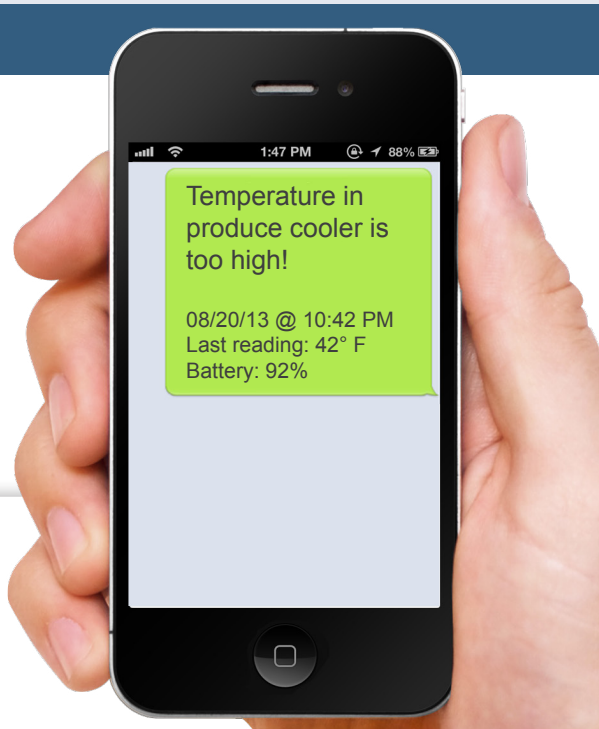
MONNIT™

The Leader in Low Cost Monitoring Solutions



Wireless Sensors Use Case:
Convenience Stores

The Problem:

Monnit was contacted by the manager of a US based convenience store chain. He had came across our products and believed they could solve a problem they were having with temperatures in their produce coolers. Their produce waste numbers were increasing, and they wanted to get a better understanding of why. The only way for them to know when a cooler was malfunctioning was by employees stocking the coolers to notice if there was an issue. The company wanted to implement a reliable temperature monitoring system, that would alert store managers if temperatures in there coolers were fluctuating to far out of range.

They realized that their process of manually tracking temperatures was not enough to protect them against the possibility of inventory loss. They needed a solution to human error and fast changing temperatures.

The Solution:

Monnit provides a reliable remote monitoring solution that includes wireless temperature sensors as well as a variety of other useful sensors. The company deployed standard wireless temperature sensors as well as probed wireless temperature sensors.

The temperature sensor housings were attached under the display edge of the coolers, making them inconspicuous, with temperature probes running to harder to reach areas. The sensor data is sent wirelessly to a MonnitLink™ gateway 400 feet away using one range extender mounted in the ceiling area half-way between the two locations. The gateway sends the information to iMonnit™, the online sensor monitoring system. The sensors were set to check and record temperatures every 15 minutes. Notifications were setup to alert the manager if a temperature was above their set limit, allowing him to respond appropriately.

Wireless Sensors Used

Wireless sensor used:	How it was used:
Temperature sensors	To monitor and track temperatures inside a produce cooler. Helping determine best placement of different produce, as well as alert if a coolers compressor may be going bad.
Temperature sensors with probes	To monitor and track temperatures of harder to reach areas within a produce cooler.

The Result (Cost Savings)

For an initial investment of ~$1000, the customer deployed a comprehensive temperature monitoring solution in one of it's stores. Monnit recommended that this customer place wireless temperature sensors at various locations within the coolers to monitor the temperature as well as find out if there were variances between different locations in the coolers. They placed wireless sensors in a produce cooler and found that there were warmer spots. Being able to determine the location of warmer and colder spots in the cooler, they rearranged the location of different types of produce based on their storage temperature recommendations. The trial allowed them to determine temperature fluctuations in their produce cooler minimizing spoilage and waste.

In the first three months of using the system, it alerted the manager of rising temperatures caused by a faulty compressor. The inventory was moved and the issue resolved before any spoilage occurred. The trial was successful which resulted in the store deploying additional sensors in its other food coolers and the company implementing the temperature monitoring solution in other stores.

Using Monnit's comprehensive monitoring solution, this customer is now able to:

- Avoid potential product spoilage by using sensors in their produce and food coolers.
- Tell if food cooler doors are not closed properly, preventing temperature fluctuations.
- Minimize costs associated with spoiled inventory and waste removal.

"Monnit's wireless sensors have done an outstanding job helping us monitor the temperatures in our store coolers. With their help, we were able to identify and fix several issues we were having. The sensors were easy to install and setup, and Monnit's team has been absolutely amazing to work with!"

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.

MONNIT™