



Proactive Surge Protection

The Power of Proactive Protection

Many Americans make it a point to visit the doctor, dentist, and auto mechanic periodically for vaccinations, a checkup and cleaning, and maintenance. These are all examples of preventive measures, and we recognize that paying for these services with some time and a relatively modest amount of money can prevent much larger problems and costs from happening in the future. We also know that often times developing problems or vulnerabilities are hidden or uncertain, and only by taking a proactive approach can we keep these unwanted events from occurring.

In contrast, some businesses seem to be making a different calculation – they may think, “Why make any unnecessary expenditures now, particularly when the risk of something bad happening is low? We haven’t experienced any problems in the past, so we may not need preventive action at all.”

That might be what an Orlando resort facility was thinking when they installed a new fire alarm system not long ago. The system itself cost about \$100,000 and would

be covered by insurance, so the resort decided not to spend an additional \$8,000 to purchase surge protection equipment as a preventive measure.

Sometime later, a power surge hit the facility with enough energy to damage the fire alarm panel and networked systems hardware. As the resort expected, insurance covered the cost of the required repairs to the systems – but it did not cover other related costs that were incurred during the 17 days it took for the fire alarm system to be repaired, inspected, and recertified. To ensure the safety of the guests and the public during this period, the resort was forced to maintain a “fire watch”, meaning a fire truck was stationed at their expense in their main parking area 24/7. The final price tag was \$320,000 – far surpassing the cost of the surge protection that would have prevented this from happening, as well as the entire cost of the system itself. The resort immediately made the investment in surge protection to ensure the problem would not be repeated; however, significant financial and reputational damage had already been done.



Proactive Surge Protection versus Reactive Surge Protection

By definition, proactive means taking an action in advance, anticipating a potential difficulty in the future and acting to minimize it, defuse it, or avoid it altogether. From this standpoint, the resort described above may have believed that it was acting in a proactive fashion by taking out insurance on the new systems, knowing that it would cover potential damages.

Where the resort made their mistake was in not thinking through the potential damages in a broad and strategic way that would have anticipated a period of system downtime during the repair and recertification process, and what that period would mean to their operation. It is not unusual for electrical surges to cause damage to expensive electronic systems and equipment that then requires repair or replacement, and the risk of downtime on that expensive equipment can be substantial. Downtime on a security system, for example, could result in missing video surveillance data with a corresponding increased risk for loss, damage, and liability. Downtime on an access control system could risk a loss of work time as well as overall security, when employees and vehicle fleets can't easily enter or exit your facility. Downtime in a datacenter could risk the loss of critical customer or operational information. Surge protectors help ensure that your systems stay up and running and reduce these corresponding risks.



All that being said, there are situations where businesses choose not to purchase surge protection devices to protect their sensitive electronics, and that is certainly within their prerogative and their rights. Some savvy integrators have started using “surge refusal forms” to let customers make this decision explicitly, confirming that they have been informed of the option and specifically decided not to proceed. This is a valuable tool in two respects – first, it ensures that surge protection is being discussed and the customer has been given the option to make a knowledgeable decision. Secondly, it provides a measure of protection for the integrator with regard to guaranteeing the operation of the system. For example, if a surge event happens three months after installation, their liability for fixing the damage may be limited if surge protection was recommended and then declined by the customer.

The Right Time to Consider Surge Protection

To be proactive, the right time to bring up surge protection is during the proposal or the design stage. However, if systems are already installed and in service but do not have surge protection, the right time is now.

In many cases, facilities in need of electronic systems such as fire alarm panels, video surveillance or access control systems will hire a design or engineering firm to plan an appropriate system; or request “design / build” proposals



from suitable integrators. Such end user customers are normally not experts in the design of these systems – that is why they are asking for help – they may not know to ask for surge protection as part of the proposed solution. It is the responsibility of the engineering firm or integrator to include such protection as part of the design, or at least as a specified option. In fact, this responsibility is just as important as including power supplies, equipment racks, or other support elements that may not have been mentioned in the customer request but are nonetheless part of any complete system.

In a similar way, any integrator or design/engineering firm that becomes aware of an installed system that lacks surge protection should feel an obligation to make the user customer aware of the situation immediately, or as soon as practical. Users may not realize that their systems are vulnerable and what would be involved to install protection before a damaging surge event occurs. Surge protection can be added easily and cost effectively to almost any electronic system or wired network, keeping power surges from causing damage to important security and operational systems.

As mentioned above, the customer may feel pressure to cut costs or accept greater risks for some reason, but a decision to decline surge protection should be made with the full awareness of the proposed costs and the benefits of such protection, along with the potential risks.

Conclusion

Taking a proactive approach to installing surge protection ensures the security of your data, employees and facility during an unpredictable electrical event. Not only will it protect the valuable equipment and systems that support your business, it also protects from the ancillary costs of downtime, operational delays, and reputational damage. In nearly every case, the cost of surge protection is small when compared to these potential losses.

Ideally, surge protection is part of the design plan from the start, but it can be added at any time to existing systems – and the right time to consider protecting an existing system is now!

Don't wait to react to electrical surge damage – be proactive!

