



Using Inverters for Back-up Power...

An inverter converts stored battery power to 120 VAC. In a renewable energy system, such as a solar or wind system, inverters are used to provide power in remote locations. But the same equipment can be used to provide power to backup equipment found in offices, suburban homes or at your desk.

What do I need to build a backup system?

There are four components to a back-up system:

Component	Sizes	Notes
Inverter Battery Charger Battery Auto-Transfer	300 to 5500 watts 5 to 150 amps 50 to 2000 AHR 5-50 amps AC	Output greater than largest AC load Recharge batteries in 8-16 hours after discharge Sized to run loads for 1-48 hours To switch to back-up power in event of power loss

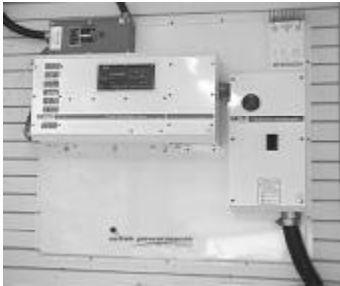


Choose a Back-up System that includes an inverter with transfer switch and battery charger with enough power to handle the type of equipment you want to run. If you don't know how much power you'll need, see the table on Page 2. The battery bank is selected with enough reserve storage to power your equipment for as long as needed, typically one to 48 hours. SPS or its' Dealers can calculate the battery bank size, if you need advice. Note that many of the inverters we offer have built-in automatic transfer switching to detect a power failure and connect the inverter to the load circuits. If some of the loads you wish to run are sensitive to power output quality, you may elect to use a pure sine wave inverter.

How do I install a Back-up Power System?

A Back-up Power System consists of an inverter, with a battery charger and battery bank. Smaller systems can be installed near the loads they will run - i.e. the computer or the furnace. Larger systems are typically installed in a basement or garage, near the electrical panels.

The electrical circuits that are to be run from the inverter must be separated and wired through the inverter. For home backup systems, a small AC sub-panel for the emergency loads can be installed next to the main panel (as shown above). Don't forget to enclose the batteries and vent them to the outdoors. SPS has designed many back-up power packages for different applications. If you have any questions about the choice of a system to fit your needs, please contact SPS or your local Dealer.



Home & Commercial Back-up Systems...

Our home and commercial Back-up Systems can protect your home or business from power failures. With sizes from 300 to 5500 watts, they can run sensitive loads of all sizes. Install with any of our Solar-Series battery systems and you can have four to 48 hours of protection.

Back-up Systems can be as simple as a hand-held inverter, or a completely automatic system connected to the electrical panel. To simplify installation, we offer fully integrated panels with inverter, charger and transfer switching.

Our qualified sales staff can help design a system to meet any power needs.

<i>Typical Back-up Power Systems:</i>		
Inverter Model	Max. Load	Application
GP-300	300 W	Pellet stove, TV
GP-500SB	500 W	Computer
GP-1750	1500 W	Well Pump
GP-2500	2500 W	Furnace fan, sump pump
ProSine 2.0	2000 W	Small Business UPS
PB-SW4024	4000 W	Home UPS
PB-SW5548	5500 W	Home/Business Back-up