



LDP Series Lithium Iron Phosphate Battery

Ideal LiFePO4 battery Solution For Energy Storage System

LDP Series Lithium Batteries LiFePO₄ Battery Solution for Energy Storage System



Safer



Smarter



Simpler



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 :

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:

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.

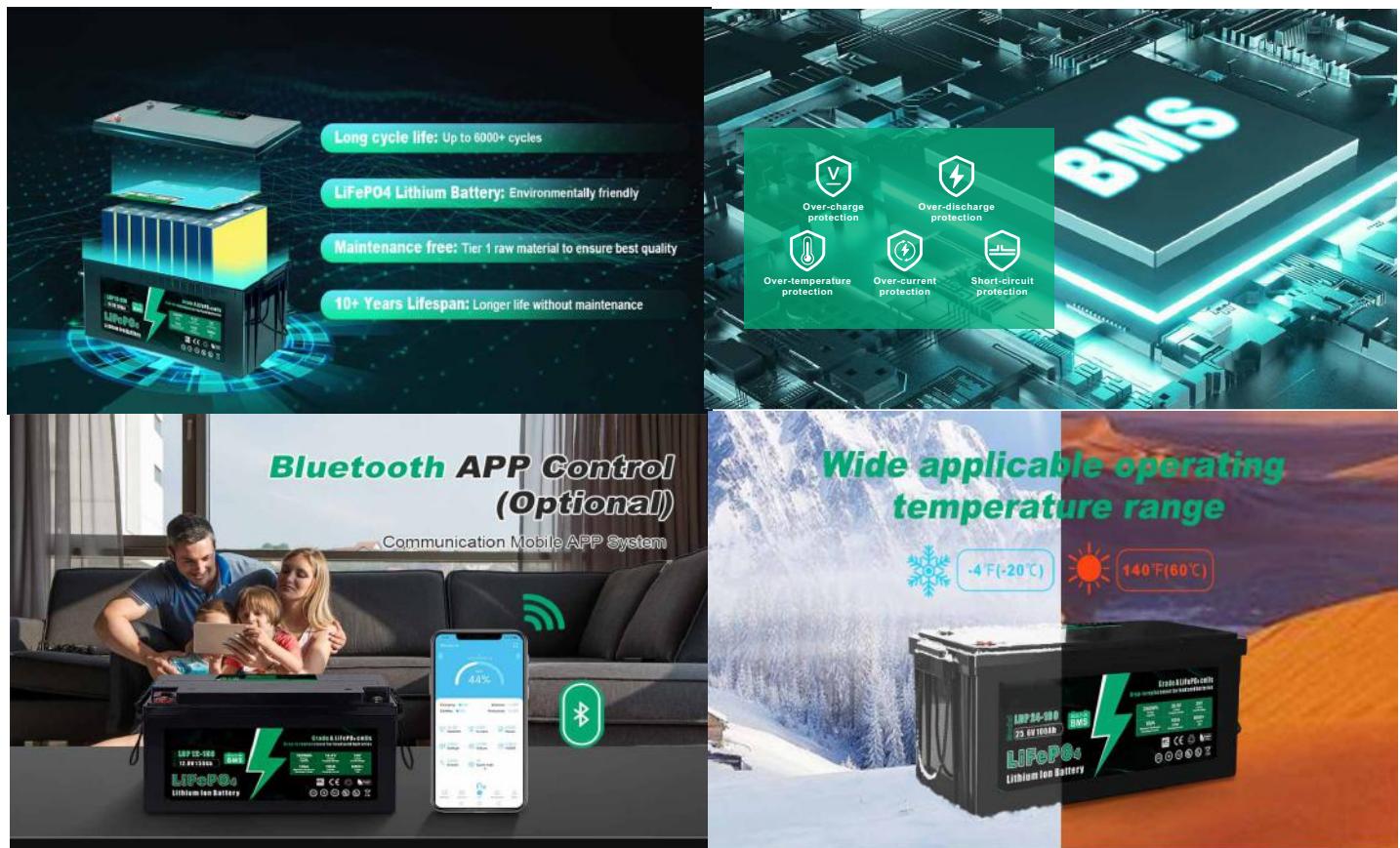
Temperature tolerant:

-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:

