

Distribution Center Saves Perishable Products Through Two Hurricanes



Customer

A family owned company since 1967, Quirch Foods has become one of the largest food product distributors in the Southeastern U.S., Latin America and the Caribbean. With distribution centers in the U.S. and Puerto Rico, they cater to a variety of different food markets from cruise lines to supermarket chains.

Challenge

Quirch Foods distribution center in San Juan, Puerto Rico is an 85,000 ft² facility used to refrigerate and freeze perishable goods ranging from vegetables to meats. The challenge they were facing was monitoring the temperatures of their goods during hurricane season when power outages were likely.

Hurricane Irma hit Puerto Rico in September of 2017, and caused the distribution center's main power to go out. The backup generators kicked on to keep the facility's power going. However, two weeks later there was still no power to the island and Puerto Rico was hit again by hurricane Maria. The second blow from hurricane Maria led to structural damage of the facility's roof causing the loss of some perishable goods.

Summary

VISIBILITY



Wireless Facility Monitoring

AWARENESS



Saved Inventory from Disposal

“We were able to maintain constant communication with the temperature sensors during the storm and days after, we were able to map the temperature history of our inventory and confirm integrity, quality and safety were never at risk.”

Solution

Emerson Cargo Solutions' Wireless Facility monitoring system monitors temperature in stationary areas such as storage and processing facilities, walk-in coolers and freezers and cold-cases. The system is easily installed and uses wireless loggers that communicate with a gateway. The gateway sends data to the cloud database in real-time, using cellular connectivity. The system has redundancy built in, such as backup batteries in the event of a power outage.

Luckily, this system is installed in freezers and refrigerated areas at the Quirch distribution center in Puerto Rico. During Hurricane Irma, it alerted Quirch Foods key executives in Miami, Florida of a temperature change in a section of the facility when the power went out. "Once you lose power, you automatically switch modes looking at temperature because it gives you an indication. When you have no communication during storm hours the temperature will help you determine if the facility has suffered any damage or not," said Jorge Roza, Director of Marketing at Quirch Foods. Wireless Facility helped monitor temperature for two weeks and generators were used when there was still no power on the island. This helped the company save many perishable items because product continued to be monitored and it was confirmed temperature was not compromised.

Then Hurricane Maria hit the facility harder, causing structural damage to the roof. "Once we went and inspected the facility, we saw there was structural damage to a portion of the roof. So that became a priority. Thanks to Emerson we were able to monitor other areas because a temperature variation was a likely indication of further facility damage," said Roza.

Emerson's Wireless Facility monitoring system helped Quirch Foods maintain temperature control on perishable goods even though the power was out for months. "We were able to maintain constant communication with the temperature sensors during the storm and days after, we were able to map the temperature history of our inventory and confirm integrity, quality and safety were never at risk. Thus, we did not have to destroy or reject any merchandize due to temperature abuse nor question the integrity of the inventory. That's the real value," said Roza.

Result

- Utilized Wireless Facility Monitoring temperature control on perishable goods during back-to-back hurricanes
- With power out for long periods of time, Wireless Facility helped saved perishable goods



Wireless Facility Monitoring