Product Engineering for Smart Controller for UK Based Retail Coolers

Product Introduction

IoT Cooler controller, takes care of normal fridge controls like temperature set points and defrosting with effective Power Management and connects to phone via BLE.

Device also collects data on when people visit the store and adapt fridge on off timing to ensure cold products before store opens and switches off fridge after store timings.

It can also monitor how many people stopped in front of fridge and how many of those opened the fridge. This gives store and product manufacturer insights into what sells.

Project Scope

- Design , Prototype, Support Manufacturing, certification and reliability test
- Hardware, Firmware and Mechanical Design

Key aspects for Product Engineering



- Compact design: High Feature Integration for both 110/230V AC market at ~12A with food grade plastic.
- Designed for Price Sensitive Markets.
- High Volume Product with 6 variants with quantity of 150K-200K
- 24x7 365 days un-attended operation
- Connectivity: BLE with OTA updates
- Real Time Alerts

Key Achievements



Cost effective, high featured device

High Quality Achieved by implementing necessary Quality Processes and Quality monitoring by our team at Chinese manufacturing plant







Compressor

Heater

Fan

Light

