

It's all Geek to Me!!

The Shock of it all



I recently had a service call where the person's computer was not functioning at all. It turned out to be a pretty short call because as soon as we turned it on we could smell burning insulation. There had been a thunderstorm and lightning had struck nearby and fried his computer. It was an older machine and I recommended that he replace the machine rather than try to repair it.

The problem brings up the question of Power Protection for your computer. What do you need in order to protect your computer from power surges? Your computer can be a sizeable investment and people rely on them more than they realize for communication, banking, paying bills, etc. What happens when it dies unexpectedly?

Many people will purchase a \$10 power strip in order to get the extra outlets they need to run the computer. The problem with most of these is that they are not rated to protect sensitive computer equipment.

The basic protection is to use a proper surge suppressor. A surge suppressor will detect a surge in power and shunt the overage away from the equipment, protecting it from damage. To protect your computer it needs to detect the surge and react quickly. In order to protect a computer properly, you need a suppressor that meets the Underwriters Laboratory 1449 rating (UL 1449). If you're not familiar with Underwriters Laboratory, they are a not-for-profit testing and certification organization. You have probably seen the logo for this company on many different products. It's the letters UL inside a circle like this:



Power surges can enter your home by several conduits such as phone, Cable TV electrical or data cables. Since you have more than one way to burn out your computer, you need to protect your computer from any entry. Look for a suppressor that has electrical, cable, phone and data jacks depending on what you have for wires going into your computer. You'll pay a bit more for these (\$20 or more) than a regular power strip, but it's worth it to protect your PC.

These will only protect you if the power surges, what happens if the power sags? Typically if there is a drop in power, the PC shuts off. If the PC is in the middle of something it could corrupt files. Even better is how many times have you worked on a document for hours and then lost power before you saved it?

To protect from both surges & sags, you need to use an Uninterruptible Power Source or UPS. This is essentially a battery backup for your computer. The amount of time it will last varies based on the size of the battery and the amount of stuff connected to it. The idea is to give you a few minutes of power to save your work and shut down the computer cleanly to avoid problems.

There are several models available and they measure the power in VA (voltage amperes), the higher the number the more load it can take. The battery charges during normal operation and provides power to the equipment. When the power sags, the battery is providing power to keep the equipment running.

The battery will degrade over time and you would need to replace it with a new one. You usually do this by purchasing a replacement from the manufacturer and sending the old one back. Any rechargeable battery will fail over time and not hold a charge, these are just a bit bigger. They should last for a few years though.

A 350VA battery should be able to provide power to a typical PC for about 5 minutes and cost about \$40. Just enough time to save your work and shutdown. Remember the more stuff plugged into it (scanner, phone, speakers, etc.) decreases the length of time the battery will run.

A UPS will also provide protection if the power surges so you are well covered and protecting the investment in computer equipment by using them.

If you have any questions about computers, please feel free to send them to me at Contact@cbtechserv.com and I will respond in a future column.

Steve Cote is the owner of Copper Beech Technology Services, he has been involved in the computer industry since 1982 and is located in Salem, NH. Started March 2003, Copper Beech Technology provides onsite computer support services to residential and small business customers in the Merrimack Valley and surrounding communities. These services include PC installation, repairs, upgrades, network installations, virus detection/removal as well as web and e-mail hosting services. You can contact Copper Beech Technology by e-mail at contact@cbtechserv.com. Appointments can also be scheduled by calling 866-SOS-GEEK.