

Case example

Club's





The Problem: Failed Coolroom Compressor



A week earlier at large sporting social club the cooler's compressor failed at some point during the evening, it was well stocked with both prepared meals and fresh unprepared produce. The refrigeration failure went unnoticed until the following day when a chef noticed that the cooler was warm and the prepared food had started to spoil, as also the perishable produce. To be safe, they had to dispose of all the food in the cooler and restrict restaurant service until the cooler was fixed and restocked.

Not only did the club lose around \$3,000 in perishable produce, but they had to call in Chefs from RDO's and pay overtime rates to produce the prepared foods again, the prep was crucial to the restaurant service. Hundreds of dollars of extra wages were spent on top of the food that had to be replaced. Not only were these costs born, but the initial lunch service had to be massively reduced due to lack of food, and the kitchen staff called back in on their days off were not happy either as they lost their valuable time off.

The club wanted to implement a reliable temperature monitoring system, that would alert managers if temperatures in there coolers failed, they also needed to be able to be contacted anytime anywhere, in the event of an Alert going off in the future they could take action, transfer the stock to another facility saving thousands of dollars in lost stock and wages.

They realized that their process of manually tracking temperatures was not enough to protect them against the possibility of inventory loss. They needed an automated solution to track temperatures.

The Solution:



The customer chose to install wireless probe temperature sensors with internet gateway. The sensor housings were attached to the outside of their walk-in coolers and Freezers with temperature probe running through the door seals and attached inside. **i-temp** provided a reliable remote monitoring solution that included full data access and reports via the internet, with weekly reports emailed to the Chef automatically.

The sensor data is sent wirelessly to the gateway 20 meters away, which sends the information to the online sensor monitoring system. The temperature sensors were set to check and record temperatures every 30 minutes. Notifications were setup to alert their key staff if temperature readings are above their chosen limit and time frames, allowing them to respond appropriately.

i-temp system installed

Action	Result
Temperature sensor with probe And Ethernet gateway, spare internet port for base station was located in dining room	Monitor and record temperatures inside walk-in refrigerators and freezers, providing data for ANZFSA and local health code requirements and notifications set to alert staff of temperature
	Fluctuations or failures, preventing product spoilage.
5 refrigeration units monitored	Cost of \$5 per week each - \$25 per week
Time frame	Two weeks from order – 1 day to install
Other costs	\$650 Installation fee
Future costs	\$0 all battery replacements, equipment upgrades included in the weekly fee
Result	Coolroom had two more failures before a replacement unit arranged, No stock loss no repeat labour costs due to alerts received.
Bonus result	Thousands of dollars in labour saved as manual data logging no longer required, automatic reports also generated saving more time.
Refrigeration technician	Access to instant data on refrigeration's past and current performance can save many hours in fault diagnostics, graphic charts and detailed data files provide invaluable feedback on performance.
Labour savings	Over \$6,000 PA, based on correctly* manually recording 5 units twice a day and recording files, 2 min per unit @ \$35ph 365 Days. *this means collecting data from calibrated thermostat from with the cooler
Paper work	None – all on Smart Phone/Tablet/Computer

The Result (Cost Savings)



For \$25* pw, the customer was able to deploy a comprehensive solution addressing all of their needs. Each walk-in refrigerator/freezer that the company is monitoring contains upwards of \$5,000 in food product. Within the first month the system alerted their staff of an failure of a cooler which could have resulted in several thousands of dollars in lost stock, so the system has already paid for itself.

The staff are saving a minimum of 20 minutes per day in manually recording temperatures of the food storage systems, this equals thousands of dollars a year in labour costs saved, the system has already paid for itself again!

Using i-temp comprehensive monitoring solution, this customer is now able to:

Avoid potential product spoilage by using temperature sensors in their refrigerated storage.

Tell if cooler doors are not closed properly, or if units are not performing at correct temperature.

Automatically track and document storage temperatures per ANZFSA and local health requirements.

Ensure optimal product storage shelf life by ensuring correct storage temperature.

Provide auditable independent evidence of correct food storage temperatures have been met.

All Costs plus GST, A once off \$650 installation and commissioning fee

For further information visit, www.i-temp.com.au