



## Description

Onera Systems has the latest innovative solar solution for your home, **SolGuard™**. It opens new horizons for the use of Solar Energy in your home providing a unique turnkey system to meet all your energy needs.

**SolGuard™** eliminates the need for diesel power and is the right step that paves the way for a revolution in the world of Solar Energy applications.

**SolGuard™** is a model that provides a source of reserve electric power. The system ensures that you can live in your home, without power outages in addition to saving electricity consumption from the public network and eliminate diesel generator noise & costs. The system works by generating electricity directly on the internal network of the house and takes advantage of the power stored on batteries to meet the needs of your home.

**SolGuard™** can be installed anywhere on or in the grounds of your house, it is a flexible system that is easy to erect and maintain.

## Operation

**SolGuard™** PV Solar System has been designed to bridge power cutoffs and provide seamless power supply to homes. Not only this, but **SolGuard™** will also sustain power supply during day time at ZERO grid consumption by automatically replacing it with Solar Energy, thus, allowing for free-of-charge electricity, and saving vital equipment from sudden power loss.

**SolGuard™** is featured by complete noiseless operation with zero emissions that complements natural tranquility at home. Yet, **SolGuard™** will save quality time where few seconds of power cutoff would cost more than 100 electricity bills.

**SolGuard™** provides remote monitoring of system performance by means of software powered equipment, whereby system output and information can be monitored using PC, cell phone, or iPod.

**SolGuard™** is also equipped with optional "smart" controller that regulates loads to match system output.

**SolGuard™** consists of World-class quality PV solar modules which generate electricity, batteries to store energy, Grid Inverter with Backup Inverter to regulate voltage and protect batteries while charging and discharging, also, transform DC to conventional AC for operation of home appliances and equipment.

**SolGuard™** operates in a smart exquisite manner. During daytime, PV solar modules transfer sunlight into electricity which goes directly to home local grid to operate home appliances. If home load is larger

than PV modules power, smart inverters compensate the difference from the grid, otherwise, excess power from PV modules goes directly to batteries for recharging. In the occasion of grid power cutoff during daytime, PV modules electricity goes directly to home local grid to operate home appliances, however, if home load is larger than PV modules power, the difference is compensated from the charged batteries, otherwise, the excess from PV modules goes directly to batteries for recharging.

In the occasion of grid power cutoff during nighttime, smart inverters, allows batteries to provide home with necessary power for a sufficient time, until grid power is back. At this instant, smart inverters exchange batteries' power with grid power, and allow the grid to recharge batteries to be ready for future use.

**SolGuard™** is a "Fix-n-Forget" system that is virtually free of maintenance charges and onerous refueling hassle required for fossil fuel generators.



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