Wireless Sensors Use Case: School Cafeterias

Customer Overview:

Llano Independent School District, Llano Texas.

Llano ISD has a rich, strong tradition of excellence in education. They currently serve approximately 1800 students across 4 campuses (2 Elementary Schools, 1 Jr. High and 1 High School). Community involvement, parent participation, dedicated staff members, and outstanding students combine to make Llano ISD one of the best in the state of Texas.

The Problem:

A few times each year, the school district would have their cafeteria walk-in coolers and freezers go down due to reasons such as power outages, blown fuses / breakers or even cooler equipment failures. On average, the school district would have at least one instance every year where they would have to scrap the contents of a walk-in cooler or freezer due to spoilage. While the school district has cafeteria staff on site during school hours, often times they are unable to tell if there is an issue with the walk-ins until it is too late. Their current processes were not enough to protect them against the possibility of inventory loss.

Monnit was contacted by Lajuana Wimberley, the Director of Nutrition for the school district. She was searching for a reliable temperature monitoring system that would alert her immediately if temperatures in their walk-in coolers / freezers were fluctuating too far out of range. She wanted to run a trial in one of their school cafeterias and had narrowed her search to 4 different solutions. She ultimately choose Monnit due to the simplicity of installation and use, as well as the value (cost, features and reliability).
The Solution:

Monnit recommended the use of leaded temperature sensors and a MonnitLink™ Ethernet Gateway. The sensor housings were attached to the outside of their walk-in coolers and Freezers with temperature probes running through the door seals and attached inside.

The sensor data is sent wirelessly to the MonnitLink™ Ethernet Gateway located in the cafeteria office, which sends the information to the iMonnit™ online sensor monitoring system. The temperature sensors were set to check and record temperatures every hour and notifications were setup to alert their staff via text message if temperatures are outside of their limits, allowing them to respond appropriately.

Wireless Sensors Used

<table>
<thead>
<tr>
<th>Wireless sensor used:</th>
<th>How it was used:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature sensor with probe</td>
<td>To monitor and record temperatures inside walk-in refrigerators and freezers, providing data for FDA requirements and notifications set to alert staff of temperature fluctuations, preventing product spoilage.</td>
</tr>
</tbody>
</table>

The Result (Cost Savings)

For an initial investment of ~$400, the customer was able to deploy a comprehensive temperature monitoring solution in their trial school’s cafeteria. Within the first few weeks, the system alerted them of an incident where a freezer’s fuse had blown over a weekend, which could have resulted in several thousands of dollars in spoiled inventory. The school district was very happy with the choice they made, and since their initial trial, have deployed additional monitoring systems across all of their schools.

Using Monnit’s comprehensive monitoring solution, Llano ISD is now able to:

• Ensure that the foods stored in their coolers / freezers is kept fresh, maintaining its nutritional value.
• Avoid potential product spoilage in their walk-in coolers / freezers, saving money.
• Automatically track and document food storage temperatures.

“I am impressed with these wireless sensors! They do exactly what we need them to, and have already saved us from a few issues with our walk-in coolers and freezers.”

- Lajuana Wimberley, Director of Nutrition
Llano Independent School District

It doesn’t matter where in the world you are or what time it might be, deploying a Monnit wireless sensor and monitoring solution connects you from anywhere, 24/7 so you’ll know immediately when a problem starts.

For information about our products or to place an order, please contact our sales department at 801.561.5555.