Globally-recognized artisanal cheesemaker monitors production, aging, and distribution with Samsara’s wireless environment monitoring and fleet tracking platform:

- Seven thousand square feet of cold aging, storage, and receiving areas, plus a fleet of Ford delivery trucks running daily deliveries throughout Northern California
- Deployed Samsara EM12 environmental sensors, VG33 vehicle gateways, and GW22 industrial gateways to continuously monitor cold chain and fleet operations

Highlights:

- Real-time temperature and humidity tracking enables greater control of production, storage, and distribution environments
- Precise visibility into fleet operations enables real-time route changes and improves customer service
- Complete, automatic temperature logging saves drivers and QA time otherwise spent on manual audits

“Samsara is exactly what we were looking for - one platform to track temperature, humidity, and our distribution operations.”

MAUREEN CUNNIE, OPERATIONS MANAGER, COWGIRL CREAMERY
Located in scenic Point Reyes, Cowgirl Creamery is the leading artisanal cheesemaker in Northern California. Known for its soft cheeses made with seasonal and local ingredients, Cowgirl has witnessed exponential growth, fueled by winning globally-recognized awards and consistent recognition by food critics.

At the center is Maureen Cunnie. From production to tasting and pairings, Cunnie knows cheese. She began as a chef, mastering her craft working alongside famed chef and author Annie Summer, before taking over cheesemaking at Cowgirl Creamery. After producing some of Cowgirl’s most popular cheeses, Cunnie was interested in the operations of the rapidly-expanding creamery.

She moved to a new role as Operations Manager, taking over management of the production, distribution, and retail processes. Cunnie summarizes her role as “getting cheese exactly where it needs to be in a safe and timely manner.”

“We have very specific environmental conditions for our cheese aging and distribution. We need +/- 1 degree temperature variation.”

With their devoted following, Cowgirl Creamery has an ever-expanding production operation plus a fleet of vehicles delivering cheese throughout the San Francisco Bay Area. The creamery’s distribution network runs daily deliveries to four Cowgirl-owned destinations, plus over three hundred customer sites.

Cheese is a comparatively difficult product to produce, store, and ship. Each variety requires different aging times, temperature, and humidity. The same goes for shipping, and it is imperative that cheese is protected from high temperatures and humidity due the effect on delicate flavors and the potential for bacterial growth.

The Cowgirl Creamery team was using analog temperature and manually recording temperatures on clipboards three times a day in their delivery trucks and twice daily in their aging rooms, cold storage rooms, and milk tanks. Cunnie knew there had to be a better way to record all this data, and she began
looking at chart recorders to record temperature and alert the team when temps fell out of spec.

Coincidentally, Cunnie was also searching for a fleet management solution to improve the operations of their distribution network. She hoped to find a solution that combined temperature monitoring with fleet management. That’s when she found Samsara.

“I received a text indicating the temperature was rising in one of our storage rooms and sure enough, the condenser was broken. This wasn’t possible before Samsara.”

The team installed Samsara EM-series wireless environmental sensors for temperature and humidity throughout their operations. With the EM12’s temperature probe, the quality assurance team now keeps an eye on the temperature of milk in the milk tanks, different spots in each aging and storage room, and each delivery truck.

The EM12 sensors used in the creamery production and storage areas wirelessly sync with Samsara GW22 industrial gateways. GW22s are plug-and-play cellular gateways designed to wirelessly stream real-time sensor data from a variety of data inputs. The GW22s came to Cowgirl Creamery pre-provisioned with cellular connectivity, automatically connecting to Samsara’s cloud-hosted platform without requiring IT involvement. They also wirelessly synced with and began streaming the temperature data from the EM12 sensors.

In their delivery vehicles, Cunnie’s team installed Samsara’s VG33 vehicle gateways and EM12 sensors. Just like the industrial gateways, the VG33s were ready to go out-of-the-box, the team just plugged them into the vehicle diagnostic ports. In addition to streaming the live data from the sensors, the VG33 gateways automatically stream real-time vehicle location, acceleration, and vehicle diagnostic data to the Samsara.

Now Cunnie opens the Samsara Dashboard and has visibility of her entire operation. She has configured alerts, so she receives instant notifications via SMS when the temperature of a truck or room goes above threshold. She opens the Samsara App or the Samsara Dashboard and sees all the temperature and humidity history for each location. This comes in handy, especially on the weekends.

“Last weekend I received a text indicating the temperature was rising in one of our storage rooms. I sent our technician to look at it and sure enough, the condenser was broken. This wasn’t possible before Samsara.”
On the distribution side, Cunnie bulk uploaded all of the customer addresses to Samsara. When she clicks the Fleet Overview tab, Cunnie now sees all her customer locations mapped alongside the real-time location of her drivers. She knows where her drivers are, where they’ve been, and where they’re going, all in relation to the creamery’s customers.

“Now we can ensure drivers are hitting all their stops. If we have a customer issue we have all the delivery information right there. We can instantly find and reroute the closest driver to drop off an extra case.”

Cunnie and her team are using Samsara’s real-time data every day, and are finding tremendous value in the Samsara’s historical data. When they conduct their bimonthly distribution run to LA, Cunnie and team can see the duration, mileage, and fuel consumption for the trip. The team regularly discusses the merits of the trip, and Cunnie now has all the data to run a cost analysis and determine the route’s return on investment.

With a consistent focus on delivering the highest quality products, the Cowgirl Creamery team has an in-house quality assurance team and consults 3rd party inspectors to ensure they are maintaining best in class food safety standards.

The QA team ensures proper environmental conditions are maintained across every stage of the supply chain. The team regularly check Samsara’s reports which show historical temperatures. The reports are automatically run and delivered via email, and can be exported for inspections.

Between the rapidly growing product line, daily deliveries, and over seven thousand square feet of refrigeration full of cheese, Cunnie has a lot to look after. She notes that Samsara drastically improves the creamery’s operations, but ultimately it provides her the peace of mind that everything is working as it should.