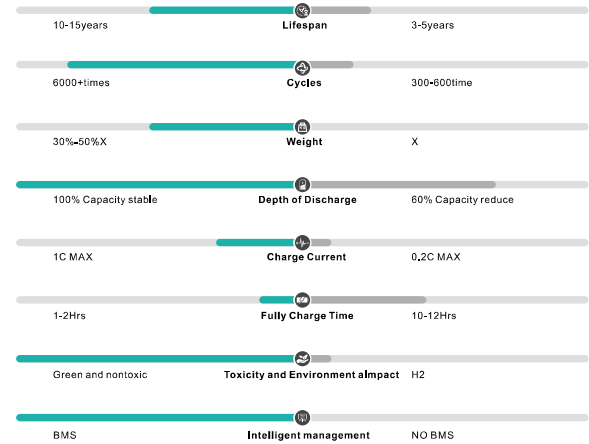
#### Smarter

- Adopt high-end IC and MOSFET;
- Built-in smart BMS with multiple protections;
- Supports Bluetooth monitoring(Optional);
- Flexible deployment: up to 4 packs in parallel or 4 in series.

#### Simpler

- Drop-in replacement for lead acid batteries;
- Lighter weight, up to 70% weight saving;
- Fast charging: 90% within 1~1.5 hours;
- Easy operation & maintenance free.

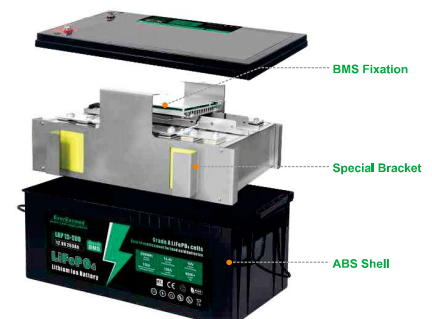
### Battery comparison



- The battery is internally insulated with epoxy resin plates to effectively avoid internal short circuits.
- Flame-retardant ABS material with excellent fire performance.
- Internal wiring harnesses are wrapped in flame retardant velvet tape to enhance battery safety.
- High-density EVA foam fixing, excellent shock resistance in transportation and harsh environments.

### Double protection with ABS shell and special bracket

- The wire harness is fixed with a special wire groove to avoid pulling off during transportation and handling.
- Glue the sampling line terminals to prevent them from loosening during transportation and handling.
- The battery cell is wrapped and fixed by a bracket to prevent the expansion of the battery cell and the dislocation of the battery cell.
- The battery is surrounded by a protruding bracket structure, which provides a heat dissipation gap and vibration buffer effect, preventing shock to the cell and BMS, which can cause battery failure.



