



Case Study: AVTECH Software, Inc.

AVTECH Software Bands With Lantronix To Ward Off Potential IT Environmental Disasters In Data Centers And Across Corporate Networks

CHALLENGE: Provide a means to remotely monitor and manage potential environmental disasters in corporate IT data centers such as extreme temperature, humidity, power loss, or smoke before expensive IT equipment fails or is damaged.

SOLUTION: AVTECH Software, using Lantronix technology, developed an advanced real-time, secure line of IT environmental monitoring solutions that provide remote accessibility using any standard web browser.



BENEFIT: Remote monitoring and control of critical data center environmental elements providing access from anywhere at anytime, to minimize downtime and avoid costly hardware replacement, labor and related inconveniences.

Monitoring the environment in a data center is a crucial aspect to maintaining network uptime and IT infrastructure equipment. Because computer and network equipment is designed to operate most effectively within a specific range of environmental conditions, potentially catastrophic results to data, software, or any number of hardware components can occur if the environment is unstable. In fact, temperature extremes are the most common cause of hardware failure, which leads to expensive downtime.

SOLUTION: Remotely Monitor & Manage Data Center Environmental Conditions

AVTECH Software has 20 years of industry leading experience manufacturing IT monitoring software and hardware for data centers of all sizes. The company's customer base includes the White House, United Nations, over 80 percent of the Fortune 1000, almost all branches of the U.S. government and organizations of all types and sizes. As a preferred vendor, they provide monitoring products to many of the worlds most secure data centers.

To mitigate possible disasters, AVTECH was challenged with providing solutions that would enable organizations to remotely monitor and manage critical environmental conditions including temperature, humidity, power, flood, smoke, room entry and more, in a computer room, data center, rack cabinet, telecom closet or other facility.

SOLUTION: Effective Early Warning System That Combines Device Server, IT Monitoring And Alerting Technologies

In order to meet the disaster-protection needs of its customers via an easy network development, AVTECH incorporated Lantronix Device Server™ technology into their environmental-monitoring products. This gave users the ability to securely and remotely monitor the data center environment from virtually anywhere over the Internet.

Device Servers provide the ability to securely access serial devices over Ethernet or 802.11 b/g wireless networks. With this technology, electronic equipment can be securely monitored and managed over a network or the Internet. When combined with AVTECH's hardware and software solutions developed for IT environmental monitoring, the result is an enhanced disaster-protection solution for data centers and expensive IT equipment.



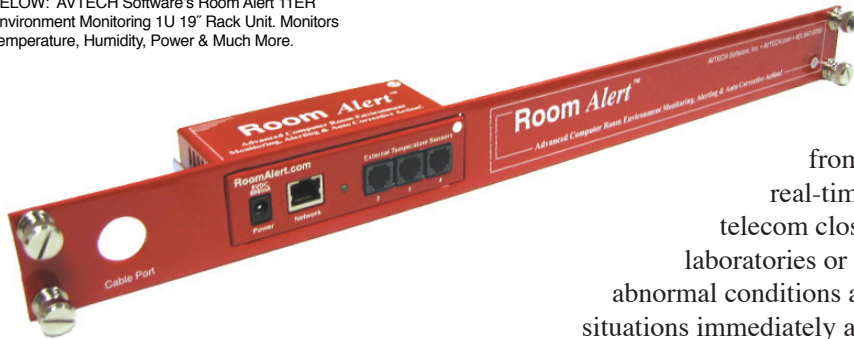
ABOVE: AVTECH Software's TemPageR 4E Environment Monitoring Unit. Monitors Data Center Temperature.

AVTECH decided on the Lantronix XPort® embedded networking module because of its ease-of-integration into their existing product design. XPort is an extremely compact, integrated Device Server that gives OEMs the ability to quickly and easily design Ethernet networking capabilities to virtually any device with a serial (UART) interface. Smaller than the average thumb, XPort includes all the essential features to network-enable OEM equipment, including a 10Base-T/100Base-TX Ethernet connection, proven operating system, an embedded web server, email alerts, a full TCP/IP protocol stack, and 256-bit AES encryption for secure communications.

With these advanced networking functions, XPort enabled AVTECH to embed intelligence such as remote diagnostics and firmware upgrades, automation and control, power management, onboard web server, SNMP monitoring and more, into its Room Alert™ and TemPageR™ monitoring products.

RESULT: Minimize Downtime And Avoidance Of Costly Equipment Repair And Replacement

BELOW: AVTECH Software's Room Alert 11ER
Environment Monitoring 1U 19" Rack Unit. Monitors
Temperature, Humidity, Power & Much More.



With these network-ready “intelligent devices,” system administrators can now monitor the physical environmental conditions within the computer room including temperature, humidity, power, flood/water, smoke/fire, airflow and more from any location through an Internet connection. This real-time early warning system for rack cabinets, network or telecom closets, computer rooms, data centers, operating rooms, laboratories or other facilities can be an invaluable tool to detect abnormal conditions and enable managers to remedy potentially disastrous situations immediately and before they become costly.

The ultimate benefit of AVTECH’s network enabled Room Alert and TemPageR products is that they give organizations of all types and sizes the resources to minimize downtime and avoid costly hardware replacement, due to IT environmental concerns. Lantronix assisted AVTECH with their commitment to make the monitoring and management of computer systems, servers, networks and data center environments easier by providing powerful, easy to use, software and hardware network connectivity solutions. The combination saves time and money for customers while improving operational efficiency and preparedness.

“The need for proactive environmental management solutions has become a priority for many data centers around the world, particularly as sensitivity to downtime has increased,” said Michael Sigourney, senior product specialist for AVTECH. *“By partnering with Lantronix, we are able to provide end users with the latest technologies they need in order to effectively manage what is happening in the data center and ensure they are aware of any changes in real-time.”*

The XPort Advantage

- **No Networking Expertise Required/Minimal Engineering Effort** - eliminates the complexity of creating a networked environment by providing a complete, integrated solution.
- **Highly Secure** - 256-bit AES encryption assures secure communications.
- **Expanded Business Opportunities** - by providing faster network throughput at a lower cost, XPort expanded the available market by allowing more aggressive pricing and penetration into new market segments.
- **Accelerated Time-to-Market** - as a complete network-enabling solution, XPort reduced an expected development cycle of several months to several weeks, allowing faster product introduction.
- **Compact Size** - a compact RJ45 form factor allowed XPort to be seamlessly integrated into a “small footprint” product.



Irvine, CA • 800.562.8766
www.Lantronix.com



Newport, RI • 888.220.6700
www.AVTECH.com