

SUPPRESSION FILTER SYSTEMS

Suppression filter systems. Why does my facility need them?"

Deadlines. Data. Finished goods. Results. Regardless of the product or service your business provides, you depend on utility-supplied electricity to power computers, automated assembly lines, lab equipment, telecommunications networks, security systems and more. And there's no room in your budget for costly damage or downtime resulting from preventable electrical disturbances.

Today's microprocessor-based equipment and systems are dramatically different from the manually operated or tube-and-transistor products of a generation ago. Built with silicon chips and other sensitive components, your office machinery, LANs, WANs, automated production lines, and biomedical devices are highly vulnerable to electrical transients.

"I don't have a lightning problem. Do I still need protection?"

Although the most easily identifiable, lightning is not the only electrical disturbance or even the most frequent. In fact, non-lightning transients are much more common and are just as capable of causing equipment malfunction or failure.

Technically speaking, transients are short duration, high magnitude events that find their way into the electrical power distribution system. While lightning causes transients by striking in the vicinity of power lines, non-lightning transients are routinely generated in a number of ways:

- utility grid switching utility capacitor bank changes
- power factor correction capacitors Static charge build-up
- equipment interference transformer malfunction
- internal motors, switch mode power supplies and other internal components

Whether in the form of swift and catastrophic lightning or as a result of degradation from repetitive low-level transients, no work environment is immune from potential failure or malfunction resulting from the electrical disturbances that cost North American companies more than \$26 billion each year*. From the operations center of the U.S.'s largest commercial airline, which estimates power failures at \$1 million per minute, to the small office built around a personal computer, telephone system and fax machine, every facility with plug-in equipment will eventually be affected by electrical disturbances.

"How do suppression filter systems protect my facility?"

Suppression filter systems are installed between the power source and the load to be protected, either singly or in coordinated networks of multiple units. Once in place, suppression filter systems stand permanent guard as power quality "sentries" responsible for cleansing, filtering and regulating the electricity before it reaches your critical equipment. In this way, damaging transients are prevented from disrupting the processes you depend on each and every day. Potentially damaging spikes or surges are suppressed and neutralized, and system-upsetting high frequency noise is filtered and reduced to harmless levels.