

# [Headline] Wield the power of LiFe

**[Subheading]** Long-lasting. Flexible. Powerful. Supercharge your devices with our new high-performance LiFePo4 battery cells.

## [Block 1] Introducing the LiFePo4 100Ah and LiFePo4 280Ah

Our lithium iron phosphate (LiFePo4) battery cells live longer, charge faster, and waste less energy than regular lead-acid batteries. And that's all while being smaller and lighter too. It's what's on the inside that counts, after all.

### **LiFePo 100Ah**

A battery cell you can rely on. Designed for portability and power.

Nominal capacity	Nominal voltage	Standard discharge	Weight
100Ah	3.2V	0.33C	2.04±0.05Kg

### **Feather-weight champion**

The LiFePo4 100Ah battery cell packs a serious punch while only clocking in at around two kilograms. Take it anywhere, install it in no time.

### **Long-lasting power**

Featuring a 100aH capacity and 3.2V output, the LiFePo4 100Ah offers a reliable power source that'll stick by you through thick and thin.

### **Perfectly balanced**

Experience a steady release of power across the entire charging cycle. With a 0.33C constant current, 3.65V constant voltage, and a discharge of 2.5V, the LiFePo 100Ah safely winds down every time to maintain peak performance.

## LiFePo4 280Ah

Holding its own in tough conditions, the LiFePo4 280Ah provides total peace of mind no matter the application.

Temperature range	Cycles	Charge current	Max voltage	Dimensions
-20~60°C	≥5000	0.5C	3.65V	Width: 173.9±0.5mm Height: 207.3±0.5mm Depth: 71.7±0.8mm

### Wide temperature range

The LiFePo4 280Ah can operate in temperatures from 0 to 60°C while charging and -20 to 60°C while discharging. It'll keep going 24/7 through extreme heat or cold to make sure your devices run at full speed.

### Seamless integration

Tight spaces? Check. Hard-to-reach angles? Check. Application potential? Unlimited. Featuring super compact dimensions, the LiFePo4 280Ah fits neatly into place, wherever that place may be.

### Self destruct mode – “off”

Regardless of whether it's using a continuous or pulse current, the LiFePo4 280Ah will stop charging once the cell voltage or temperature spikes too high. In other words, your battery cells won't be damaged.

### Here to stay

With around 5,000 life cycles, the LiFePo4 280Ah provides lasting performance. Know what the average cycle time of a lead-acid battery is? 700. You do the math.

## **[Block 2] Top industries for LiFePo4 batteries**

Versatility is key to our LiFePo4 battery cell range. Here are some examples of industries where LiFePo4 batteries can make a real difference:

### **Residential buildings**

Watch as LiFePo4 batteries safely power your building for a decade or more. Their stable chemistry means they won't overheat, catch fire, or cause medical hazards, allowing them to sit comfortably alongside your residents, and they take up [65% less space](#) than lead-acid batteries. They can also store surplus energy for peak times to help you [slash electricity rates in half](#) (you'll get [1 to 4 Watt-hours per dollar](#) – double that of lead-acid batteries). Whether you're managing a bustling hotel or a secluded eco lodge, LiFePo4 batteries offer a reliable and sustainable power source for uninterrupted five-star service.

### **Data centers**

We rely on data centers to power our digital world, they rely on stable batteries to stay online. With ultra-fast charge and discharge times, LiFePo4 batteries prevent costly power outages in data centers while their small size offers more room for IT cabinets. They operate happily at high temperatures too, with a thermal runway of around [518°F \(270°C\)](#), which cuts back investment in cooling equipment. This translates to [35% lower overall costs and a 70% carbon footprint reduction](#) compared to using lead-acid batteries – all without compromising performance.

### **Solar energy**

There's no bigger turn-off when it comes to solar technology than having to constantly replace the batteries. That's why our LiFePo4 cells are in it for the long-run. They easily hook up to solar panels and gently release their power over time, allowing them to charge solar panels with up to [99% efficiency](#). While lead-acid batteries can get damaged when their charge drops below 50%, LifePo4 batteries have no such trouble – their capacity is 100% available. This means they can withstand thousands of charge and discharge cycles and keep pace with the long life-span of solar technology to provide a hands-off, cost-effect solution for eco-conscious customers.

## UPS systems

When all else fails, LiFePo4 batteries can form the last line of defense for uninterruptible power supply (UPS) systems. With a cycle stability [15-20 times longer](#) than lead-acid batteries, they can safely cover longer system downtime and bridge the changeover from utility to emergency power with confidence. Combine that with the [1000 one-minute discharges](#) available during their lifespan and it's easy to see how LiFePo4 batteries meet the demanding energy and safety requirements of critical UPS systems to provide long-lasting security.

### [Block 3] 5 reasons why you should be using LiFePo4 battery cells

#### 1: You'll save money...

We'll be honest, a high-quality LiFePo4 battery cell will cost more than your average lead-acid type at first. For good reason though – it pays dividends in the long run. You won't spend a dime on replacing LiFePo4 battery cells for years.

#### 2. ...Space

Thanks to the close arrangement of their prismatic cells, LiFePo4 batteries are [half the size and weight](#) of lead-acid batteries, saving precious space in tight operations.

#### 3. ...and Time

Put down the tools – there's no need to maintain the electrolyte or water level of your LiFePo4 batteries. And with no memory effects due to low self-discharge, you can just sit back and enjoy a decade or more without costly operational shutdowns or risky maintenance jobs.

#### 4: LiFePo4 is sustainable

Experience power without pollution. LiFePo4 battery cells can be recycled when they (eventually) need disposing of. They also consume far less energy over their lifetime than other battery types, and if they're overcharged, LiFePo4 cells don't produce nearly as much heat as regular batteries thanks to their stable internal chemistry and efficient thermal runway. Good news for the environment.

#### 5. The future is bright

The market for lithium iron phosphate batteries is set to hit over [\\$50 billion by 2028](#), with an annual compound growth of 25.6%. [Costs are falling](#) and awareness is growing – there's never been a better time to make the switch to LiFePo4.

## Why LiFePo4 over lead acid?

**10+ year lifespan**

**50% smaller and lighter**

**100% safer**

### [Block 4] Behind the technology of LiFePo4 battery cells

Lead-acid batteries – your time is up. Say goodbye to cheap and toxic power sources and hello to LiFePo4. Our cells offer a host of advantages over typical battery types.

#### **Long lifespan**

We've said it before and we'll say it again – LiFePo4 batteries live for a long time. Sporting 5000 life cycles at an 80% depth of discharge, they can outlast lead-acid batteries by a factor of five or more.

#### **Lightning-fast charging**

The design and placement of their prismatic cells means LiFePo4 batteries can charge up in just two hours. In storage, meanwhile, they only discharge around 2-3% of their energy each month. Now compare that with lead-acid batteries, which are lumbered with a 10–12 hour charge time and 20% discharge rate each month and, well, need we say more?

#### **High energy density**

LiFePo4 batteries can store around four times more energy than other battery types. This high energy density allows them to be lighter, more portable, and gives them the ability to deliver enormous amounts of power in short periods of time, making them ideal for applications requiring a high peak power output.

#### **Safety**

LiFePo4 batteries are free from rare earth metals and toxic chemicals. They don't leak liquids or release harmful fumes such as hydrogen sulfide, and due to their stable electrolytes and efficient thermal runways, they won't catch fire – all things which lead-acid batteries have a real potential for.