## Specification

| Battery Model                   | Nominal Voltage | Rated Capacity<br>@ 5-HR Rate<br>(77°F/25°C) | Typical energy | Recommended charge current | Max charge current | Max continuous discharge current | Outline Dimension |       |       |       |        |      | Weight | Terminal |
|---------------------------------|-----------------|----------------------------------------------|----------------|----------------------------|--------------------|----------------------------------|-------------------|-------|-------|-------|--------|------|--------|----------|
|                                 | (V)             | (Ah)                                         | (Wh)           | (A)                        | (A)                | (A)                              | Length            |       | Width |       | Height |      |        |          |
|                                 |                 |                                              |                |                            |                    |                                  | (mm)              | (in)  | (mm)  | (in)  | (mm)   | (in) | (kg)   |          |
| LDP12-6                         | 12.8            | 6                                            | 76.8           | 3                          | 6                  | 6                                | 151               | 5.94  | 65    | 2.56  | 100    | 3.94 | 0.8    | F2       |
| LDP12-8                         |                 | 8                                            | 102.4          | 4                          | 8                  | 8                                | 151               | 5.94  | 65    | 2.56  | 100    | 3.94 | 1.05   | F2       |
| LDP12-12                        |                 | 12                                           | 153.6          | 6                          | 12                 | 12                               | 151               | 5.94  | 98    | 3.86  | 101    | 3.98 | 1.3    | F2       |
| LDP12-18                        |                 | 18                                           | 230.4          | 9                          | 18                 | 18                               | 181               | 7.13  | 77    | 3.03  | 167    | 6.57 | 2.2    | M5       |
| LDP12-24                        |                 | 24                                           | 307.2          | 12                         | 20                 | 20                               | 181               | 7.13  | 77    | 3.03  | 167    | 6.57 | 2.9    | M5       |
| LDP12-30                        |                 | 30                                           | 384.0          | 15                         | 30                 | 30                               | 165               | 6.50  | 125   | 4.92  | 175    | 6.89 | 4.2    | M5       |
| LDP12-36                        |                 | 36                                           | 460.8          | 18                         | 36                 | 36                               | 195               | 7.68  | 130   | 5.12  | 167    | 6.57 | 4.8    | M6       |
| LDP12-42                        |                 | 42                                           | 537.6          | 21                         | 42                 | 42                               | 197               | 7.76  | 165   | 6.50  | 170    | 6.69 | 5.5    | M6       |
| LDP12-50                        |                 | 50                                           | 640.0          | 25                         | 50                 | 50                               | 229               | 9.02  | 138   | 5.43  | 217    | 8.54 | 7.2    | M6       |
| LDP12-60                        |                 | 60                                           | 768.0          | 25                         | 50                 | 50                               | 229               | 9.02  | 138   | 5.43  | 217    | 8.54 | 7.5    | M6       |
| LDP12-70                        |                 | 70                                           | 896.0          | 35                         | 50                 | 50                               | 260               | 10.24 | 169   | 6.65  | 215    | 8.46 | 8.1    | M8       |
| LDP12-84                        |                 | 85                                           | 1088.0         | 42                         | 84                 | 84                               | 260               | 10.24 | 169   | 6.65  | 215    | 8.46 | 10     | M8       |
| LDP12-90                        |                 | 90                                           | 1152.0         | 45                         | 90                 | 90                               | 305               | 12.01 | 168   | 6.61  | 215    | 8.46 | 11     | M8       |
| LDP12-100                       |                 | 100                                          | 1280.0         | 50                         | 100                | 100                              | 328               | 12.91 | 172   | 6.77  | 220    | 8.66 | 11.5   | M8       |
| LDP12-120                       |                 | 120                                          | 1536.0         | 60                         | 100                | 100                              | 328               | 12.91 | 172   | 6.77  | 220    | 8.66 | 13     | M8       |
| LDP12-150                       |                 | 150                                          | 1920.0         | 75                         | 100                | 100                              | 483               | 19.02 | 170   | 6.69  | 240    | 9.45 | 14.5   | M8       |
| LDP12-200                       |                 | 200                                          | 2560.0         | 75                         | 150                | 150                              | 522               | 20.55 | 240   | 9.45  | 220    | 8.66 | 20.5   | M8       |
| LDP12-230                       |                 | 230                                          | 2944.0         | 115                        | 150                | 150                              | 522               | 20.55 | 268   | 10.55 | 220    | 8.66 | 23     | M8       |
| LDP12-300                       |                 | 300                                          | 3840.0         | 120                        | 150                | 150                              | 522               | 20.55 | 268   | 10.55 | 220    | 8.66 | 30     | M8       |
| LDP12-400                       |                 | 400                                          | 5120.0         | 120                        | 150                | 150                              | 522               | 20.55 | 268   | 10.55 | 220    | 8.66 | 38     | M8       |
| LDP24-12                        | 25.6            | 12                                           | 307.2          | 6                          | 12                 | 12                               | 165               | 6.50  | 125   | 4.92  | 175    | 6.89 | 3      | M5       |
| LDP24-24                        |                 | 24                                           | 614.4          | 12                         | 20                 | 20                               | 197               | 7.76  | 165   | 6.50  | 170    | 6.69 | 5.8    | M6       |
| LDP24-30                        |                 | 30                                           | 768.0          | 15                         | 20                 | 20                               | 229               | 9.02  | 138   | 5.43  | 217    | 8.54 | 7.2    | M6       |
| LDP24-42                        |                 | 42                                           | 1075.2         | 21                         | 42                 | 42                               | 260               | 10.24 | 169   | 6.65  | 215    | 8.46 | 11     | M8       |
| LDP24-50                        |                 | 50                                           | 1280.0         | 25                         | 50                 | 50                               | 328               | 12.91 | 172   | 6.77  | 220    | 8.66 | 10.5   | M8       |
| LDP24-60                        |                 | 60                                           | 1536.0         | 30                         | 50                 | 50                               | 483               | 19.02 | 170   | 6.69  | 240    | 9.45 | 13.5   | M8       |
| LDP24-70                        |                 | 70                                           | 1792.0         | 30                         | 50                 | 50                               | 483               | 19.02 | 170   | 6.69  | 240    | 9.45 | 14.5   | M8       |
| LDP24-100                       |                 | 100                                          | 2560.0         | 50                         | 100                | 100                              | 522               | 20.55 | 240   | 9.45  | 220    | 8.66 | 23.5   | M8       |
| LDP24-120                       |                 | 120                                          | 3072.0         | 60                         | 100                | 100                              | 522               | 20.55 | 268   | 10.55 | 220    | 8.66 | 24     | M8       |
| LDP24-150                       |                 | 150                                          | 3840.0         | 75                         | 100                | 100                              | 522               | 20.55 | 268   | 10.55 | 220    | 8.66 | 27     | M8       |
| LDP24-200                       |                 | 200                                          | 5120.0         | 100                        | 150                | 150                              | 522               | 20.55 | 268   | 10.55 | 220    | 8.66 | 38     | M8       |
|                                 |                 |                                              |                |                            |                    |                                  |                   |       |       |       |        |      |        |          |
| Charging temperature            |                 |                                              |                |                            |                    | (0°C~50°C )                      |                   |       |       |       |        |      |        |          |
| Discharge temperature           |                 |                                              |                |                            |                    | (-20°C~60°C )                    |                   |       |       |       |        |      |        |          |
| Recommended Storage Temperature |                 |                                              |                |                            |                    | (10°C~35°C )                     |                   |       |       |       |        |      |        |          |

## Performance Curve

