



Serve Up the Best Practices to Keep Food Safe

Food safety and quality are top concerns in the food service industry. As restaurants face incredibly tight margins and intense competition on virtually every front, food spoilage and food-borne illness are significant threats to both budgets and public relations.

Advancements in the Internet of Things (IoT) technology can help restaurant managers meet food safety requirements so customers can keep coming back for more. See how Monnit® helps [restaurateurs remotely monitor food temperature](#) and facility operations 24/7 using innovative IoT Solutions.

Spoiler alert: The ROI is significant, considering the franchisee's restaurants could have lost tens of thousands of dollars in spoiled food. 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

The manager of a famous restaurant franchise frequently experienced issues with her refrigeration and freezer storage units. Her worries focused on:

- Walk-in cooler doors left ajar.
- Freezer temperature variations.
- Cooler compressors, suddenly failing.

The week before the manager's call to Monnit, a cooler's failure went unnoticed almost an entire day when a chef found the cooler too warm and some of the food already spoiled. Staff had to dispose of all the food and restrict restaurant service until the cooler was fixed and restocked. The food spoilage and unplanned repairs resulted in the loss of thousands of dollars.

Restaurant management had realized that their process of manually tracking food storage temperatures was getting more complicated and time-consuming. And they increasingly felt the safety protocols they had in place were not enough to protect them against the possibility of lost inventory.

The manager was also concerned that even slight deviations from manual processes might move them away from the Hazard Analysis Critical Control Point (HACCP) food safety management mandates of the U.S. Department of Agriculture (USDA).

The franchisee knew it was time to implement a reliable temperature monitoring system that would alert restaurant managers if their cooler and freezer temperatures fluctuated too far out of range. And managers wanted to better maintain food temperatures from cooler to pan to plate. They decided the restaurant needed the automated Monnit Remote Monitoring Solution to track temperatures and other critical food safety requirements.



Solution

The restaurant manager self-installed:

- Ledged Temperature Sensors on the outside of walk-in coolers and freezers with temperature probes running between door seals and attached inside.
- Open-Closed Sensors on cooler and freezer doors to alert staff if they were ajar.
- The iMonnit Sensor Management and Remote Monitoring Software on staff smartphones and computers.
- A gateway at one end of the kitchen to protect and communicate data sent from sensors.

Sensors sent data wirelessly to the gateway, then the gateway aggregated the data and sent it to the iMonnit Software. The Temperature Sensors were set in iMonnit to check and record temperatures every 20 minutes. The manager set up notifications to alert staff when any door wasn't shut and when temperature readings went above preset limits, allowing staff to respond immediately.

Monnit helped the restaurant add and use its Food Probe Sensors, AC Current Meters, Vehicle Detection Sensors, and Water Detection Sensors to create a more comprehensive restaurant management solution.



Results

Soon after every refrigerator and freezer in the restaurant had a Temperature and Open-Closed Sensor connected to it, the solution alerted the staff about a cooler door that was left open at the end of a shift. This incident could have again resulted in several thousands of dollars in spoiled inventory. Since the initial install, the franchisee has deployed additional Monnit Remote Monitoring Solutions in six more restaurants with similar issues.

Using Monnit's comprehensive monitoring solution, restaurant management is now able to:

- Avoid potential product spoilage by using Temperature Sensors in their coolers and freezers.
- Be alerted if doors are not closed properly, preventing temperature fluctuations.
- Automatically track and document food storage temperatures per regulations.
- Ensure that the product leaving their restaurant has stayed within set temperature parameters.
- Maintain food, staff, and customer safety procedures across restaurant operations.

ROI: After only a few days using the Monnit Solution, restaurant managers optimized their temperature monitoring and saved thousands of dollars by avoiding food spoilage.

With the new Monnit Remote Monitoring Solution in place, the company also improved and automated record-keeping practices to comply with [Title 21 Code of Federal Regulations Part 11B](#) from the U.S. Food and Drug Administration (FDA). Our Temperature Sensors delivered reliable readings that are authentic, encrypted, and confidential. We helped ensure restaurant sensor readings and records were secure and logged appropriately. Our solution also helped the franchisee meet the temperature requirements of its HACCP compliance program.

Monnit Sensors and Meters Help Keep Food Services Safe and Quality High



1

Temperature Sensors

Monnit Standard and Digital Temperature Sensors measure a range of conditions from -40°C to +125°C (-40°F to +257°F), and our Low Temperature Sensors monitor -200°C to +162°C (-328°F to +325°F) with easy logging and graphing.

2

Open / Closed Sensors

You can know in an instant if a freezer, cooler, or refrigerator door has been left open. Our Open-Closed Sensor is ideal for lids, windows, and gates too. Keep all your food storage and restricted areas safe.

3

Food Probe Sensors

When you're working fast to get food on your tables or out the door, temperature checks need to be quick and accurate. Our Wireless Food Probe Thermometer can do it and is 21 CFR Part 11B and HACCP compliant.

4

AC Current Meters

It's easier to know if your restaurant equipment needs maintenance with an AC Current Meter. Available in 20-, 150-, and 500-Amp options, you can monitor abnormal power draw and fix it before failure.

5

Water Detection Sensors

A Monnit [Wireless Water Detection Puck](#) or [Wireless Water Rope Sensor](#) can help you keep employees and customers safe from slips and falls. And they can help prevent damage from a plumbing leak.