KEMPINSKI THE DOME BELEK – ANTALYA
Case Study

www.kempinski.com/en/hotel-the-dome

Total : 2925 Devices

EAE Technology Devices Used

156 Rooms
43 Villas
Common Areas

Controlled Equipment

Lightings
Curtains
AC
Fan Coils

System Provided

KNX GRMS
Central Monitoring & Control
Lighting Control

Project Status

Completed,
May, 2024

Customer Review

In this case study, you may notice that there is currently no customer review included. The project has just been completed and it is taking some time to observe the results before providing feedback. We understand the importance of customer reviews and will be sure to add their insights as soon as they are available.
Thank you for your understanding, and stay tuned for this valuable addition!

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:

- Lighting Systems: Automation and energy efficiency-focused control of all indoor and some part of outdoor lighting of the hotel. Lighting control is applied as dimming diming and on/off control.
- HVAC Systems: Control, central monitoring and optimization of the hotel's heating/cooling, ventilation and air conditioning systems. Fan coils and AC units are controlled by EAE Technology's KNX Thermostats and Mitsubishi AC Controller.
- Security Systems: Integration of room KNX System to Modbus (BMS) part with dual-layered approach which enhancing the encryption level.
- Energy Conservation: Use of automation applications that will provide energy savings by minimizing energy consumption. Door and Window contacts are used for unnecessary energy use.
- Building Management System (BMS): Monitoring and management of GRMS via a central control software.

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

Field Devices	Quantity	Panel Devices	Quantity
Mona DND/MUR Panel	199	Power Supply	156
Mona Card Holder	199	Modbus Gateway	43
Mona Touch Thermostat	242	Room Control Unit	328
Mona Touch Switch	978	Universal Dimmer	156
Mona Bedside Panels	372	KNX AC Gateway	96
		IP Router	156

Mona DND/MUR Unit

The hotel's logo is used on the DND/MUR panel. Mona DND/MUR unit displays the room number in all rooms of the hotel, including villas, suites and standard rooms. 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. While the touch bell button becomes passive in the "Do Not Disturb" mode, the "laundry" icon informs the hotel staff to collect the laundry according to the user's request.

Mona Card Holder

Mona's Touch RFID Card Holder which has also switching functions up to 6 buttons saves energy when the guest is not in the room. Also sends the DND and MUR statuses to the DND/MUR unit located outside the room, controls lighting or curtains in some rooms, and runs scenarios through switching buttons.

When a guest enters the room and inserts the card, the welcome scenario is activated. Air conditioning turns on, set to required temperature and room entrance lights are turned on. Guests can perform the specified controls of lights, DND, laundry and MUR with a single touch. The Mona Card Holder at room entrances ensures security with RFID MIFARE feature and delivers a unique comfort experience.


Mona Bedside Panels

There are 2-unit, 3-unit, 4-unit, and 5-unit blocks in this project. Bedisde panel is the combination of switches (sometimes thermostats) with socket frames. Through the bedside panels lightings and curtains are controlled with one simple touch. Guests can select the 'Master Off' scenario which turns off all the lights and curtains. Beside that, guests can adjust room functions according to their needs by pressing DND, MUR or an accompanying light without disturbing the guest during the night.

The Mona block touch switch series are used in the same frame as sockets adding a modern touch to the room. In this project, Modular frames include 2x2M Modular European sockets including power socket, USB (Type A) and Type C sockets.
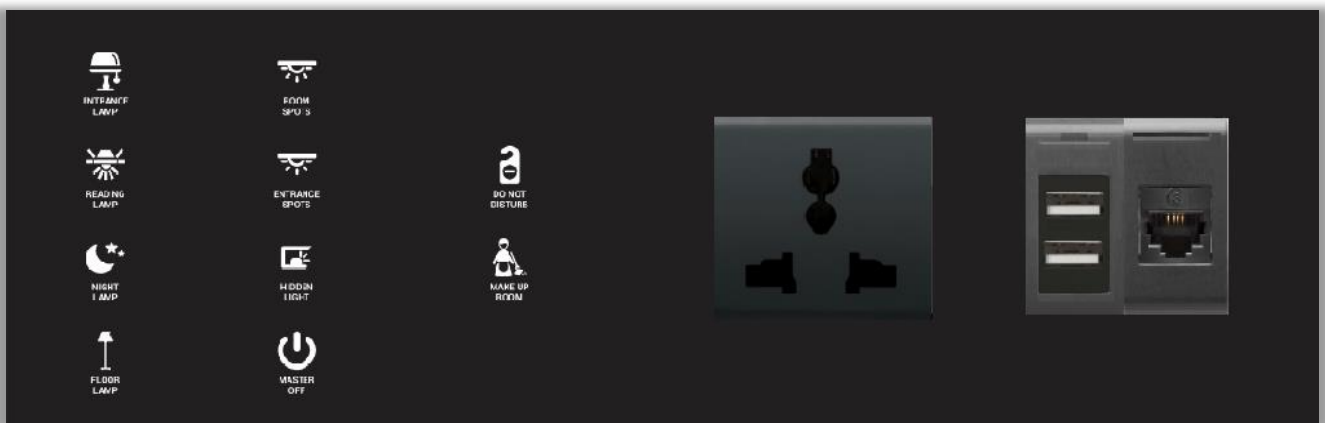
Mona Thermostats

