



BENEFITS OF BATTERY BACKUP



Why install a battery backup

During power outages, a backup battery can keep essential appliances and systems running, such as lights, refrigerators, medical devices, and security systems. Battery storage also helps you maintain a comfortable and safe living environment. In case of grid failures or energy shortages, a back-up battery provides a sense of security knowing you have a reliable power source.

Pairing a battery with solar panels

Solar and energy storage are a natural pairing. During an outage, battery backup keeps your solar system running so that any available solar energy powers your essential loads and recharges your battery for use at night. This extends the length of time you can be self-sufficient while the grid is out.

Incentives & Rebates

- PSE Flex Batteries Program: Up to \$1,000 per battery, plus up to \$500/year
- PSE Flex Batteries Enhanced Incentives: Up to \$10,000 for qualifying customers
- Tesla Battery Rebate: Up to \$1,000 rebate when you install Powerwall or expansion units



Uninterrupted Power

Ensures power in the event of a grid outage



Maximize Solar Power

Utilize more of your solar energy on-site



Energy Security

Enhances your energy security when the grid is unstable



Reduces Noise and Air Pollution

Eliminates noise and air pollution caused by generators



Stable Energy System

Takes the strain off the energy grid during high-energy use periods

Key factors to consider with a battery backup system

- ✓ **During an outage, what devices or appliances are:**
 - Essential to have
 - Nice to have
 - Not needed
- ✓ **How long of an outage do you want to prepare for?**
 - Hours
 - Days
- ✓ **How much space is available near your electrical panel?**

Differences between batteries and generators

When it comes to keeping your home powered during outages, both battery backup systems and traditional generators are effective solutions. Each option delivers reliable power in a blackout, and both have their own pros and cons. Selecting between a battery backup system and traditional generators requires evaluating your unique power needs, budget, safety considerations, and environmental values.

Battery Backup Systems

Pros:

- **Clean Energy:** Stores energy from renewable sources like solar, reducing reliance on fossil fuels.
- **Quiet Operation:** Operates silently compared to noisy generators.
- **Low Maintenance:** No fuel, oil changes, or moving parts, leading to fewer repairs.
- **Seamless Power:** Provides an almost instant transition when the grid fails.
- **Environmentally Friendly:** No emissions, making it a green choice.
- **Warranty:** Most manufacturers offer at least 10 years of coverage under a product warranty, while some offer 15 or 20 years.

Cons:

- **Higher Initial Cost:** More expensive upfront, though long-term savings may offset this. Incentives like tax credits and rebates can significantly lower those upfront costs.
- **Backup Duration:** Depending on battery size, provides power for several hours or a few days.
- **Dependency on Solar or Grid:** Needs to be charged, so less effective in long outages if solar or grid power is unavailable.

Generators

Pros:

- **Backup Duration:** Can run as long as fuel is available, making it ideal for extended outages.
- **Lower Upfront Cost:** Generally cheaper to purchase and install compared to battery systems.
- **Independent of Solar or Grid:** Doesn't rely on energy sources like solar panels or grid electricity.

Cons:

- **Noisy Operation:** Generators are loud, which may be bothersome.
- **High Maintenance:** Requires regular fuel refills, oil changes, and periodic servicing.
- **Fuel Costs & Emissions:** Relies on gasoline, propane, or diesel, which can be expensive and environmentally harmful.
- **Delayed Activation:** Often takes several seconds to minutes to start up after a power outage.