Control HVAC, Lighting, and Energy Usage

Retail automation projects are becoming increasingly popular as they help retailers to streamline their operations and provide a better shopping experience for their customers. One of the critical aspects of retail automation is controlling HVAC, lighting, and monitoring energy meters. In this solution sheet, we will explore why controlling these systems can help achieve comfort, reduce energy costs, and travel expenses, and how Intesis products bring a solution to their problems.

Intesis offers a wide range of communication gateways that provide seamless integration with building automation systems (BAS) allowing retailers to control their HVAC, lighting, and energy meters remotely, optimizing their energy usage and achieving a comfortable shopping experience for their customers.

Challenge No. 1: HVAC Control

The HVAC system in a retail store is responsible for providing a comfortable temperature and humidity level for customers and employees. Retailers must ensure that the store’s temperature is optimal for customers, leading to a better shopping experience. Moreover, retailers need to reduce their energy costs.

Solution:

Intesis HVAC interfaces, designed with the collaboration of the main HVAC brands from the market, enable access to all variables from the HVAC unit to any protocol for building automation. This means that independently of the brand, all HVAC units will look the same from the BMS perspective.

This is a reliable solution that allows retailers to set the temperature based on occupancy, external weather conditions and time of day, leading to more efficient energy usage and cost savings. Enable temperature limitations at the stores, scenes schedule, real-time alarm monitoring, and detailed error information for a fast response and reduced downtime.

Benefits:

- Retailers can achieve a comfortable shopping experience for their customers, leading to increased sales and customer loyalty.
- Retailers can reduce their energy costs by optimizing the energy usage of HVAC and lighting systems, leading to cost savings.
- Retailers can reduce travel expenses by monitoring energy meters remotely, eliminating the need for on-site visits to identify and address energy issues.

“Intesis allows retailers to achieve up to 30% energy savings with a ROI in less than 18 months.”
Challenge No. 2: Lighting Control

Lighting is an essential aspect of retail stores as it can significantly impact the customers’ shopping experience. Retailers must create a welcoming atmosphere and highlight specific products to attract customers’ attention.

• **Solution:**

Intesis protocol translators for lighting integration are developed based on the main standards for retail lighting (DALI-2, KNX) and are certified for the main markets as well. With the gateways, Intesis enables reliable and bidirectional control of lights so, from the BMS, retailers can adjust the presets based on occupancy and daylight availability, leading to more efficient energy usage and cost savings.

Challenge No. 3: Energy Meter Monitoring

Monitoring energy meters is crucial for retailers to track their energy consumption and identify areas where energy is being wasted.

• **Solution:**

Intesis solutions for HVAC, Protocol translation, and Cloud Control, are capable to integrate energy meters for different applications: calculating the energy consumed by HVAC indoor units individually, connect the energy meters to the BMS, or to enable remote monitoring from the cloud. By enabling that visualization and variables, retailers can identify energy-intensive areas and take steps to reduce energy consumption, leading to cost savings.

Intesis solutions provide retailers with the tools they need to control their HVAC, lighting, and energy meters, optimize their energy usage, and achieve a comfortable shopping experience for their customers. By using Intesis solutions, retailers can reduce up to 30% in their energy costs, increase sales, and improve customer loyalty.