The Mona Touch Thermostat Series seamlessly integrates design, technology, and intelligence to manage climate control in each room of the Kempinski Dome, perfectly complementing modern environments. Its touch interface, minimalist lines, and frameless surface create a truly unique user experience.

When the balcony door is opened, the system automatically adjusts the set temperature to conserve energy, resuming from the previous state once the door is closed.

Air conditioning systems in the villas are controlled by Mitsubishi Electric EAE AC Gateways, while the four-pipe fan coils in the rooms are managed by EAE Room Control Units.

The Mone Thermostat emphasizes the elegance and sophistication of the product while maintaining clarity and precision in describing its features.
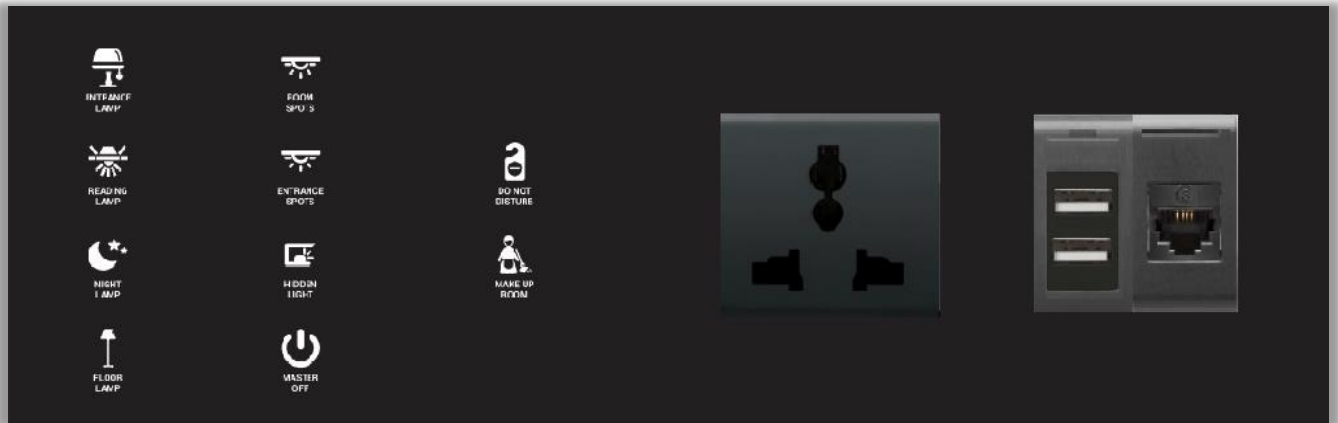

Mona Switches

Lighting and curtains are controlled with the Mona touch switches placed on the walls of the room. Guests can select the 'Master Off' scenario which turn off all the lights and curtains via the Mona touch switches as well as send the signals to DND/MUR module with DND and MUR buttons.

Mona Switches has button option up to 12, thus many objects in the room can be controlled with one product.

Other Monoblock Products

In the project, the Mona Series was meticulously implemented in configurations of 2-unit, 3-unit, 4-unit, and 5-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, in bathrooms ensuring a perfect blend with the room's aesthetic.

This thoughtful arrangement, combined with elegance of Mona switches, creates a visual symphony that harmonizes effortlessly with other devices in the room. The result is an environment where functionality meets art, where every detail is curated to elevate the overall ambiance, offering both practicality and an unparalleled sense of style.
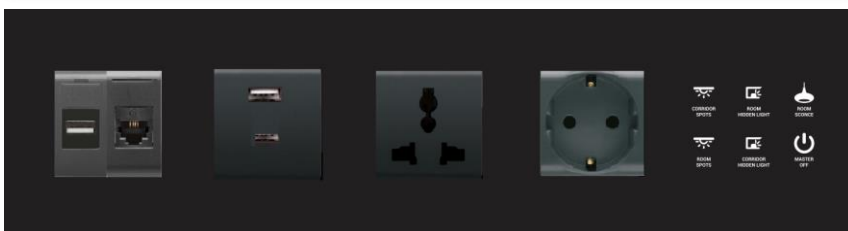
Other Devices Used in Project

Power Supply

Room Control Unit

IP Router

Universal Dimmer

KNX Modbus Gateway

AC 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/TCPIP 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.