



This hotel is a franchise hotel  
for Akra Hotels

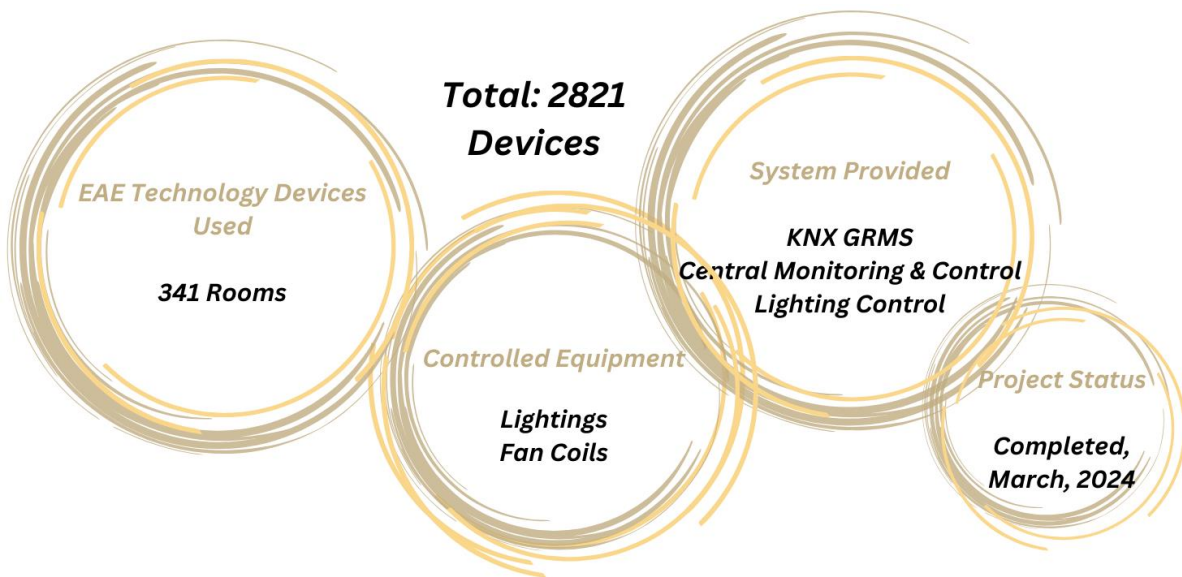


## AKRA SORGUN TUI BLUE SENSATORI – ANTALYA

### Case Study



<https://akrahotels.com/tr/oteller/akra-sorgun/>



## **Customer Review**

*The touch-sensitive lighting and air conditioning switches, designed to align with the technological advancements of our era, have significantly modernized guest rooms. By incorporating personalized color schemes that complement the interior décor, technology has seamlessly integrated with the architectural aesthetics.*

*In the past, identifying a faulty switch or lamp relied on the guest's report. Today, these issues can be monitored through centralized software, enabling prompt action without guest intervention. Moreover, "make up room" and "do not disturb" indicators are now managed via the central system, allowing housekeeping to efficiently plan their work without the need to physically check each room. The ability to control all these functions through the GRMS Central Management Software not only enhances guest comfort but also boosts the efficiency of operational processes.*

*Upon check-in, the "welcome scene" is activated through PMS integration, personally welcoming guests by name in their rooms. Additionally, IPTV channels are automatically organized according to the guest's nationality, further enhancing the personalized experience.*

*KNX GRMS also allows the air conditioning to be pre-set to an optimal temperature for unoccupied rooms, ensuring a quick cool-down upon guest arrival. When the "empty room" scene is active, the system maintains the room at a set temperature, dramatically reducing energy consumption compared to the wasteful practice of leaving air conditioners running in empty rooms.*

*In summary, KNX GRMS System has added value in three key areas: Guest Comfort, Operational Efficiency, and Energy Savings. It is a highly effective technology that I strongly recommend all facilities consider integrating into their operations.*

*Regarding the evaluation of the manufacturer as EAE Technology on a scale of 0 to 10, I would rate as follows:*

