

No product left behind with Axis.

RC Willey saves millions, reduces shrink 170% below industry average by adding Axis network cameras to its inventory tracking system.



Organization:

RC Willey

Location:

Salt Lake City, UT, USA

Industry segment:

Retail

Application:

Loss prevention, inventory management

Axis partners:

AlphaCorp, Genetec

Mission

In order to fulfil its promise of same or next day delivery, home furnishings retailer, RC Willey, manages \$500 million of inventory in warehouses and stores throughout the Western US. With millions of dollars of product in constant motion, tracking inventory discrepancies and investigating shrink was a challenge without video support. The company installed analog cameras to document the inventory flow, but when that system reached the end of its life, RC Willey began searching for a high resolution IP video surveillance system that could deliver better video with greater forensic value.

Solution

After lengthy on-site testing of 15 IP camera vendors, RC Willey selected Axis network cameras to track inventory in transit from its distribution centers, retail stores and delivery trucks. West Valley City, UT-based systems integrator and Axis partner, Alphacorp, was selected to undertake the installations.

Advanced imaging features such as Wide Dynamic Range-Dynamic Capture provide the company with sharp, identifiable details under widely diverse lighting conditions – from vast warehouse racks to open dock bays, retail stockrooms and will-call pick-up centers. RC Willey stores the video locally at each site where it can be accessed remotely by Loss Prevention staff and other authorized personnel through a Genetec video management system.

Result

Since the Axis cameras were installed, inventory shrink has dropped significantly to 0.01 percent, a full 170 percent below the home furnishings industry average. The cameras have helped the company pinpoint the root causes of inventory discrepancies and take steps to correct their procedures. The cameras also help the company improve warehouse management best practices to prevent future inventory from going astray.

“I attribute most of our phenomenally low inventory shrinkage to the way we use our Axis cameras in conjunction with our warehouse management and point-of-sale systems.”

Rod Mosher, Director of Loss Prevention, RC Willey.

Tracking inventory in transit

RC Willey has been selling home furnishings, household appliances, consumer electronics and more for over 80 years. The company stands out in the home furnishing world by offering same or next day delivery of their merchandise, an unusual commitment in an industry where six to eight weeks is the norm.

To provide such fast delivery, RC Willey must maintain over \$500 million in inventory at distribution centers and retail stores across Utah, Nevada, Idaho and California. Between \$20 and \$30 million in inventory is in transit at any given time. “Keeping track of all the inventory in constant motion is one of our biggest challenges,” said Rod Mosher, Director of Loss Prevention at RC Willey.

Like most retailers, RC Willey tracks inventory by integrating standard warehouse management and point-of-sale systems. However, before they installed cameras, if an item failed to reach its destination and the location data was incorrect, the LP team found it difficult to determine where the breakdown in inventory flow occurred.

“We needed an inventory verification tool that could help us stem our losses,” Mosher said. He decided to install analog cameras to document a product’s journey, and when that system reached the end of its life, he wanted to upgrade to the increased resolution and functionality of IP cameras.

Working with AlphaCorp, a security systems integrator and Axis partner, RC Willey selected Axis network cameras for their high image quality and wide range of features. “We needed cameras that could handle constant motion without blur, and deliver high-quality, usable video in diverse lighting conditions,” said Mosher.

With the IP-based system, when RC Willey has an inventory discrepancy, the corporate LP team will retrace a product’s path from warehouse to delivery with their warehouse management and point-of-sale systems. Since each step along the way is monitored by the cameras the LP team can pull video with their Genetec VMS to visually verify that the product did in fact go where the reports indicated.

Clear images in all lighting conditions

AlphaCorp typically installs between 60 and 70 cameras per location for the retailer. Because of the diverse lighting challenges at their warehouses, such as when the sun streams in through the loading dock door, RC Willey relies exclusively on the AXIS P3384-VJ-VE Fixed Dome Network Cameras with Wide Dynamic Range-Dynamic Capture. The WDR feature can balance the contrasting bright and dark areas to provide full detail throughout the entire scene.

The 5-megapixel AXIS P3367-VE Fixed Dome Network Camera provides more robust image detail over long ranges, such as parking lots, and they use AXIS P3354 Fixed Dome Network Cameras for store interiors and general surveillance. The company is also field-testing the outdoor-ready AXIS Q3505-VE Fixed Dome Network Camera with advanced Wide Dynamic Range-Forensic Capture. WDR-Forensic Capture uses advanced algorithms to reduce noise in an image and displays every detail in a scene as best as possible.

Depending on the location, RC Willey installs between 100 and 300 terabytes of onsite storage to hold about 90 days of video. Because the Axis camera parameters are easy to adjust, RC Willey can fine-tune frame rates and resolution to meet bandwidth and storage constraints without compromising image quality.

Getting to the root cause of loss

The video recordings let RC Willey analyze the root causes of inventory discrepancy and change their protocols to avoid discrepancies in the future. “We use the video hundreds of times a day. We’ve been able to correct a lot of procedural issues that we were never aware of before,” Mosher said. As shrink drops, customer satisfaction rises. “Nothing is more frustrating for a customer than to show up when they are told and not have their purchase arrive,” Mosher said. The ROI on the investment has been rapid and huge. When Mosher joined RC Willey nine years ago, the company losing millions of dollars a year to shrinkage. Today shrinkage is down to about 0.01 percent, compared to an industry average of 1.7 percent. “That ROI is phenomenal in our industry,” said Mosher. “I attribute most of our success to the way we use our video systems.”

