

Solar Powered Residential/Small Business Systems



SAVE MONEY AND INCREASE RELIABILITY FOR RESIDENTIAL AND SMALL BUSINESSES WITH SOLAR POWERED ELECTRICAL SYSTEMS .



Many residences and small businesses in the developing world do not have a reliable electrical grid or 24-7 access to electricity without using a noisy and expensive fossil fuel generator.

GSI solves the problem by installing a solar powered energy generation system with battery backup. The system integrates with an existing power grid and generators and seamlessly starts up when the grid goes down. In the unlikely event that there are several sunless days, your generator may be used to recharge the batteries.

Global Solace is providing the most reliable solar electric system using German engineered products, USA installation quality standards, and the world's best Tier 1 solar modules.

Benefits: The solar electricity allows the homeowner to have the comforts of 24 hour air conditioning, seven days per week without the expense of generators and costly fossil fuels. In addition, the solar PV is quiet so that the noise of the generator is eliminated. Designed and built to the USA electrical codes and standards, the system is designed to last for its warranted life of 25 years using best German made electronic components and Tier 1 solar modules.

Please call to discuss your home or business needs!

Ask about our solar powered rural schools and health clinic solutions!

Save Money, Increase Reliability by Investing in Solar Power

- Solar power systems are a long term investment which will save money by producing electricity from the sun offsetting the very high costs of power from the electrical grid.
- Solar power systems provide a stable and reliable source of power for 24 hours per day, 7 days per week, 52 weeks per year, and 20 to 25 years.

Global Solace
empower • inspire • sustain

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Solar Powered Residential/Small Business Systems

The solar power system uses state of the art solar modules to capture energy from the sun and convert it to electricity to run the household or business electrical appliances during the day and night. The system is designed for extra daily production that is stored in batteries for use in the night using the HOMER program from the US Dept of Energy. GSI designs the system to balance the electrical loads throughout the day with the solar modules and battery storage. The system seamlessly integrates into an operating local grid if it exists and to an auxiliary generator that is available for times when the solar power is not enough.

GSI designs the system to power your air conditioning units, refrigerators and freezers, and other 24 hour appliances for the **full 24 hours of the day with no blackout periods**. In cases where the grid exists but is unreliable, the system seamlessly starts operation when the grid goes down. The system **saves money** by replacing expensive grid electricity with free solar generated electricity. The expensive grid or the expensive, noisy, dirty generators are used only when necessary to recharge batteries.

Solar energy systems are **reliable**, have no moving parts, are typically warranted for up to 25 years, and work effectively in the hot, humid, and sometimes dusty climate found in the developing world. GSI provides the **highest quality systems** by combining the design services of the US Department of Energy, installation quality of the US electrical codes, and product quality using German engineered electronics and the best Tier 1 solar modules.

GSI has designed a "standard" system of 5 kW however it is **easily expandable** by adding solar modules and batteries. The supporting components, such as wiring, and switching equipment, are typically oversized so that the basic system can grow as your needs grow over the 25 year lifetime of the system. The system is **constantly monitored** by an internet based system whose output is visible to the owner and to the GSI engineers in the United States using a standard web page.

Benefits: Quality, Reliability, and Cost Savings

- Long Term Support for Sustainable, Successful Installation
- Reliability - site visits and designs by GSI employees
- Quality - USA engineering, German electronics, Tier 1 solar modules, and installations following USA electrical codes
- Cost Savings - solar investment pays for itself then makes money
- Operational & Maintenance Contracts available
- Easily expandable in 5 KW increments

Hardware Features

- 5 KW solar array with 230 volt AC at 50 HZ or 240 volt 60 HZ
- Maintenance free Gel batteries for storage
- SMA SunnyBoy grid tied inverter
- SMA Sunny Island inverter/controller with batteries
- Tier 1 solar modules from the most reliable manufacturers
- Roof, pole, or ground mount options
- Internet access allows remote system monitoring by GSI and owner on webpage
- Generator connection at 230 or 120/240 volts
- Wiring with conduit to USA specifications
- Optional: computer hardware and software
- Long runs from solar array site to home/business are allowed
- AC Coupled design accommodates multiple charging sources, sun, wind, grid and generators

Other Possible Installations

- Small Shopping Malls
- Government Offices
- Workshops
- Rural Village electrification
- Hospitals and Health Clinics
- Hotels
- Schools
- Mosque or Church
- Telecommunications equipment
- Irrigation
- Desalinization plants

System Appliances

All typical AC electrical appliances are powered, such as lights, TVs, radios, cell phone chargers, and so forth, however the system is designed to keep the 24 hour, 7 day per week indispensable air conditioning units, refrigerators, and freezers operating at all times.

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