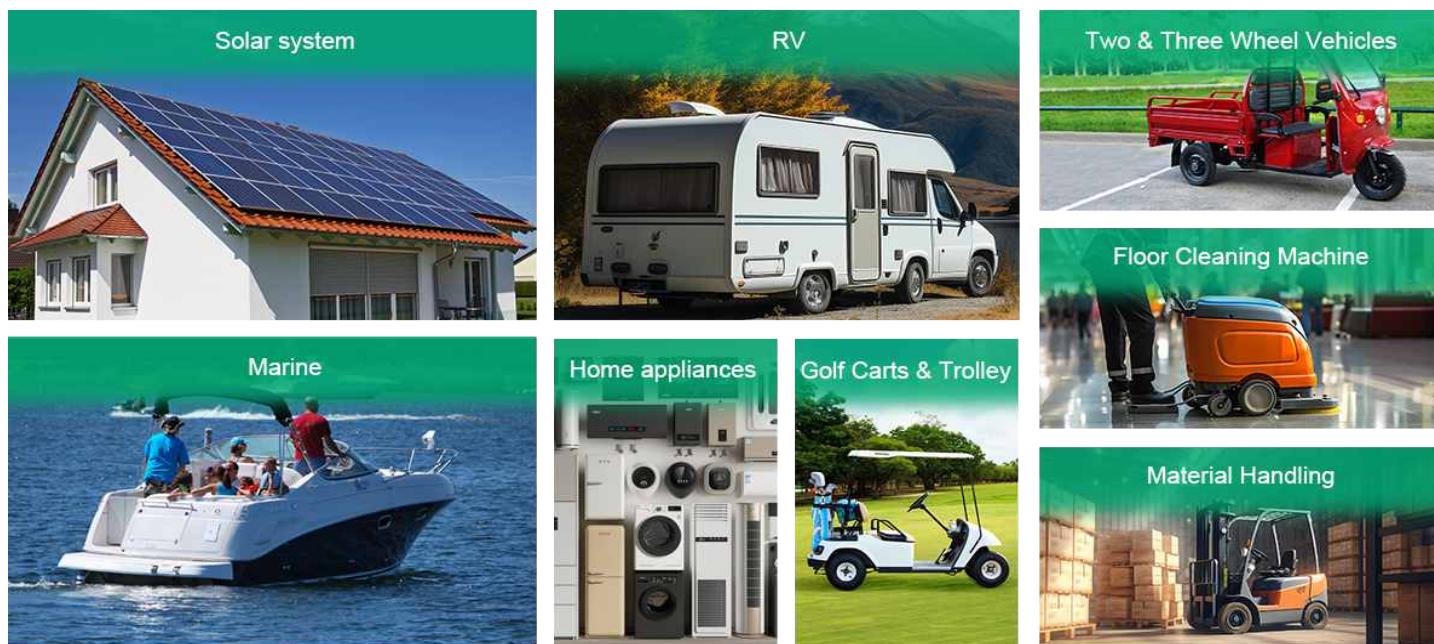
Adopt lithium iron phosphate technology which is a totally environment friendly green energy storage solution.

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 our 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.

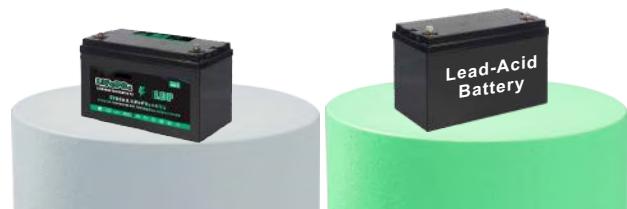
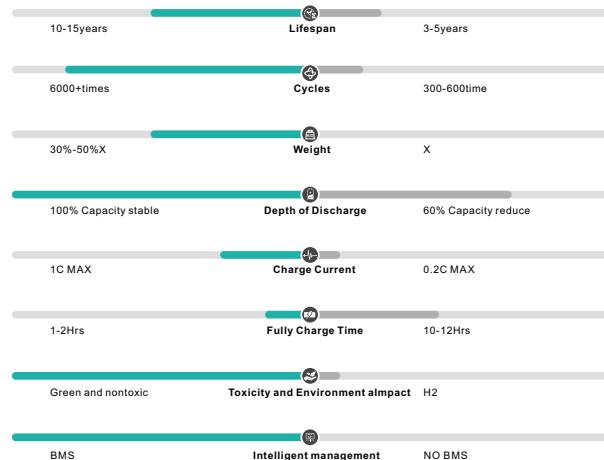
Smarter

- 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 (V) | Rated Capacity @ 5-HR Rate (77°F/25°C) (Ah) | Typical energy (Wh) | Recommended charge current (A) | Max charge current (A) | Max continuous discharge current (A) | Outline Dimension | | | | | | Weight (kg) | Terminal |
|---------------|---------------------|---------------------------------------------|---------------------|--------------------------------|------------------------|--------------------------------------|-------------------|------------|-------------|-------------|------------|-------------|-------------|----------|
| | | | | | | | Length (mm) | Width (mm) | Height (mm) | Length (in) | Width (in) | Height (in) | | |
| 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

