

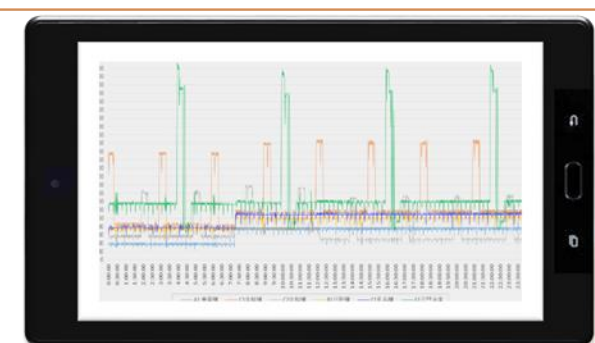
An AIoT-based Energy Management System for Food Retail Stores

Introduction

The Artificial Intelligence of Things Energy Management System (AIoT-EMS) can monitor energy consumption, improve energy performance and maximize energy savings in the fields, such as convenience stores or super markets, etc. Through the built-in artificial intelligence algorithms, the implementation of intelligent control can analyze and make abnormality diagnosis to optimize power operation through energy-using behavioral change and overall energy adjustments.

EMS Controller

AI based algorithm can effectively manage operations of equipment, save 5-12% of field energy, and achieve an ROI of 1~2 years.



Freezer Controller

Dynamic Temp. set point and defrost on demand energy saving algorithm.
AI pattern recognition for predicting malfunction possibility of showcases.



IoT-Based Wi-Fi Communication

Light Controller

Lighting power is changed according to timeslot.



Thermostat

Temp. set point is changed according to variations of customers.



PIR Sensor

People Flow Detection



Key Features

- Installed in more than 3,100 convenience stores in Taiwan
- Improve operation efficiency of 12% by using AI algorithms
- Reduce manpower by predictive maintenance (PDM) for refrigeration system
- Provide energy service company (ESCO) model for various applications
- Achieve Return-on-Investment (ROI) of less than 2 years

Quick & Easy Installation

