POWERED FOR PERFORMANCE

POWERVAR POWER CONDITIONING TECHNOLOGY PRIMES RETAILER FOR SUCCESS

n the technology world, the adage "what you see is what you get"—or WYSIWYG"—often applies. However, in many instances, what VARs and their customers see is not what they thought they would—or want to—get.

David Szczygiel, owner of Andersons Cash Register Systems in Greensburg, Pa. knows this all too well. Not long ago, the VAR was, as he puts it, at his "wits end" with a POS system installation that involved the deployment of two touchscreenbased cash registers, scanners, receipt printers and a credit card processing system.

Szczygiel had initially thought the project would be a simple, straightforward one, with no problems once the system was in place. "At the beginning of the installation, I was pleasantly surprised to see that the shop was undergoing a complete renovation," the VAR says. "The part that was most pleasing, of course, was the all-new electrical entrance and wiring throughout the building," which, he believed, would almost guarantee the absence of any problems arising on the power supply front.

At first blush, Szczygiel's assessment appeared to be correct. The installation procedure "hummed along fine," he recalls, with the typical "working out the bugs" stage of programming the system to meet the needs of the customer as his only challenge. But after only a few short weeks, complaints about system "lock-ups" began to surface.

The VAR initially addressed the problem by simply powering down the POS system and immediately turning it back on. While this solution was somewhat effective, it was not practical because of a consistently heavy volume of store traf-

fic. The end-user neither wanted to cause delays in processing patrons' transactions nor risk the chance that shoppers would grow so frustrated with long waits at the checkout counter that they would take their business elsewhere.

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Even more puzzling—and troubling—was the inability to identify a system lock-up pattern and the root cause of the trouble. "At first it was one unit, then both, with no real rhyme or reason," Szczygiel states. "Lock-ups would occur several times in one day, or sometimes skip entire days with no problems. My first thought was that it could be a particular sale or function, but we quickly eliminated this possibility. My second and third attempts to remedy the situation were more drastic and included new programming and completely replacing the POS units."

Still, the lock-ups persisted. Further investigation of the store as a whole revealed the constant incidence of unexplained power outages. However, Szczygiel had fitted the POS equipment with off-the-shelf uninterruptible power supply (UPS) systems; hence, he believed it should be unaffected by any outages the retailer might experience.

CASE STUDY

Even before this chain of events began to unfold, the team at CRS, Inc., the POS distributor with which Andersons Cash Register Systems works, had strongly suggested that power conditioners from POWERVAR be included in the store's cadre of new technology. CRS continued to make the same recommendation as problems cropped up, but Szczygiel resisted based on the assumption that the UPS units "had to provide some kind of conditioning."

One day, he discovered otherwise. While still skeptical that power conditioning was indeed a "must" for the customer, he agreed to meet at the store with CRS dealer representative Rick Stange and POWERVAR representative Craig Kalie. It was there that the critical differences between a standard UPS and a low impedence isolation power conditioner became clear to him. Some vendors, the VAR learned, claim certain UPS's condition power as well as ensure its delivery to POS systems. In truth, however, the majority of such devices are simply surge protectors with battery systems for providing power in the event of an outage. It takes specific electrical components to provide the level of protection needed by modern electronic systems—and POS systems are no exception.

Just as significantly, the VAR notes, "Craig proceeded to show us a picture of what the power looks like coming out of the UPS units and various outlets in the building and stated that these were not acceptable tolerances. There was the proof; suddenly no more skepticism." The CRS representative also explained that despite the newness of the electrical system in the building, multiple coolers and other electrical devices located throughout the structure remained a source of power problems.

Both cash registers and all peripherals were subsequently integrated with two separate POWERVAR power conditioning units. The problems quickly vanished, and have not resurfaced since, Szczygiel says.

Each power conditioning unit features three essential components: a built-in low-impedance isolation transformer, a power line noise filter and a surge diverter. These components operate together to guard the retailer's system not only from the effects of power outages, but from those of such power disturbances as spikes, noise (unwanted high frequencies that alter the normal voltage pattern and are generated in stores by printers, back-office copiers, air conditioners, coolers and appliances) and common-mode voltage (a voltage of any amplitude or frequency that is measured between the phase conductor and the ground conductor or the neutral conductor and the ground conductor). These disturbances can damage retailers' equipment in three ways-through complete destruction, degradation of computer components (among them POS systems) and disruption (which manifests itself in system lock-ups like those experienced by the Andersons' Cash Register Systems end-user, as well as in lost files, communication errors, "no trouble found" service calls and inaccurate, slow system throughput).

"We now include power protection on all new installs, regardless of building conditions or appearance," Szczygiel conclude. "Thanks to Craig at POWERVAR, along with Rick and all the staff at CRS," for providing a solution to retailers so they no longer experience the negative effects of minor and major power disturbances.

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Providing clean, reliable power is POWERVAR's sole focus, and has been since our founding in 1986.

Thanks to this singular mission, POWERVAR has been able to develop a full line of power protection equipment with unmatched reliability and quality that is the gold standard of the industry. POWERVAR offers an in-depth product portfolio of real solutions and real protection for the technology your business relies on to keep your operation running smoothly.

All of us at POWERVAR are absolutely dedicated to designing, producing and offering you the finest-quality power protection products possible, from power conditioners to isolated uninterruptible power supplies (UPS) then backing them with exceptional customer service. It's more than a framed mission statement hanging on the wall — it's an individual commitment from each of us to you.

This dedication to quality shows in our extensive research and development, which has resulted in numerous industry-leading product innovations. This commitment is abundantly clear in the quality of our people. They are experienced, educated and professionally dedicated to helping you obtain exactly the power protection solutions you need

POWERVAR is a global provider of power management systems, headquartered in Waukegan, Illinois, with international sales and distribution offices in Swindon, United Kingdom, Toronto, Canada, Mexico City, Mexico, and Paderborn, Germany. POWERVAR is the first choice in power protection for OEMs and resellers in the POS industry. All POWERVAR solutions incorporate a high energy surge diverter, a noise filter, and a low impedance isolation transformer. Together these components prevent power disturbances from destroying, degrading or disrupting the point of sales system's operation. POWERVAR continues to lead the industry by creating higher standards for power quality to support the increasing use of technology in a plethora of vertical markets.

