

CASE STUDY



Frankfurt Airport

Innovation strategy with LED eye-catcher

Germany's largest airport never stands still. More than 60 million people a year pass through here at what is one of the most significant international aviation hubs.

Catching people's attention quickly and effectively is important for the airport operator who values the advertising revenue potential. Part of the large-scale innovation strategy at Frankfurt Airport involved replacing the analogue light boxes with future-proof digital signage installations.

The Challenge

State-of-the-art installation with the highest safety standards

Ben Hur GmbH was invited to implement an impressive innovation project in collaboration with the operator of Frankfurt Airport, Fraport AG, and Media Frankfurt. Two visual eye-catchers in Hall A of Terminal 1, right next to the Lufthansa Business and First Class Check-In, impress with their size, luminosity and colourful digital content. Each of the two surfaces which measure around 54m² had to meet high fire protection regulations to ensure the safety of all passengers and employees.

In developing such major projects, not only does Media Frankfurt attach great importance to impressing customers on the technical side but also in setting new priorities in terms of sustainability. Accordingly, the installed solutions must offer energy saving options.

“Given the airport’s requirements for a state-of-the-art, highly future-proof, and eye-catching solution, which produces razor-sharp images at large size, and can hold its own against the high lighting conditions, we really had no other choice but to go with LED technology,” Cornelius Bodamer, Managing Director of Ben Hur GmbH explains.

“In choosing the manufacturer, we paid special attention to reliability and service, as well as the fire behaviour of the LED solutions. Sharp/NEC was the logical choice: a sound, long-term partner with an extensive service portfolio and LED cabinets with metal housing that deliver excellent results in fire tests. With the durable solutions, we were able to design the LED walls of the airport to look good and function sustainably for the next eight years.”

The Solution

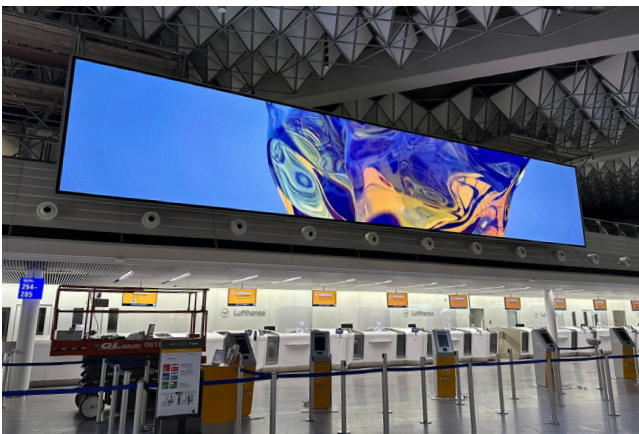
522 LED cabinets with integrated fire protection

The decision was ultimately made in favour of LED modules with 3.8mm pixel pitch from the FE series, which were to be installed on steel structures. The substructure was provided by EXACT solutions:

“The finer the pixel pitch, the more important the substructures become,” adds Bodamer.

“We have to be able to rely on every detail being considered and we can do that with EXACT solutions. They rose to the occasion once again. At the same time, LANG AG equipped the LEDs from Sharp/NEC – which feature a metal housing and passive cooling, and hence only have a very low fire load from the outset – with Media Fire Protect, an integrated self-extinguishing system that was specially developed for applications in critical infrastructures. The extinguishing devices from JOB GmbH made of glass burst at factory-defined temperatures, thus extinguishing fires immediately where they occur. As a result, the fire cannot spread any further, and the damaged cabinets can be replaced with minimum effort, without having to replace the entire installation. The power supply for the LED cabinet concerned is also interrupted, preventing another heat event.”

To meet the sustainability requirements of the solutions, Ben Hur deployed EcoProtect and light sensors. During operation, the sensors automatically adjust the brightness of the LEDs to the surrounding lighting conditions, allowing significant energy savings. With the aid of EcoProtect, the walls are switched off automatically at night at defined times and switched back on again in the morning in an especially eco-friendly manner.



The Result

An exceptional advertising experience at Frankfurt Airport

Both “digital check-in stars”, as the airport refers to them, measuring around 54 m², have been in operation at Terminal 1 since the end of June 2024.

Each with a height of 3.078 metres and a width of 17.632 metres, the boards are one of the largest indoor surfaces of their kind at German airports. Both screens are characterised by their impressive size and extremely high resolution. Thanks to being able to display spectacular 3D effects, they offer an exceptional advertising experience that impresses both operator and guests alike.

“The LED walls satisfy all of the client’s requirements to the fullest and are designed to be absolutely future-proof,” concludes Bodamer.



“The airport itself refers to them as a showcase for the innovation strategy. We can be proud of the result and the excellent collaboration between the clients, Sharp/NEC, EXACT solutions, LANG AG, and Ben Hur GmbH!”

Further innovative projects are planned for Frankfurt Airport including more advertising spaces guaranteed to grab travellers’ attention, set to feature in Terminal 3 which is scheduled to open in 2026.

Informationen zum Standort

SECTOR

Aviation and transportation

CUSTOMER INFORMATION

Frankfurt Airport / Media Frankfurt
www.linkedin.com/company/media-frankfurt

INSTALLATION PARTNER

Ben Hur GmbH | benhur.de
EXACT Solutions | exactsolutions.de
LANG AG | lang-ag.com

INSTALLATION DATE

May 2024

EQUIPMENT

- NEC FE038i2 (522 cabinets in total)

Media
Frankfurt

BEN HUR

EXACT
SOLUTIONS

LANG

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