- Work Discipline: 10 points*
- Strong, Open, and Clear Communication: 10 points*
- Solution Focus: 10 points*
- Product Technology: 10 points*
- Software Development: 10 points*
- Qualified Human Resources: 10 points*
- Goodwill: 10 points*

*Greetings and respects,*

**M. Yiğit KELEŞTEMUR**

**Group Information Technologies – Information and Communication Technologies Manager**

## Project Scope

The project's KNX Guest Room Management System is designed by EAE Technology's expert team to increase the hotel's energy efficiency, ensure security and maximize comfort. The following components are included in the scope:

*PMS Integration* : The integrated Opera Property Management System allows monitoring of check-in and check-out processes, ensuring precise control and status updates for each room.

*Central Monitoring & Control System Integration*: To integrate the automation system with the building's BMS, the Central Monitoring and Management device facilitates remote control and monitoring of the KNX GRMS system, ensuring cohesive management.

- *Lighting Control*: The automation system manages room lighting, enhancing both comfort and energy efficiency.

- *HVAC Systems*: Centralized control and optimization of the hotel's heating, cooling, and air conditioning systems.

- *Security Systems*: Integration of the in-room KNX system with the BMS via Modbus, allowing for effective management and monitoring of card access.

- *Energy Conservation*: Advanced automation applications are employed to reduce energy consumption and promote significant energy savings.

In this context, when the project is completed, the hotel has been optimized to have the highest standards in terms of energy efficiency, comfort and security.



## Used EAE Technology Devices

<b>Field Devices</b>	<b>Quantity</b>	<b>Panel Devices</b>	<b>Quantity</b>
Mona DND/MUR Panel	341	Modbus Gateway	341
Mona Touch Thermostat	480	Room Control Unit	345
Mona Touch Switch	365	Universal Interface	150
Mona Bedside Panels	799		

## Project Concept

In this project, a comfort and energy-saving focused occupancy-based scenario control system was implemented without the use of a card holder. To achieve this, a KNX/Modbus Gateway was central to the project design, enabling seamless execution of various scenarios.

The KMG features a patent-pending logic controller that powers a room energy saver system, eliminating the need for traditional card holders. This innovative function automatically triggers scenarios when guests are not present in the room. Instead of relying on card holders, EAE Technology's PIR sensors were utilized to detect occupancy. For bathrooms, the IP44-rated version of EAE Technology sensors was chosen, ensuring reliable occupancy detection even in damp environments.



In addition, lighting and HVAC systems are managed using visualization software, making energy savings more efficient with the KNX/Modbus Gateway device. The KMG is capable of executing eight different scenarios through its advanced logic functions, and in this project, we implemented three key scenes:

**Pre-Welcome:** As the guest enters the room, the entrance lighting automatically turns on, creating an inviting atmosphere.

**Welcome:** Lighting, HVAC, and sockets are fully operational as long as the presence sensor detects the guest's occupancy.

**Leave:** When the guest exits and closes the door, the leave scenario is triggered after a specified period, turning off all lights and sockets while setting the air conditioning to the predefined temperature and mode.

**Check-in:** When check in is done, the room got energised without energy consumption. For example, sockets became operational.

**Check-out:** When check in out done, the energy of the room is cut of. All the energy consumption has been stopped.

### Property Management System (PMS)

Opera and Fidelio integration are in use for PMS (Property Management System) solution.

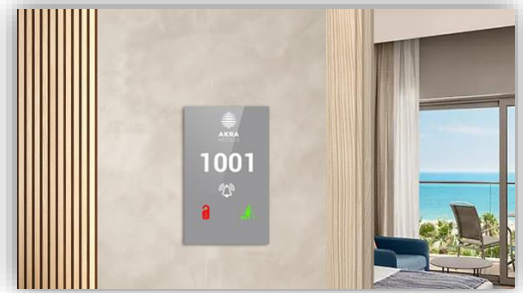
Once the check-in process is initiated, above scenes in the room are activated. The status of air conditioning, room temperature, lighting fixtures and the television status is arranged accordingly. In this project,





## **Mona DND/MUR Unit**

The hotel's special logo is used on the DND/MUR panel. Mona DND/MUR unit displays the room number in all rooms of the hotel. The "Do Not Disturb" and "Clean My Room" icons on the product are controlled from the bedside units and other wall switches in the room in order to increase the comfort level of visitors. Also the touch bell button becomes passive in the "Do Not Disturb" mode.



