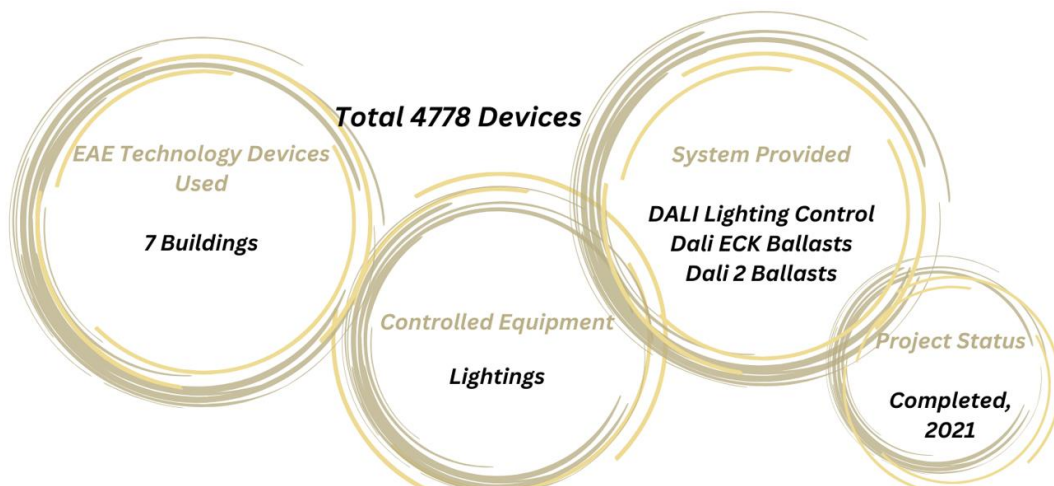


Turkish Airlines Operation Center
Turkish DO&CC
Cargo Building
TGS Building
Charge Building
IGA Mosque, Istanbul/Turkey

Case Study



<https://www.igairport.aero/>



Project scope

Project Scope: Istanbul Airport Lighting Control System

This project involved the design, implementation, and commissioning of a comprehensive lighting control system across **six buildings** at Istanbul Airport.

System Components and Functionality:

The system integrated the following key components:

- **EAE KNX-DALI Lighting Control:** This formed the core of the control system, managing lighting based on sensor data and user input. This included DALI 2 and Dali ECK ballasts.
- **EAE Technology Presence Sensors:** Used in common areas for occupancy-based lighting control. IP44 rated is preferred.
- **Oria Push Button Switches:** Provided user control of lighting. Anthracite and pearl white colors were used. 1F, 2F, 3F, and 4F button options implemented.
- **ECK Emergency Control Kit:** Ensured lighting control system functionality in emergency situations. Regularly monitored via DALI.
- **Integration to BMS:** Enabled real-time monitoring and control of the entire lighting system, including fault reporting and energy usage optimization.
- **Visualization Software:** Provided centralized control and monitoring system via a user-friendly interface, allowing for remote access and operational adjustments.

Project Deliverables:

The project successfully delivered a fully functional and integrated lighting control system, meeting all specified requirements for:

- Lighting control and monitoring across all six buildings.
- Reliable operation and emergency functionality.
- Energy efficiency and cost reduction
- User-friendly interfaces for monitoring and control.

This scope statement outlines the key aspects of the project. Detailed specifications and technical documentation are available upon request.

Used EAE Technology Devices

Turkish Airlines Operation Center

Panel Devices	Quantity
Switch Actuator	15
Dali Gateway	350
Universal Interface	580
Sensor	940
Push Button Switch	350



Turkish DO&CO

Panel Devices	Quantity
IP Router	12
Line Coupler	3
Dali Gateway	90
Universal Interface	15
Sensor	200
Push Button Switch	180



Cargo Building

Panel Devices	Quantity
IP Router	15
Dali Gateway	51
Universal Interface	117
Sensor	154
Push Button Switch	35



TGS Building

Panel Devices	Quantity
IP Router	25
Dali Gateway	103
Universal Interface	268
Sensor	370
Push Button Switch	85



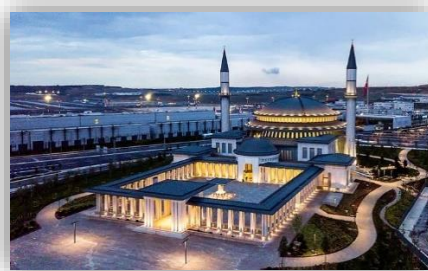
Charge Building

Panel Devices	Quantity
IP Router	20
Dali Gateway	100
Universal Interface	275
Sensor	240
Push Button Switch	60



IGA Mosque

Panel Devices	Quantity
IP Router	5
Switch Actuator	100
Dim Actuator	25
Sensor	66
Touch Button Switch	4



