



CASE STUDY

Getting ahead of Climate Control Challenges with Environmental Monitoring



Highlights

- MT sensors help provide critical monitoring of temperature and moisture in network closets with subpar climate control
- MT sensors in fridges and freezers at retail locations save hours of time previously spent manually checking temperature
- The Meraki dashboard allows for instant mobile alerts, allowing the team to remain in-the-know even when working remotely
- MT sensors installed in under 30 minutes
- Up to \$130k worth of hardware damage mitigated
- Up to 1,000 working hours saved

“ Other vendors have tried to deliver on the single-pane-of-glass experience. None of them do it quite as well as Meraki.

MIKE SHONYO

Senior System Engineer

LOCATION

Akwesasne, New York

INDUSTRY

Retail

PRODUCTS

MT sensors

Overview

Resting along the St. Lawrence river in the northernmost part of upstate New York is the town of Akwesasne, part of the St. Regis Mohawk reservation. It's here that Tarbell Management Group has their headquarters.

This family-owned and operated management business was built on values of honesty and trust, with a legacy of hard work tracing back to the 1950s and a two-pump gas station called *The Bear's Den Trading Post*. Tarbell is now an essential part of the local community, providing much-needed services such as convenience shops, restaurants, hotels, gas stations, and more.

Challenge

Mike Shonyo and two other members of the Technical Services Department are responsible for keeping Tarbell's ten business locations connected to the network so operations run smoothly. With an array of retail business types, network downtime could have significant operational impact and lead to poor customer experiences. The local community relies heavily on Tarbell's convenience stores to feed their families and gas stations to fuel their cars. Thus, an integral part of Tarbell's mission and role within the community is to keep these locations up and running.

For Mike and his team, one of the main threats to the network is environmental issues. As Tarbell grew from just one gas station to multiple businesses across the region, network equipment was often stored in rooms that were not built for that purpose. This meant that network hardware was vulnerable to temperature and moisture changes brought on by the northern climate and inadequate climate control in the makeshift network closets.

“ The MT sensors are an absolute peace of mind to me. I’m no longer stressed out walking around checking things manually. I’m saving a ton of work hours.

MIKE SHONYO

Senior System Engineer

The team had to battle the elements on multiple occasions. At one location, the cold winter months would cause a rooftop AC unit to freeze. At another, they experienced a flood due to buildup of condensation inside their HVAC system.

To compensate for these challenges, Mike and his team would have to regularly check network closets for temperature and moisture issues, resulting in many lost working hours. Additionally, renovating just one of the closets to bring it up to standard would have been cost prohibitive, with a price tag of \$50,000.

Solution

Mike believed he could not only improve efficiency but also increase convenience if he was able to monitor the temperature of all his Cisco Meraki hardware remotely. He submitted the idea as a “wish” on the Meraki dashboard and received a follow-up from the Meraki team asking if he would like to try out some of the new MT temperature and humidity sensors. Mike’s response: “Yes please!”

Mike has now installed a number of sensors in Tarbell’s core data center where all of the network data travels through. This includes MT sensors to monitor for temperature, moisture, water leaks, and door access. He has also installed a Meraki MV smart camera to monitor the room and serve as a data gateway for the MT sensors.

Mike was able to set up all of this equipment in under 30 minutes, and as an added bonus, he can monitor and manage it remotely—and in the same place as his other network hardware—via the Meraki dashboard.



MT SENSORS

Results

The MT sensors proved their value for Mike in short order. One Friday he got an alert from one of the MT sensors that the temperature in a network closet had reached 80° F. He was able to immediately report the alert to the maintenance team only a few minutes before they were preparing to close up shop for the weekend. The HVAC technician was able to respond to the scene and fix the issue—a malfunctioning AC economizer—within 15 minutes of being notified.

With this quick fix, the team was able to prevent a network outage, avoiding significant lost revenue as well as the loss of \$130,000 worth of network hardware. On top of these potential monetary losses, the outage would have resulted in hours, if not days, of downtime, preventing retail locations from serving their customers. This downtime could have ultimately affected the brand's reputation for outstanding customer service, a reputation Tarbell prides themselves on.

Additionally, Mike discovered that the MT temperature probe sensor could be of great use in the fridges and freezers across Tarbell's retail locations. Mike estimates that staff were spending up to 1,000 hours per year checking the temperatures of fridges and freezers. Even with all the manual inspections, they could not prevent the loss of nearly \$15,000 worth of perishables due to an overnight breakdown. By installing the MT temperature probe sensors, Mike's staff had more time to serve customers while still ensuring perishable food stayed fresh.

Mike and his team have found that the Meraki dashboard is a lifesaver in terms of managing the network. They love that everything can be managed from one single location, sparing their small team from having to travel for minor troubleshooting at remote locations. And by setting up dashboard and SMS alerts, the team is immediately in-the-know when an issue arises, keeping them agile and efficient.



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