Comnexiom

USE CASE

Take a Proven Preventive Maintenance Approach to Apartment Management

Property management companies offer the benefits of uniform policies, guaranteed services, and amenities like timely apartment maintenance. However, there can be a significant investment in time and resources to improve operational efficiencies in apartment complexes while also delivering energy conservationstrategies and increasing tenant standards for comfort and safety.

It's much easier to handle daily apartment operations of any size when you know what's happening with your facilities behind closed doors. Whether it's heating, ventilation, and air conditioning (HVAC) systems, plumbing, or appliances, sensors can tell you—virtually wherever you are—how all of them are working.

Sensors can also send you an instant alert when there's a potential maintenance problem in your apartments. Read how we can help you remotely monitor apartment complex operations 24/7

Spoiler alert: The ROI is significant by avoiding water leak damage and optimizing apartment maintenance. It's all easily managed using an online dashboard on a smartphone or computer. Plus, alerts via email, text, or call from a wide variety of fast-install sensors and meters.

Challenges

A large property management company of several apartment complexes wanted to improve its maintenance operations for both occupied and unoccupied apartments. Due to recent property damage and varying occupancy levels, the property managers also needed to reduce operating and capital costs across its facilities.

In one of the company complex's unoccupied apartments, a water heater leak resulted in water damage to that unit and the unit immediately below it. The tenant in the lower unit had just returned from a weekend trip and called the manager's office to notify them of the water damage. Unfortunately, it was too late for the manager to do anything other than start the cleanup.

The apartment managers discovered that Remote Monitoring Solutions are perfect for putting preventive maintenance measures in place and helping fix issues before becoming more significant problems like a water heater flooding apartments.

Solution

The property manager opted for one of our trial solutions in one of their apartment buildings, consisting of Wireless Water Detection, Temperature, Open-Closed, and HVAC Sensors and Gateways.

The property manager self-installed:

- Wireless Water Detection Sensors—Water Rope, Water Detect Plus, and Water Detection Puck—throughout the building to monitor water heaters, boilers, and bathrooms for leaks
- Temperature Sensors throughout the building to monitor unoccupied apartments and HVAC systems
- Accelerometers, Differential Air Pressure Sensors, Vibration Meters, and AC Current Meters on HVAC air circulation fans, pumps, motors, and ducts
- Open-Closed Sensors on doors and windows of vacant apartments
- The Wireless Sensor Management and Remote Monitoring Software on property manager and maintenance staff smartphones, tablets, and computers
- Gateways to protect and communicate data sent from every Wireless Sensor and Meter

Sensors sent data wirelessly to gateways in the maintenance and utility closets of each building. The gateway then sent aggregated sensor data to the software. Using the software, property and maintenance managers uploaded a graphic showing the apartment building layout of the monitored areas.

This allowed the managers to drag and drop sensor tags onto the design or map with live data. Then, they could see the performance of the building's plumbing, doors, and HVAC systems from an aerial view. Managers set up notifications to alert them if readings or assessments fell outside set ranges and signified any potential issues, allowing them to respond immediately.

Results

Before implementing the Wireless Sensors, the apartment management company repaired the damage from the water heater leak to the two affected units. This remodeling included replacing the water heater, carpet, floorboards, baseboards, drywall, repainting walls, and restoring furniture. They also had to pay for the damaged belongings of the downstair's tenant. The project cost thousands of dollars—much more than the cost of deploying the Remote Monitoring Solutions in the building.

Using our comprehensive monitoring solution, the property management company can:

