



Abacus Business Solutions
15301 Roosevelt Blvd.
Suite 303
Clearwater, FL 33760
Tel: (727) 524-0177
Fax: (727) 524-0188
www.abacuspos.com



Power Viruses

You've probably heard about the dangers of software viruses. But did you know that power viruses can do just as much damage to your system? And that a typical facility can experience as many as 6,000 power viruses or more every year?

The following describes six power viruses that can kill your productivity and discusses why you should immunize your system with power protection.

Some of these power disturbances are obvious—some are almost unnoticeable—but they all cause problems that can seriously damage your productivity, from lost data and lock-ups to communications errors and hardware failures.

Fortunately, whatever types of power viruses your system is exposed to, you can immunize yourself with complete power protection.

Common-mode Voltage Problems



Probably the most serious virus facing computer users today, common-mode voltage problems can cause unexplained data losses, glitches, system failures and "no trouble found" service calls. The only way to immunize against common-mode voltage is to install a power conditioner or UPS that has an isolation transformer output. All quality power protection solutions should include an integral isolation transformer for that reason.

Electrical Noise



Electrical noise is spread by electrical neighbors such as electronic lighting ballasts, appliances, printers, photocopiers and even other computers. Over time, and in connection with low-voltage spikes, noise can wear away electrical components and cause them to fail for no apparent reason. A high quality power protection system can eliminate noise and keep your system's health from deteriorating.

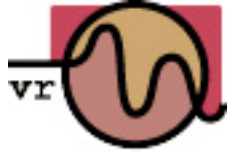
Voltage Spikes and Impulses



Like electrical noise, voltage spikes and impulses are also spread by equipment inside your facility. When elevators, motors, or air conditioners stop and start, they can cause sudden large increases in voltage inside the electrical system. Other causes include electric utility switching and lightning strikes which can cause transients so intense they literally "blow up" sensitive electronics.

Unlike surge diverters, which can only slow down or weaken this virus, a power protection system stops voltage spikes and impulses immediately by giving you complete protection from small and large transients.

Voltage Regulation



In the past, unregulated voltages wreaked havoc with linear power supplies, making it hard for computer-based equipment to function. Failures were common. But thanks to the switch-mode supplies used in today's computers, today's systems have developed their own immunity to voltage regulation viruses. (This immunity is a by-product of the same technology that makes switch mode supplies smaller and more economical.)

Blackouts



Although they're the most visible—and memorable—of power viruses, blackouts account for comparatively few power disturbances each year. An uninterruptible power supply (UPS) will keep your system up and running during a blackout, but it won't immunize against the other power viruses. That's why you should make certain your power protection systems are compatible with your UPS systems so you have full immunity all the time.

Backdoor Disturbances



The Backdoor Disturbance virus infects your system via a pathway you'd least expect: the backdoor. Even though it's not an AC power connection, damaging electrical disturbances can enter electronic systems through modem and phone lines, network connections, and I/O cables.

Fiber optic connections are one means of protection, but if your system uses ordinary communications wiring and connections, you should immunize it against this often unrecognized but very dangerous virus.