Case Study: National Chicken QSR

Quick Serve National Chicken Restaurant Realizes Energy Saving With chameleon[®] energy management system (ROI in 18 months revealed)

We can all agree that energy costs will continue to rise; this puts a significant amount of pressure on the restaurant industry. We can combat the rising cost with an energy management system that controls the largest energy draws in your restaurant; HVAC, lighting and walkin coolers and freezers. The savings achieved from controlling these energy wasters goes straight to the bottom line.

Challenge

With energy costs continuing to rise, our customer finds it increasingly difficult to operate a profitable restaurant. By taking control of his restaurants HVAC, lighting and walk-ins they are able to reduce expenses and increase profits in this low margin food industry.

Solution

Our customer selected the chameleon energy management system to take control of their energy usage. Offering control of lighting, HVAC and walk-in coolers and freezers they saw potential to realize a quick return on their investment. It also gives the customer visibility from anywhere that has an internet connection.

Product overview (best in class)

- LonWorks open platform utilizing Echelon's iLon SmartServer
- Honeywell- communicating programmable
 thermostats
- Three phase meter- monetizes energy consumption, populating the dashboard
- Communicating I/O devices for lighting and load control
- Adaptable refrigeration control- allows each controller to adapt to its own environmental dynamics
- Chameleon software was developed specifically for the quick service restaurant industry (alarms, alerts,



Fast Facts

Equipment Controlled	HVAC, Lighting, and Refrigeration
Energy Savings	15%
Cost of System	\$11,055
ROI	~18 months



System at a Glance

HVAC Zones / Thermostats	
Space Temperature Sensors	
Duct Temperature Sensors	
Lighting Zones (using sunrise/sunset function)	4
Refrigeration Zones / Evaporative Efficiency Controllers	
Photocell Control (for cloudy days)	yes

Results

After installing the chameleon energy management system customer recorded savings of 15% on HVAC, lighting and refrigeration expenses. Customer complaints about the dining rooms being too cold have also been greatly reduced. Based on initial calculations the ROI for this system may result in 18 months or less. Most chameleon energy management systems project a 24 month ROI or better.

energy management simplified