



Dubai Airports
Connecting the World

CASE STUDY

Dubai International Airport

HDL Brings Automated Efficiency to the World's Busiest Airport

SUMMARY

Dubai Airports is the government authority which owns and manages all commercial airports in the United Arab Emirates. Dubai Airports chose to install HDL lighting automation solutions into Dubai International Airport due to their proven reliability, ease of management, and customizability.

- **Client name:** Dubai Airports
- **Organization size:** 3182 employees
- **Products:** HDL Buspro lighting solutions
- **Industry:** Transportation
- **Location:** Dubai United Arab Emirates



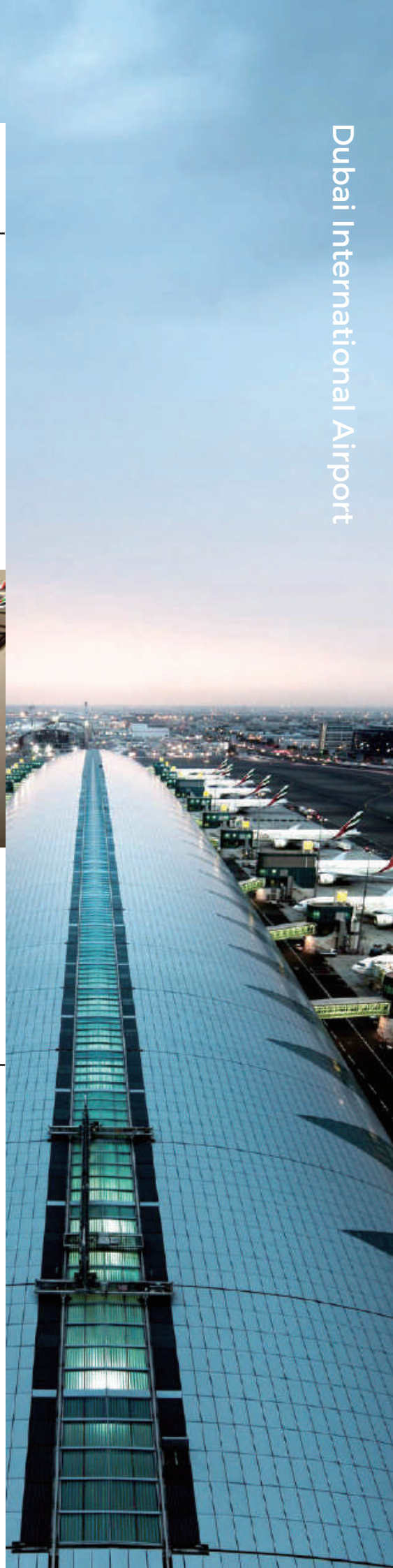
DUBAI INTERNATIONAL AIRPORT

HDL lighting automation solutions were installed into Dubai International Airport as part of the airport's scheduled refurbishment process.

Managed by the Dubai Airports authority, the state owned Dubai International Airport has been Dubai's main airline hub since 1960, welcoming over 68 million passengers per year and serving 260 destinations.

The airport consists of three terminals, three concourses, two cargo mega terminals, a duty-free zone, an expo center with three large exhibition halls, a major aircraft maintenance hub, and a flower center to handle perishable goods.

Further expansion of the airport is already planned, with the airport management team having secured authorization for a \$7.8 billion expansion program.





PROJECT BRIEF

As part of their refurbishment and expansion schedule, the airport operators sought to upgrade the existing lighting control system in the baggage handling area, CCTV monitoring centre, and the meeting rooms in terminals 1, 2 and 3.

Seeking a centrally managed, user friendly, intelligent lighting control solution Dubai Airports recognized that an automated control system would not only meet their needs but allow future expansion and modification.

A requirement from Dubai Airports was that the system selected must already have been implemented in a public transport setting, and have a proven track record of high reliability.



QUOTE

"With the new system we can modify or expand our lighting system at our own pace."

"Our staff have been provided with illumination systems which will help ensure safety, security, and productivity within our airports."

Senior Airport Official



UTTERLY DEPENDABLE

Over the past seven years HDL solutions have been installed into transport hubs across the world. Previously HDL automation control solutions have been integrated into train stations, airports, and even major roadways and bridges.

Primarily focused towards lighting control, HDL has built its reputation on its solutions being 100% reliable.

"Our solutions are tested every day in real world conditions, they have proven to be utterly dependable, robust, and reliable. With a HDL installation, we give the building operator a modular solution which can be expanded or reduced when needed."

"It is thanks to our products that we have been able to foster long-lasting relationships with our clients. They know that HDL pre and post-sales support is unparalleled, and that we stand by our product guarantees."

EXPERIENCED INSTALLERS

At HDL we know that the driving force behind any system installed into an airport should be security, an enhanced passenger experience, and the ability to be expanded in the future. We also know that an installation must be completed without impacting on the day to day operations of an airport.

With trained and accredited HDL automation integrators available around the world, your airport will always be in safe hands.

During the installation of the Dubai International Airport lighting system, HDL Dubai were able to complete the project ahead of schedule and within budget.

As with any HDL installation, the schedule included an intensive testing process once the system had been commissioned.



PRODUCTS INSTALLED

- **Leading Edge Dimmers**
- **0 to 10V Ballast Dimmers**
- **64CH DALI Dimmers**
- **48CH DMX Scene Controllers**
- **Single Port Programming Gateways**
- **750mA Power Supply Modules**
- **DLP Touch Panels**
- **BACnet Gateways**

THE RESULTS

HDL fully automated the lighting control system in the baggage handling area, CCTV monitoring office, and the meeting rooms in terminals one, two, and three of Dubai International Airport.

This was accomplished through HDL Dubai engineers installing a combination of HDL Dali modules, 0 to 10 and trailing edge dimmers, and HDL DMX scene controllers.

To control the newly installed system, the Dubai Airports team selected the HDL DLP touch panel as it provided; "Simple navigation, the ability to set customized levels, and a fitting design aesthetic."

With the HDL lighting control solution in place, the airport can benefit from:



LOCAL AND CENTRALIZED LIGHTING CONTROL

The entire baggage handling area can be locally controlled via password protected HDL DLP touch panels, or remotely controlled via the facilities manager.



NATURAL LIGHTING SIMULATION

Due to the CCTV monitoring office being staffed 24 hours a day, and having no external windows, a natural lighting simulation scene was created.

This allows the circadian rhythm of staff members to be regulated for maximized natural alertness.





SIMPLIFIED LIGHTING MANAGEMENT

With a range of preset scenes the lighting systems in the baggage handling area, CCTV monitoring office, and the meeting rooms in terminals one, two, and three can be instantly controlled via wall mounted HDL DLP touch panels. Scenes common to all areas included all lights on, all lights off, and emergency lighting only.

FURTHER COOPERATION

Once the airport management team had conducted independent tests on the installed HDL system, they requested that HDL install the same lighting solutions into the newly built Al Maktoum International Airport in Jebel Ali.

Scheduled to be completed in 2027, Al Maktoum International Airport will be the largest in the world in terms of freight handled, moving up to 12 million tonnes (12,000,000 long tons; 13,000,000 short tons) per year.

The confidence the Dubai Airports group has in HDL stands as a testament to the reliability and functionality of HDL's lighting control solutions.

AT A GLANCE

The HDL Buspro lighting automation system was installed into multiple areas of the Dubai International Airport.

This has enabled centralized lighting control and custom lighting profiles to be created.

