

Why SineTamer®?

Facilities using SineTamer® devices typically experience:

- Fewer unexplained shutdowns
- Reduced repair and replacement costs
- Longer life for drives, controls and electronics
- Faster, more predictable ROI

It fits the facility – not the other way around

SineTamer® solutions are engineered to match applications without unnecessary features, oversized hardware or added complexity.

Backed by decades of real-world experience and global deployment, CP Automation and SineTamer continue to deliver practical, proven power protection.

Remember, good power protection shouldn't be complicated. We remove the guesswork by eliminating things that should not be stopping your production or wasting your valuable engineers' time, trying to find root causes to nuisance issues.

Peace of mind.



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For power quality enquiries:

www.cpaltd.net

PROTECTION FOR MODERN POWER



Today's facilities depend on sensitive electronics – drives, PLCs, controls, UPS systems, automation and connected equipment. These systems are powerful, fast and unforgiving when power quality slips.






Power quality problems aren't only caused by lightning, they come from the everyday electrical noise inside modern facilities.

SineTamer® is next-generation surge protection technology, designed to address the disturbances that cause the most damaging failures before they turn into downtime.

No complexity. No guesswork. Effective protection again and again. Up to 25-year warranty.

The root of power problems

Modern equipment creates electrical disturbances simply by operating. Every start, stop and speed change introduces fast, repetitive transients into power systems. Common sources include:

-  AC, DC & Servo drives
-  LED lighting and much more...
-  CNC machines
-  Direct-On-Line (DOL) & Star-Delta Starters
-  Auto Transfer Switches for Generator or UPS systems

These disturbances can occur frequently, slowly degrading sensitive electronics in the process, from high level to very low levels.

Traditional surge protection focuses on big, rare occurrences. It is unable to protect from low level transients due to threshold levels in its design, so the smaller, faster disturbances continue to disrupt critical equipment, with problems like these occurring:

- **Random faults and lockups**
- **Nuisance trips**
- **Premature control board failures**
- **Reduction in product life operation**

This in turn results in escalating maintenance costs. If protection doesn't address everyday reality, problems can become routine. Disturbances exist at much higher frequencies and are often invisible to conventional power quality protection.

Supraharmonics: The gap between harmonics and EMC is an emerging power quality challenge

Modern technologies such as VFDs, photovoltaic inverters, electric vehicle chargers and switch-mode power supplies all use rapid switching to control power. While efficient, this switching can introduce supraharmonics – high-frequency electrical disturbances typically occurring between 2 kHz and 150 kHz.

Unlike traditional harmonics, these disturbances exist at much higher frequencies and are often invisible to conventional power quality protection.

Why supraharmonics matter

Supraharmonics can travel throughout a facility's electrical system and interact with sensitive electronics, especially if false zero crossings occur.

Over time, they can contribute to:

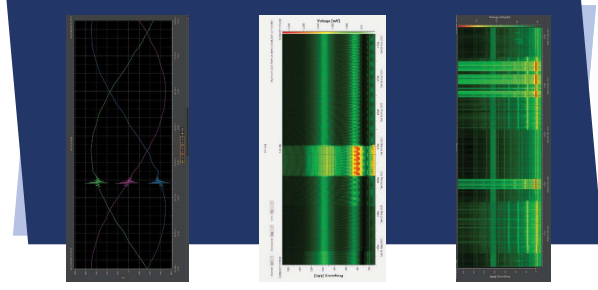
- **Random control system faults**
- **Nuisance trips and unexplained shutdowns**
- **False sensor readings**
- **Accelerated ageing of electronic components**
- **Gassing measured in oil analysis of Transformers**

How SineTamer® helps

SineTamer® can address supraharmonics using frequency-actuated attenuation, allowing the device to track the sine wave and respond to disturbances across the entire waveform.

What makes SineTamer® different

Unlike conventional surge protection devices that react only to voltage spike threshold, SineTamer® uses patented frequency-actuated attenuation to actively mitigate the problem before it becomes dangerous. This advanced approach allows the device to actively track and follow the sine wave itself, monitoring all 360 degrees of the waveform, not just peak voltage events.



Modern core components

SineTamer® devices use advanced, internally fused MOV technology, which provides higher energy handling per component while reducing unnecessary complexity. The result is a cleaner design with fewer failure points and improved long-term reliability, hence the warranty being up to 25 years depending on the model.

Simple diagnostics

Clear LED status indicators, and optional extras like audible alarms & relay outputs, give the user a feedback of when protection is compromised and system-wide monitoring provide immediate visibility without adding operational burden.

Solutions that scale

Units are available with

- **Peak surge current ratings up to 600 kA**
- **Voltage ratings up to 6.6 kV**

This range supports applications from standard commercial facilities to demanding industrial and infrastructure environments.

Frequency-responsive protection

Instead of reacting only to voltage spikes, SineTamer® responds to changes in frequency, enabling the unit to virtually eliminate false zero sine-wave crossings and diminish the impact of supraharmonics.

Built for real capacity

Higher per-mode energy capability means SineTamer® absorbs damaging energy instead of letting it pass downstream – protecting the equipment that matters most.





CP Automation
Keeping industry
in motion



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