



# Homeowner s Guide to Lithium Solar Batteries 2024

## Homeowner s Guide to Lithium Solar Batteries 2024

We work with a panel of solar experts to create unbiased reviews that empower you to make the right choice for your home. No other solar site has covered renewables as long as EcoWatch, which means we have more data and insider information than other sites.

When you decide to go solar, you'll have an array of solar panels installed on your roof. If you don't know how solar panels work, they collect energy from the sun and convert it into an electric current. The direct current (DC) electricity passes through an inverter, which turns it into an alternating current (AC), the type of electricity we use in our homes.

Most home solar installations are connected to the local power grid, meaning any excess energy produced by your solar energy system is fed back to the grid. If your utility company has a net energy metering program, you can receive credits for this excess energy. If your solar system does not produce enough energy to power your home at any point, you'll draw energy from the grid.

Solar batteries are renewable energy storage systems that store energy produced by your solar system rather than sending it back to the grid. This allows you to use the stored energy when your solar panels are not producing any energy (like after the sun sets or on overcast days). Lithium solar batteries are energy storage devices typically made with lithium iron phosphate.<sup>1</sup>

For that reason, Blue Raven Solar developed an innovative solar financing plan that offers in-house, flexible, zero-money-down options. The results speak for themselves, as Blue Raven Solar is now one of the fastest-growing solar companies in the nation and was recently acquired by SunPower. Its BluePower Plus+ plan (exclusive to Blue Raven) mimics the flexible structure of a lease while still providing the greatest benefits of owning your system.

Eligible homeowners enjoy 18 months of solar power before having to pay their first bill. When coupled with the federal solar investment tax credit (ITC), the initial energy savings can offset more than a third of the overall cost of a system before requiring a dollar down.

In contrast, other installers can only offer similar financing through solar leases, PPAs or third-party providers (such as Mosaic or Sunlight). Third-party loan providers can complicate the process, while opting for a loan or PPA will disqualify you from some of solar's biggest benefits (additional property value, federal solar tax credit and local solar incentives).

Before we get into specifics, you should know that there are a few different types of lithium technology -- regular lithium, lithium-ion and lithium iron phosphate (LiFePO<sub>4</sub> -- also known as LFP). Standard lithium

# Homeowner s Guide to Lithium Solar Batteries 2024

batteries are not rechargeable and, therefore, not fit for solar.

We already use lithium-ion technology in common rechargeable products like cell phones, golf carts and electric vehicles. Most lithium-ion solar batteries are deep-cycle LiFePO<sub>4</sub> batteries. They use lithium salts to produce a highly efficient and long-lasting battery product. Since they are deep-cycle batteries, the products do very well even when the attached solar panels experience inconsistent charging and discharging.

Before Tesla developed its Powerwall I lithium-ion solar battery 2015, most solar batteries used lead-acid battery banks. There are now many lithium-ion solar batteries on the market, allowing a range of options for homeowners and their various needs.

The DoD of a battery is the amount of the stored energy in the battery that can be used relative to its total capacity. Most batteries come with a recommended DoD to maintain the health of the battery.<sup>2</sup>

For example, the Tesla Powerwall II has a 100% depth of discharge (or so it advertises), which theoretically means that you can use 100% of the energy in the battery before it has to be recharged (we believe that it's closer to 80% -- fully draining the Powerwall between charges will significantly lower the battery life).

Contact us for free full report

Web: <https://www.sumthingtasty.co.za/contact-us/>

Email: [energystorage2000@gmail.com](mailto:energystorage2000@gmail.com)

WhatsApp: 8613816583346

