## **Electrical power is a** good thing -- until it's not.

As business owners and managers, we like to think we're the power behind our business. We make the decisions, work with customers or clients, conduct the training, the hiring, the firing and much more.

But the truth is, much of our business runs on electricity. It's electricity that powers our equipment, phones, computers, printers, scanners, fax machines, security system and more.

Electricity is a wonderful thing, but it can be dangerous, too. Voltage spikes, caused by power outages, lightning, tripped circuit breakers, short circuits and power company malfunctions, can temporarily increase the amount of voltage that travels through electrical lines. When these spikes reach our telecom system and other equipment they can do a lot of damage.

Spikes are fast, short duration oscillations that affect the amount of voltage running through power lines. They can permanently damage any piece of equipment running on electricity, and that can be costly.

The solution is the installation of an uninterruptible power supply (UPS) between the source of power and the equipment using that power.

As defined on Wikipedia, "A UPS is typically used to protect computers, data centers, telecommunication equipment or other electrical equipment where an unexpected power disruption could cause injuries, fatalities, serious business disruption or data loss. UPS units range in size from units designed to protect a single computer without a video monitor to large units powering entire data centers or buildings."

## Find the UPS that suits your operation.

If your business is small or has minimal office equipment, smaller standby UPS systems are probably sufficient. If your business is mid-sized or larger, or if you have server-based computer networks or manufacturing equipment, you may require more sophisticated protection.

Here are the basic elements you'll want to consider when choosing a UPS system:

1. **Power:** The system you choose must have enough power to protect and support all of the devices you have in your business. Power is usually calculated in Volt-Amps (VA). By adding up the watts required by each piece of equipment, you will be able to determine the total amount of power your UPS system will need to protect.

2. Protection Run Time: Secondly, you will need to consider how long you want the system to stay powered if there is an extended outage. Many UPS devices keep equipment operating only a few minutes, giving users enough time to safely shut them down. If there's a chance that power will be off for an extended period, this could interfere with your ability to conduct business. Having no power can result in missed communications, unhappy customers and lost revenue. Selecting a UPS with extended run time is an important consideration.



3. Activation: Different systems use different triggers to initiate their operation. More basic systems have battery power that kicks in when the voltage drops below a certain level. More powerful systems have a transformer. Transformer-based systems have more sophisticated technology that keeps the voltage within an acceptable range and only relies on the battery in low- or no-power situations.

4. Incoming Power: It's important to know about the quality of your incoming power source when choosing a solution. If power fluctuations are common in your area, a UPS with Automatic Voltage Regulation is the answer. This can protect your equipment by correcting the incoming power from over-voltages and under-voltages.

UPS systems should not be chosen based on price alone. Select one that fits the systems and equipment you use in your business and the quality of the power source you receive.

As you run your business, make sure it's able to run even when the electrical power is less than reliable. Adding an uninterruptible power supply can help your business save its sensitive electronics, equipment and other systems and increase the reliability of your business for your customers -- even if the power company can't.



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