



Battery Energy Storage vs. Generator Home Back-Up Power Systems

Which is Right For You?

Battery Back-Up System



- Connected to your solar system's PV array and/or the electrical grid.
- Offers continuous source of fueling that is available daily and indefinitely (energy from the sun).
- Uses natural power from the sun's energy that is free, abundant, better for the environment, and requires no delivery labor or delivery costs.
- Provides uninterrupted power.
- Power stored is limited – depending on size, may only be able to back-up essential systems for several hours, or may require purchase of multiple units to cover your complete demand and longer time periods.
- Very little maintenance and repair is required and equipment is much less likely to break down or malfunction.
- Upfront costs for hardware and installation are greater but it has no cost to operate, available tax credits that can offset up to 50% of installed cost, double the lifespan of a generator with significantly longer warranty, odorless and quiet, and can lower or even eliminate your annual power costs.

Generator Back-Up System



- Connected to your natural gas supply or independent LP gas or diesel tank.
- Needs continuous refueling (every 24-48 hrs) which may not be convenient to obtain or available during an emergency.
- Uses fossil fuels which can be costly, in short supply and more expensive during emergencies, incur delivery labor/expenses and/or fees, and pollute the environment.
- May take up to a minute to activate power.
- Often a better option for households that want to use a lot of power during prolonged periods of utility power loss – for example, several weeks off the grid during a time when there is not much sunlight.
- Periodic testing, inspection, operation, and maintenance is required along with costs for fuel, repairs, and professional assistance.
- Upfront costs for hardware and installation are less but it has significant cost to operate, no availability of tax credits to offset installed cost, lower typical lifespan with significantly shorter warranty, noise and odor when operating, and raises rather than lowers your overall annual power costs.