General overview

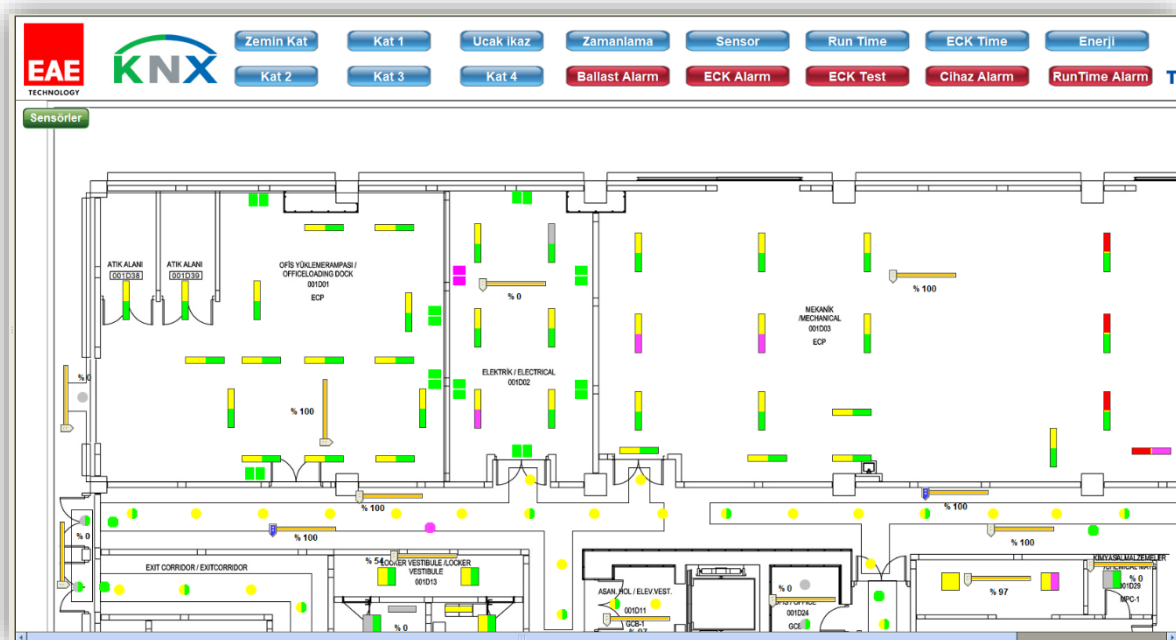
In common areas have been outfitted with Oria Push Button Switches, which provide a distinctive user experience with four different color options. Anthracite and pearl white colors are preferred. Additionally, we offered various button configurations to our customers, selecting 1F, 2F, 3F, and 4F options for our rooms.



EAE Technology IP44 presence sensors have been chosen in this project.



We provide centralized control through visualization software, significantly enhancing operational efficiency and ensuring the stable functioning of buildings. This software allows us to optimize energy usage, manage lighting control system, and provide remote access and monitoring capabilities, all of which contribute to reducing operational costs. These technologies are essential in modern facility management applications.



Alarm view;

The screenshot shows the EAE KNX alarm view interface. At the top, there are navigation buttons for 'Zemin Kat', 'Kat 1', 'Ucak Ikaz', 'Zamanlama', 'Sensor', 'Run Time', 'ECK Time', 'Kat 2', 'Kat 3', 'Kat 4', 'Ballast Alarm', 'ECK Alarm', 'ECK Test', and 'Cihaz Alarm'. Below these is a title bar 'Zemin Kat ___ Cihaz Alarm Bilgi Sayfasi'. The main area is a table with columns: Timestamp, Source State, Ack State, Source, Alarm Class, Priority, and Message Text. The table contains multiple rows of alarm events, all with a timestamp of '27 Haz 2024 13:57:17 EET' and a priority of '255'. The message text for all events is 'Communication error... Haberlesme arazi...'. The source devices listed include various Dali Gateways and Sensors.

ECK time battery view;

The screenshot shows the EAE KNX ECK Battery Time view. The title bar reads 'Dali Gateway 3.1.x --- ECK Battery Time'. The main area is a table with columns: Device Name, Battery Time, and a 'Request' button. The table lists 17 Dali Gateway devices, each with a battery time of 180 min. The devices are categorized into Dali Gateway 3.1.1 and Dali Gateway 3.1.2.

Device Name	Battery Time	Action
Dali Gateway 3.1.1_Device 16	180 min	Request
Dali Gateway 3.1.1_Device 29	180 min	Request
Dali Gateway 3.1.1_Device 30	180 min	Request
Dali Gateway 3.1.1_Device 31	180 min	Request
Dali Gateway 3.1.1_Device 32	180 min	Request
Dali Gateway 3.1.2_Device 1	180 min	Request
Dali Gateway 3.1.2_Device 5	180 min	Request
Dali Gateway 3.1.2_Device 6	180 min	Request
Dali Gateway 3.1.2_Device 7	180 min	Request
Dali Gateway 3.1.2_Device 8	180 min	Request
Dali Gateway 3.1.2_Device 9	180 min	Request
Dali Gateway 3.1.2_Device 12	180 min	Request
Dali Gateway 3.1.2_Device 13	180 min	Request
Dali Gateway 3.1.2_Device 17	180 min	Request

Used EAE Technology Panel Devices



Universal Interface



Switch Actuator



DALI GATEWAY



IP Router



Line Coupler



Dim Actuator