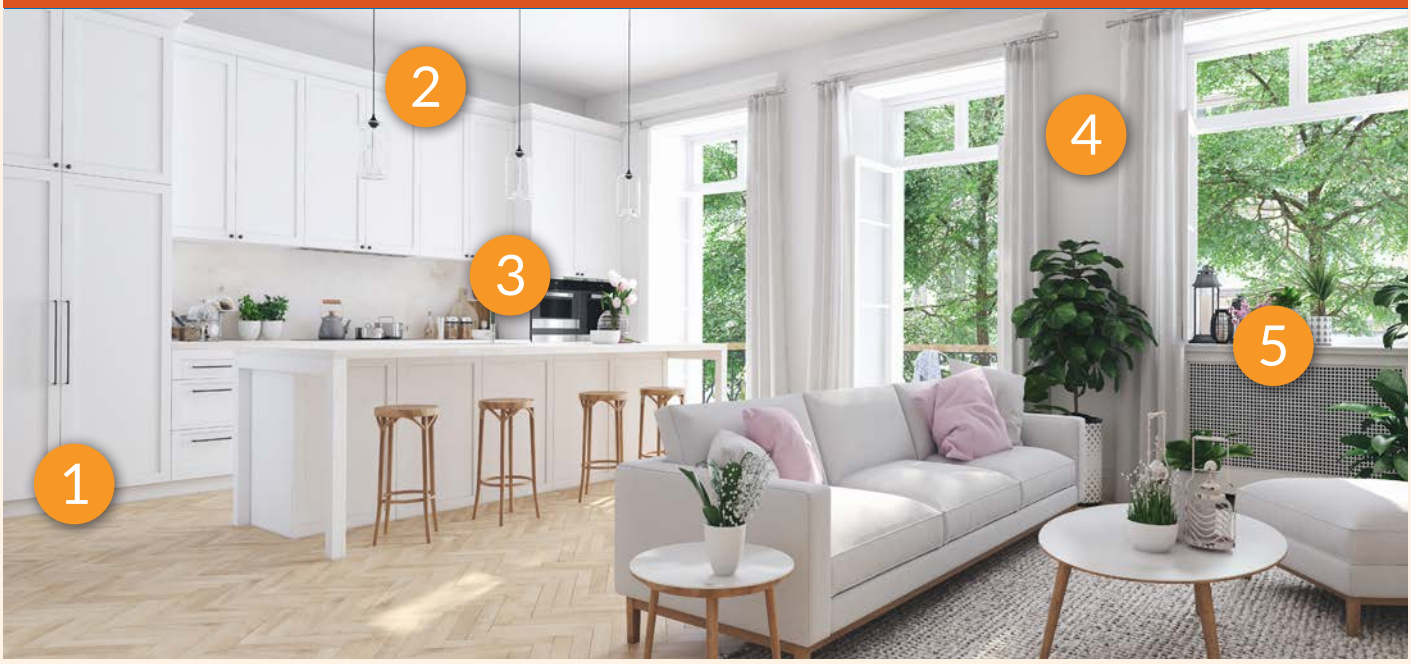
- Prevent costly damage due to plumbing, landscaping sprinkling system, and water heater leaks.
- Ensure tenants have efficient and comfortable heating and cooling.
- Monitor vacant apartment security, temperatures, and plumbing.

After managers installed the solutions in the test apartment building, water sensors detected an incident where a third-floor apartment's air conditioning unit had a condensation buildup. The AC unit didn't drain properly due to a clogged drain line. The water overflowed the drain reservoir triggering the AC unit's water sensor, and when the water ran into the water heater pan, its water sensor also sent an alert.

The maintenance staff was able to respond immediately to prevent any water damage. Had the water sensors not notified them, there was a high probability that the water would have overflowed the water heater pan and seeped through the flooring into a downstairs unit. After two months of using the system in the test building, the company decided to implement sensors throughout the other buildings in each of its apartment complexes.

ROI: After only a couple of weeks using the Wireless Solutions, the company optimized its apartment complex monitoring with preventive measures and reduced energy, operational, and capital expenses.

Remote Monitoring Helps You Keep Tenants Comfortable, Safe, and Satisfied



1

Water Detection Sensors

A Wireless Water Detection Puck Sensor is ideal around toilets, sinks, boilers, and water heaters. A Wireless Water Rope Sensor along walkways, walls, and pipes can detect water and help prevent damage from leaks.

2

Temperature Sensors

Chart your room and HVAC systems' fluctuating environmental conditions. The Temperature Sensor measures various HVAC split and packaged, hybrid heat pump, and ductless mini-split heat pump systems with a waterproof lead up to 100 feet.

3

AC Current Meters

Analyze HVAC system power consumption and predict problems before they occur with our AC Current Meters. Knowing current use by root mean square (RMS) average and amp hours helps you manage performance. Measure boiler pump power draw too.

4

Open / Closed Sensors

Maintain security across your properties by monitoring the status of doors and windows. Wireless Open-Closed Sensors use a switch and trigger magnet to detect status. Be alerted right away when the status changes from your preset parameters in the software.

5

Duct Temperature Sensors

Monitor your HVAC system right in its ducts. Duct Temperature Sensors with 8-foot leads can be inserted between vents, near fans, and under small spaces while maintaining a sealed environment. Get reports and alerts wherever you work.

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