

The Company

New Power Technologies specialise in the development and manufacture of electrical protection and efficiency products and solutions. New Power Technologies has a history of technical innovation and practical engineering solutions for critical operational environments. Our SensorGuard products are deployed for both general commercial and highly demanding applications in industries such as Telecommunications, Transportation and Energy. New Power Technologies are based in Nebraska in the U.S.A. All design and manufacture is carried out at our Nebraska facility

What does SensorGuard deliver to your Business

SensorGuard provides the best level of protection possible for your systems. Originally designed for the telecommunications service environment, SensorGuard has been designed and built to exacting standards. SensorGuard provides a strong return on investment by delivering costs savings on a number of fronts.

- **Achieve maximum system up time**
SensorGuard achieves this by only removing the grid supply so back up power can take over when the threat of damage is real; a unique ability of the SensorGuard system
- **Reduce capital costs due to equipment damage**
By removing connection to the grid supply, site equipment will not be damaged by lightning induced surges. This includes your UPS systems which are there to provide back up upon power failure.
- **Reduce maintenance costs**
The reduced level of equipment damage requires fewer maintenance hours. This also applies to cumulative (apparently random) equipment failures after storm activity

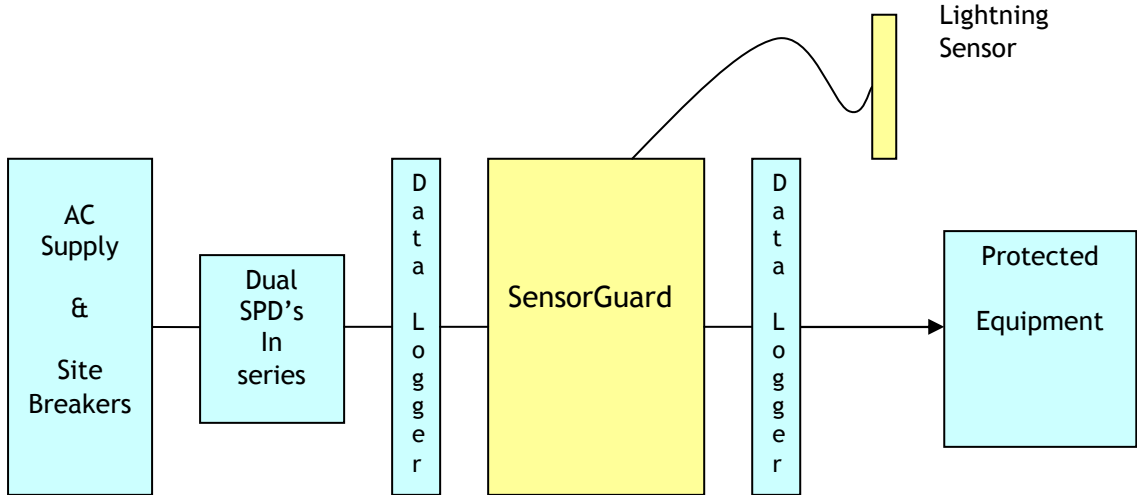
The Product

SensorGuard is designed to provide the level of electrical protection that only isolation from the grid supply can achieve. It is often stated that ‘unplugging’ your equipment is the best protection. This principle has been used for many years at large data centres, where switch over to back up power and then disconnection from the grid supply, is carried out upon warning of storm activity from a weather forecasting service. SensorGuard automates this process on a very cost effective basis, providing protection for small and large applications. Due to the ever more extensive use of electronics in the field, SensorGuard is designed to ‘outside plant’ standards, and is resistant to all weathers.

