POWER PROTECTION

Imagine you are staring at your computer screen, working intensely to wrap up a project, when lightning from a gathering storm robs your home of power. The words on your screen vanish. You groan as your computer crashes, and you quickly realize how important it is to avoid such an outage and its impact.

It's been said that there are two types of computer users: those who have lost data, and those who are going it. Fortunately, you have a third option – you can join those who have recognize the need for power protection and taken the steps to ensure that they are prepared.

Coming To An Outlet Near You

The most common problems with power are not as easy to detect as a lightning strike or complete outage. They usually arrive in the form of slight over- or under-voltages, and many go undetected, even by the utility company, while wreaking havoc on all your electronic equipment. To make matters worse, the wiring installed at the turn of the century is simply not adequate for the technology installed at the turn of the millennium.

How serious are these inside problems? Industry estimates indicate approximately 50% of all power problems originate insider the building where the problem occurs.

What Happens To Your Computer?

We'll use a nearby lightning strike as an example. Lightning strikes a nearby transformer. If the surge is powerful enough, it travels instantaneously through wiring, network, serial and phone lines and more, with the electrical equivalent force of a tidal wave. The surge travels into your computer via the outlet, phone lines, and/or data line (DSL, Cable modem driven by network cable). The first casualty is usually a motherboard or network card. Chips go next, and data is lost.

The utility responds to over-voltages by disconnecting the grid. This creates brownouts and blackouts. IF the voltage drops low enough, or black outs, your hard disk may crash, destroying stored data. In all cases, work in-process storage in cache is instantly lost. In the worst case, password protection on the hard drive can be jumbled, or the file allocation table may be upset, rendering the hard disk useless.

Resolution

Solving these problems is as simple as plugging into an uninterruptible power supply (UPS) with power management software. The UPS provides instantaneous battery power and premium surge suppression to keep your computer from crashing, no matter what happens on the power line. The software ensures that your system is safely shut down and that data is safely stored before the battery backup power is exhausted, even if you're not there.

The overall message for computer users is crystal clear: protecting and managing power in today's uncertain power environment is a top priority – your hardware and software are at stake.

Of course, high price doesn't promise quality. To find out what the unit is capable of, you need to check out its **Underwriters Laboratories (UL – ul.com) ratings**. UL is an independent, not-for-profit company that tests electric and electronic products for safety. If a protector doesn't have a UL listing, it's probably junk; there's a good chance it doesn't have any protection components at all. If it does use MOVs, they may be of inferior quality. Cheaper MOVs can easily overheat, setting the entire surge protector on fire. This is actually a fairly common occurrence!

Many UL-listed products are also of inferior quality, of course, but you're at least guaranteed that they have some surge protection capabilities and meet a marginal safety standard. Be sure that the product is listed as a **transient voltage surge suppressor**. This means that it meets the criteria for **UL 1449**, UL's minimum performance standard for surge suppressors. There are a lot of power strips listed by UL that have no surge protection components at all. They are listed only for their performance as extension cords.

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