Warehouse Monitoring: Medical/Surgical Supply Distributor Improves Efficiency and Compliance

Owens & Minor, Mechanicsville, VA, is a leading U.S. supplier of medical and surgical products to hospitals, integrated healthcare systems, alternate care locations, and the federal government. The company serves the medical community from 50 plus distribution centers nationwide, providing consumable goods such as disposable gloves, dressings, endoscopic products, needles and syringes, sterile procedure trays, surgical products and gowns, and urological and wound-closure products.

For many of these products, a climate-controlled environment is required to maintain efficacy and meet regulatory guidelines. Prior to upgrading their monitoring capability, Owens & Minor used data loggers to measure and record temperatures. Individuals in each distribution center would manually download the data for review and archive purposes. Owens & Minor recognized the inefficiency of this process and chose to look for a better solution.

Situation
Along with the company's internal standards, Owens & Minor meets requirements for archival documentation for the state boards of pharmacy and the FDA. In addition to the goal of increasing efficiency in monitoring and reporting data for compliance, the company wanted to simplify the process of viewing critical data from all locations.

Challenge
- To standardize the Owens & Minor monitoring system for warehouse temperature and humidity across all sites within the United States
- To provide the company with an enterprise-wide solution that would enable multiple users at widely distributed locations to manage their monitored areas, report, and receive alarm notifications remotely.
- To connect sensors to the continuous monitoring system via a combination of wireless and hard-wired Ethernet connections

Solution
- A Continuous Monitoring System that provides secure access from any PC on the network
- Flexible, user selectable alarm notification (email to PC, cell-phone, pager)
- Automated Data Archiving with triple redundancy
- Reporting software for FDA 21 CFR part 11 compliant documentation, historical data and graphing/reporting
- Full system IQ/OQ validation

Benefits
- System administrators can assign permissions for viewing data, setting thresholds, and acknowledging alarms to pertinent personnel
- Alarm notifications can be scheduled by day, time and person
- Detailed naming of monitored points
- Total data protection: no single point of failure — including network or power outage — will result in lost data
- Industry best sensor stability specification; accuracy for one year with high stability sensors
Owens & Minor sought a monitoring system that would eliminate the manual steps in generating reports, send immediate notification if conditions were heading out of tolerances, and provide an easily accessible way to monitor real-time trends in critical areas.

Solution
Four suppliers were evaluated as part of Owens & Minor’s monitoring system bid process. The review process led to the selection of Vaisala Veriteq’s Continuous Monitoring System using the proprietary viewLinc software monitoring.

“We selected the viewLinc system because it used standard Internet browser-based software and integrated with our existing WiFi, 802.11 network. In addition, we liked how Vaisala Veriteq paid attention to detail in matching their solution to our needs,” said Bob Peck, Director of Regulatory Compliance for Owens & Minor.

Reliable: Enterprise-wide
“Initially, we installed the system at one location to gauge its capabilities before deploying nationwide,” says Peck. “The system worked great and now monitors temperature and relative humidity from 423 sensors located within our warehouses, refrigerators, and specialty rooms.

Using viewLinc, managers at each Owens & Minor site can view critical areas of interest in real time, as well as receive alarm notification via PC, phone or pager. Alarm messages can be sent to different people based upon their areas of responsibility and ability to respond; for example, regulatory personnel receive communications alarms and distribution center personnel receive out-of-limit alarms.”

Bob Peck, Director of Regulatory Compliance for Owens & Minor