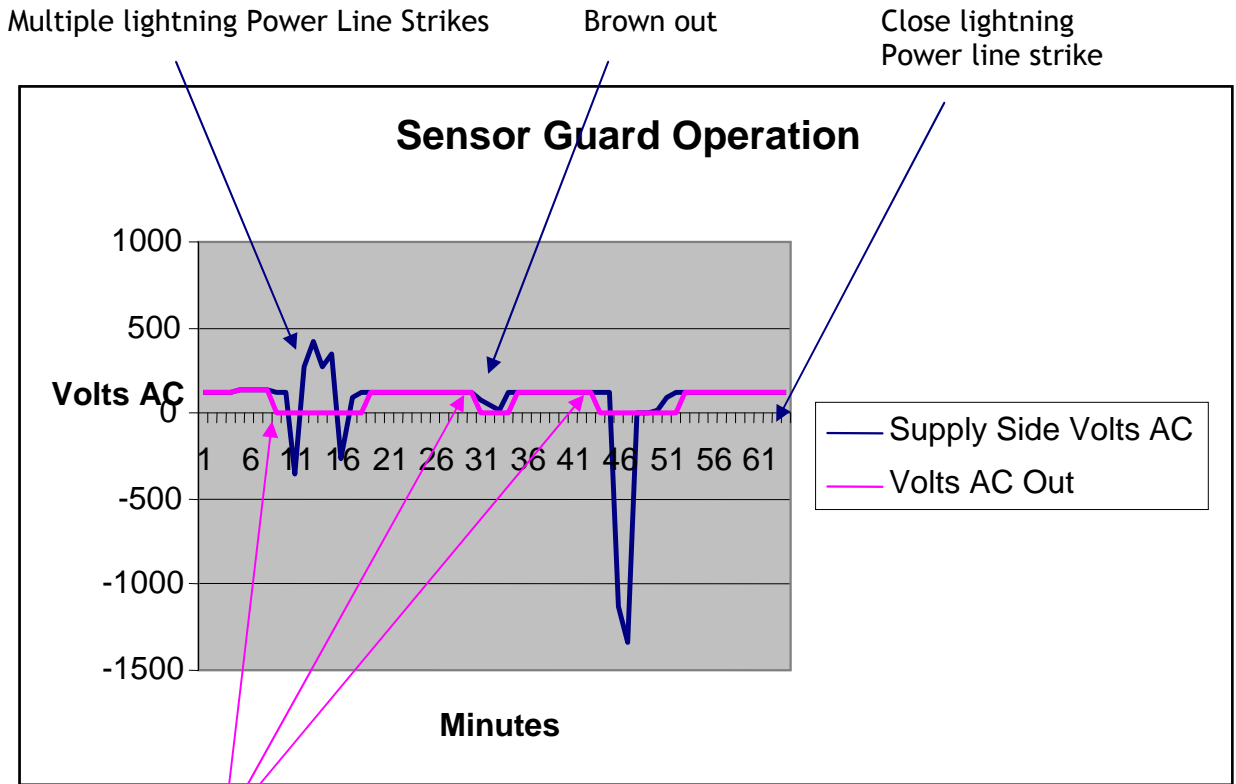
- Continually monitors AC power for instability. Monitors for threatening atmospheric conditions (Lightning Ground Strike activity.)
- Eliminates damage due to unstable power and peak load demand conditions.
- Eliminates fault current pathways through sensitive electronic circuits.
- Pro-active “Isolation” approach will complement all Surge Protection technologies.
- Rugged design assures you dependable protection in any environment.
- Comes in both “Plug-&-Play” and “Hard Wired” configuration.
- Low maintenance modular design for “in field” service & up grading.
- Ideally suited for a wide range of protection applications
- Complies to international IEC safety standards

Sensor Guard in Operation

To demonstrate how SensorGuard protects sensitive electronic equipment, data logging equipment was used to provide a direct comparison of supply side voltage and the voltage passed through by SensorGuard. The system was set up as shown below.



The resulting data shows how sensor guard isolates the protected equipment from the AC supply when Lightning activity or supply fluctuation is detected.



SensorGuard switches into protection mode when detector senses lightning activity or SensorGuard detects supply fluctuations.