APPLICATION NOTE

CAS DATALOGGERS

A Las Vegas Kitchen Goes Wireless With Temperature Data Loggers

CAS DataLoggers provided a temperature monitoring solution for Southern Glazers Wine and Spirits of America, Inc., one of the leading wine and spirits wholesalers in the U.S.A. Southern supplies hotels, restaurants, and beverage stores throughout the US; they even keep the party going in Las Vegas. As part of their marketing program, Southern provides guidance on pairing its products with different types of food. Born and raised in France, Southern's Executive Chef Benoit Cornet explains: "I work in our facility's kitchen hosting events for visitors, and we also test new products and foods for our customers to see how they pair with different beverages. We offer an ever-changing variety of food here, but we always have lots of cheeses, veggies, fruit—lots of healthy food, along with seafood and other specialties."

Last year, the kitchen had several equipment failures in its coolers and freezers, which is always a risk with any refrigerated storage units. Food safety regulations state that once products go above the 40°F safe zone, staff only have about 2 hours to get it back to temperature before the food has to be discarded. These equipment issues inconvenienced the kitchen as staff had to move food between refrigerators to keep everything safe. After this, Chef Cornet called CAS requesting a continuous monitoring and alarming system which could also send automatic alert messages to his phone.

Installation

CAS provided the kitchen with 6 battery-powered T&D RTR-502B wireless temperature data loggers, one to monitor each storage unit. The kitchen contains 4 refrigerators and 2 freezers of different sizes spread out through a large room and wired systems weren't practical given the kitchen layout. Installation was easy—the loggers are attached to the outside of the front of the units using Velcro and their external sensors are inserted through a port or door gasket to measure the temperature inside of the units. Southern also installed a T&D RTR-500BW wireless ethernet network base station to automatically collect the readings from the individual temperature data loggers. The RTR-500BW is located in a nearby room with backup generator power to support stable monitoring, even in the event that the facility's power ever goes out.

Utilization

Before installation, the chef and his assistants had tracked temperatures using thermometers integrated into their storage units, as is the case in many industrial kitchens. However, the team could be occupied preparing food for long stretches of time and they couldn't check the temperatures as often as they wanted, nor on weekends when everyone was off. Now, using T&D's wireless system, Chef Cornet has set the data loggers to automatically take temperature readings once an hour and to check for alarm conditions every 5 minutes. This way he is able to work knowing that an alarm will trigger whenever temperatures go outside safe limits, indicating that a cooler is failing and starting to warm up.

Chef Cornet also relies on the back-to-normal message the T&D system emails to his cell phone the moment that his storage unit temperatures are back to safe limits: "I live pretty far from work, on the other side of Vegas, so I like saving the trip when the fridges

are actually working fine after hours and on the weekend." In the event that temperatures don't return to safe levels following an alarm, indicating a possible equipment failure, he can take action by transferring all product from the failed fridge. "The alarms are fast, they're very reactive, so the food won't be out of temperature very long and it can all be saved."

The kitchen's system is also set up to automatically send its recorded data to the TandD Webstorage Service once an hour. This free cloud storage service offers long-term file storage space for up to over 5 million readings. All the recorded data is viewable online where it can be saved, analyzed, and printed out. Chef Cornet can also track the temperature data from his mobile device, so he can view it anytime from anywhere. Every Sunday, Chef Cornet will download the data onto a PC, print it out, and store it in a binder. This helps achieve compliance with food safety regulations so he'll have the data ready when the health inspector comes by and he can just hand all the data over: "They'll love that and it'll save us all a lot of time."

Benefits:

TandD's new wireless monitoring system really benefits Southern's temperature monitoring needs. Each RTR-502B wireless data logger includes an external sensor so the kitchen doesn't have to buy separate temperature probes. Now Chef Cornet has full documentation of his kitchen's ongoing best practices, proving to inspectors that the facility is keeping up with regulations. Further, if the kitchen ever needs to renovate and add walk-in freezers, T&D's durable data loggers are ideal for that setup too. Summing up the biggest advantage of his new system, Chef explains, "the biggest benefit is peace of mind—that's for sure. When a few of my fridges were failing, we knew we had to have something reliable to cover us the next time. I definitely have peace of mind now, and now I can also show our good practices for the health department." So now his alarming solution doubles as a compliance solution!

This Application Note has been adapted from an article written by TandD. TandD is the manufacturer of the RTR-502B and RTR-500BW, the ideal continuous food temperature monitoring solutions.

For more information on TandD's RTR Wireless Data Loggers, or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.