## **Mona Bedside Panels**

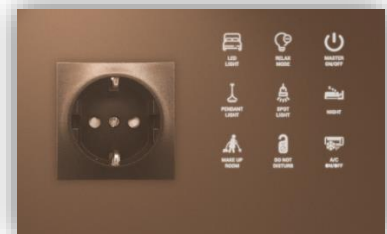
This project features 2-unit blocks, where each bedside panel seamlessly integrates switches (and sometimes thermostats) with socket frames. These panels offer guests intuitive control over lighting and curtains with just a simple touch.

Guests can easily select the 'Master Off' scenario, which instantly turns off all lights and closes the curtains, providing convenience and energy savings. Additionally, they can customize their room experience by pressing the DND (Do Not Disturb) or MUR (Make Up Room) buttons, or by activating an accompanying indication light on DND/MUR module—all without disturbing their rest during the night.

This thoughtful design ensures that room functions are easily accessible and adaptable, enhancing comfort while maintaining the serene environment guests desire.



The Mona block touch switch series complements the room's modern aesthetic, as it is designed to fit seamlessly within the same frame as the sockets. For this project, a 2-module design was implemented, which includes a 9-button switch alongside 1x2M Modular European sockets, featuring a power socket, enhancing both functionality and style in the room.





### **Mona Switches and Thermostats**

*Lightings are controlled using Mona switches located on different walls of the rooms. This allows guests to control the individual lights as well as with 'Master Off' scenario to turn off all the lights through the Mona switches for a peaceful night's sleep, eliminating any disturbance from light.*

*The Mona smart touch thermostat series effectively manages climate control in every room, offering an impressive blend of design, technology, and intelligence that seamlessly integrates with modern environments. Its intuitive touch design, minimalist lines, and frameless surface create a unique user experience that enhances both comfort and style. With these features, the thermostat not only serves its functional purpose but also adds an elegant touch to the overall room decor.*

*The Mona smart touch thermostat series features switching buttons that can accommodate up to 6 buttons, allowing for easy control of lighting as well. This design not only provides a practical and competitive solution but also helps avoid cluttering the space with multiple switches, resulting in a cleaner and more elegant aesthetic. This functionality enhances user comfort while maintaining a stylish look in the room.*

### **Other Monoblck Products**

*In the project, the Mona Series was meticulously implemented in configurations of 2-unit blocks, carefully tailored to meet the unique design requirements of each space. The placement of group sockets was artfully positioned together with TV units and above consoles.*

### **Other Devices**



Room Control Unit



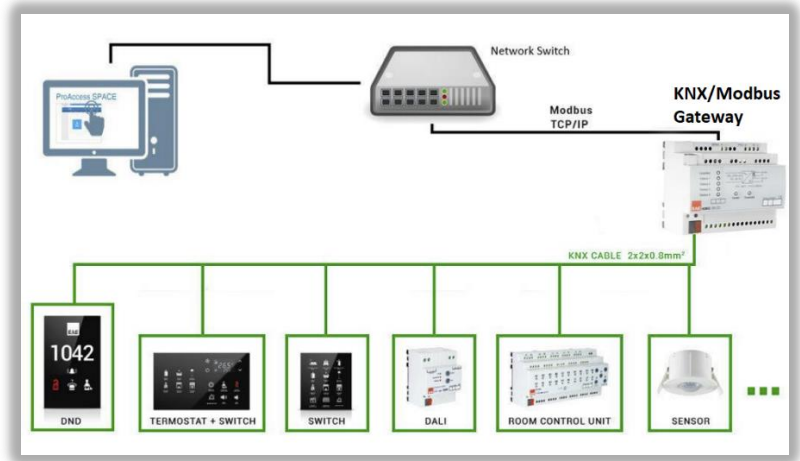
KNX Modbus Gateway



Universal Interface

## **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 transitions to Modbus outside the room.*



*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.*