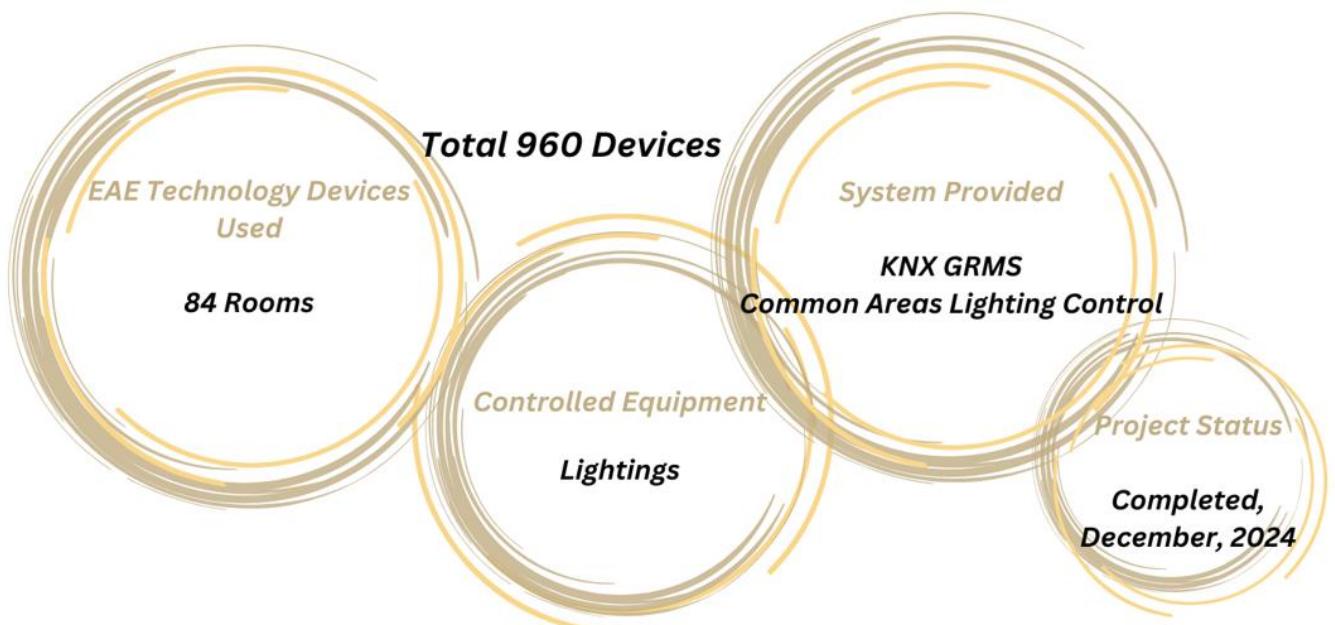


Double Tree by HILTON– Kars, TURKEY

Case Study



<https://www.hilton.com/tr/hotels/ksyutdi-doubletree-kars-sarikamis/>



Customer Review

Referance letter will be added soon...

Project Scope

The KNX Guest Room Management System for this project has been expertly developed by EAE Technology's team to enhance the hotel's energy efficiency, bolster security, and maximize guest comfort. The scope encompasses the following components:

- **Lighting Systems:** Control of all indoor and selected outdoor lighting is automated with a focus on energy efficiency. Lightings are controlled within the rooms as well as in common areas.
- **Security Systems:** Integration of the room KNX System with the Modbus component of the Building Management System (BMS) using a dual-layered approach to enhance encryption and ensure security.
- **Energy Conservation:** Implementation of automation solutions aimed at achieving energy savings by reducing unnecessary consumption. This includes the use of Card Holder and DND/MUR units for rooms.
- **Building Management System (BMS):** Centralized monitoring and management is used for integration of the Guest Room Management System (GRMS) with BMS.

Upon completion of the project, the hotel will achieve the highest standards in energy efficiency, guest comfort, and security, ensuring an exceptional experience for all occupants.



Used EAE Technology Devices

Field Devices	Quantity	Panel Devices	Quantity
Mona DND/MUR Panel	84	Dali Gateway	4
Mona Card Holder	84	Line Coupler	6
Oria Switch	506	Room Control Unit	110
Miola Touch Panel	3	Power Supply	9
Presence Sensor	64	KNX/Modbus Gateway	84

Mona DND/MUR Unit

The hotel showcases its distinctive logo on the Do Not Disturb (DND) and Make Up Room (MUR) panel. Each guest room is equipped with a Mona DND/MUR unit that clearly displays the room number for convenience. To improve guest comfort, the icons for "Do Not Disturb" and "Clean My Room" can be easily managed from bedside units and extra wall switches located throughout the room. Additionally, when the "Do Not Disturb" mode is engaged, the touch bell button is disabled, promoting a serene atmosphere for guests.



Presence Sensor

By integrating presence sensors in both the room and bathroom, we can efficiently regulate energy usage according to occupancy. This smart system automatically modifies the lighting, ensuring that energy is consumed only when the areas are in use, leading to more effective energy management.



Oria Switches

The Oria Switch provides an on/off control for room lighting. Featuring a sandy-textured surface that restricts fingerprints, it maintains a tidy look. Additionally, the status LEDs offer a clear indication of the current lighting state.



Miola Touch Panel

The Miola Touch Panel is utilized in common areas for comprehensive control over lighting fixtures and scene control. With its user-friendly interface, managing the common area's lighting control systems is a simple task. The panel's elegant design and high-resolution display not only enhance the modern aesthetics of the interiors but also enable guests to effortlessly adjust and personalize their living environments to match their preferences.



Other Devices Used in Project



Power Supply



Room Control Unit



Line Coupler



KNX Modbus Gateway

Security Perspective for Used EAE Technology GRMS System

In the room, EAE Technology's KNX GRMS devices are seamlessly integrated into the building's BMS system through the KNX/Modbus Gateway Module via Modbus/TCP/IP function. This sophisticated setup ensures that while the room itself is controlled via KNX, the system out of the room is Modbus.

This dual-layered approach not only enhances the encryption level but also guarantees that the security needs of guests are met with the highest standards. The intelligent design ensures that the room's comfort and control are maintained, while the overall building system operates securely and efficiently, providing peace of mind and an elevated experience for all occupants.

