

Resource  
Data Management

# Winthrop Gardens SUPA IGA

## The End-User

Winthrop Gardens SUPA IGA is a privately-owned independent supermarket in Perth, Australia. With over 40 years of retail experience, owner Jack Keeley is seen as the original 'Farmer Jack' of the Western territory. Focusing on serving the local community, the business has expanded recently to also include a café next door that offers fresh, organic daily selections which are cooked on-site.



Lighting



Temperature



HVAC



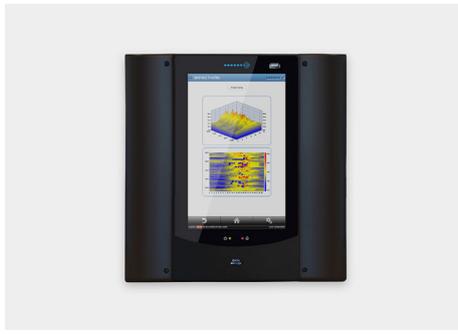
Remote Monitoring



PLC



Intuitive Controller



## The Project

Winthrop Supa IGA had previously made attempts to streamline energy performance through regular maintenance of their existing controls while also investing in eco-friendly solar solutions. Their incumbent refrigeration service and installation provider, National Refrigeration Solutions (NRS), made further attempts to optimise these existing controls but results were found to be minimal.

However, the need for a new solution was at its most prominent when the system failed completely in June 2018



Despite NRS ensuring existing controls were well maintained, this was ultimately a result of the equipment reaching the end of its working life. A temporary repair was implemented, but there was an urgent requirement for new controls.

## The Solution

NRS responded fast to the system failure and proposed a new RDM Controls System to keep refrigeration plant operational. As an approved system partner of RDM products, NRS had detailed knowledge of the features and functionalities of RDM controls that would enable Winthrop Supa IGA to achieve their objective of improved energy efficiency.

In just one week, NRS purchased the required hardware, installed and fully commissioned the system. This removed any worry that the existing system would fail for a second time and cause further stock losses.

To achieve such a quick turnaround, the following decisions were made:

- RDM controls were retrofitted to the refrigeration system, which included two racks already fitted with VSDs, condensers and cases. These controls were pre-programmed for a fast changeover, allowing for fine-tuning and optimisation to be completed after installation.
- RDM Circuit Controllers were selected for their compatibility with existing systems probes - significantly cutting installation time and minimising disruptions to production.
- The RDM Superpack Controllers installed on each rack were pre-programmed, providing immediate operation on installation, operating plant more efficiently with Fuzzy Logic and ease of commissioning.

DMTouch – RDM’s front-end control and monitoring solution – was installed to reduce energy consumption. Its extensive provision of energy-saving features, such as its Energy Dashboard, Suction Optimisation, TDB Customised Logic and Temperature Performance Indication (TPI) simplify and speed up the process of identifying inefficient operations based on an asset’s temperature and setpoints.

## Proven Results

NRS immediately saw the difference in plant operation after installing the new RDM controls. Processes had been noticeably streamlined and optimised through the refrigeration optimisation features found in the DMTouch head-end. The client and NRS also gained immediate remote access and visibility, something that was never available with the previous system.

Furthermore, within the first two weeks of installation, the TPI identified several

evaporators which required EPR calibration. Enabling further optimisation of the site and allowing for higher efficiency operation of the racks. The TPI also found a heater fault on an LT Chest Freezer which would have been extremely hard to recognise previously.

## Energy & Cost Savings

Winthrop Supa IGA saw their energy consumption substantially decrease, resulting in quantifiable energy savings. Comparing energy data pre and post-installation, overall energy costs reduced by 36% month on month, representing a 1.2 year return on investment for Winthrop Supa IGA store

## RDM Products and Solutions

- DMTouch (PR0510) - All energy saving features including Energy Dashboard – Suction Optimisation, TPI, TDB Customised Logic.
- Intuitive Super Pack Controller (PR0650 SUP) - Dropleg / Floating Head Pressure Control
- Intuitive Circuit Controller (PR0650 CCT) – Defrost Termination, TPI, Remote Defrost.

## NRS QUOTE: Paul Bonnar MD

**“The RDM products are highly functional and intuitive. There was no fuss and minimal involvement from the team in setting up the site. We now have full optimisation plus control and visibility from anywhere, giving us the ability to offer a truly efficient service.”**