

SCHNICK
SCHNACK
SYSTEMS

Terminal
C
Ankunft
Arrivals

7

Case Study

Frankfurt Airport
Arrival Area Terminal 1



Project

Modernization of the outside arrivals area in Terminal 1:
LED-strip lighting integrated into the new façade

Installed Technology

coated LED-Tiles C, Outdoor Pixel-Router, Pixel-Gate

In Operation

June 2016

Partner

LED hardware & support:
S[quadrat] GmbH
In der Alting 4
D-90596 Schwanstetten

Monitoring system:
MESO Digital Interiors GmbH
Gutleutstrasse 96
D-60329 Frankfurt am Main

Media planning:
medienprojekt p2 GmbH
Kleiststraße 23-26
D-10787 Berlin

Reference Customer

Fraport AG
Frankfurt Airport Services Worldwide
D-60547 Frankfurt

Photography

Saskia Gaulke

The Project.

Destination Terminal 1, Frankfurt Airport.

The Frankfurt Airport is Europe's fourth largest airport and the twelfth largest worldwide. Sixty-one million passengers a year make it one of the world's most important aviation hubs.

Terminal 1 alone, the older of the two terminals, has a capacity of 40 million passengers per year. It was opened in 1972. Over the years, it has been renovated and extended several times as a response to increasing passenger volume. However, due to the area's reconstruction over the years, it naturally lacked an overall design. So, in 2015 a comprehensive redesign of the outside arrivals area was initiated.

The goal: to create a pleasant ambience for arriving passengers because the curb-side and adjacent area was dark and desolate.

To achieve a modern look with a high atmospheric quality and a positive perception of security, the sidewalk and the street were resurfaced and a glass façade of more than 1,000 square meters with additional 2,100 square meter metal façade were erected.

What's more, a new digital advertising concept was put into action: the terminal façade is now adorned with six, large format LED monitors as well as strip lighting 434 meters long. This has created an attractive, multi-media area that the Fraport partner firm Media Frankfurt now markets for advertising purposes.

The opening of the new arrival level was just in time for the summer travel season 2016.



A pleasant take-off and landing at Frankfurt Airport Terminal 1 – a light-flooded space with a high atmospheric quality. Schnick-Schnack-Systems provided the LEDs for the strip lighting that is more than 430 meters long, every single LED Tile was specially equipped with outdoor connectors. The Terminal was opened in summer 2016 following 15 months of construction.



EXPERIENCE.

The Job Profile. Advertising and lighting in sync – ready for take-off.

There was more to the job than lighting: it was about an overall concept for illumination, ambience lighting and advertising surfaces. All of the lighting elements should create a harmonious ensemble with each component serving to support the other. The result: an optimal effect for advertising, a pleasant overall impression and a space where one feels at ease.

In this context, narrow strip lighting should provide continuous color change. Every time a color changes it should, similar to Ambilight, automatically match the basic colors of the content shown on the opposite-facing ad space.

The lighting technology requirements in detail:

- Control of all lighting elements from a central lighting control unit
- Video controllability
- Variable adjustment of all light elements with regards to arrangement, color temperature and color intensity
- High color fastness
- Feedback capability from power and data supplies and LED components
- Outdoor suitability of LED components, power and data supplies
- Good amortization due to long operating life (in operation around the clock 365 days a year)

The LED Tile C50 from Schnick-Schnack-Systems convinced the project planners in every instance, as did the Outdoor Pixel-Router for supplying the LED systems with power and control data. The project could begin.

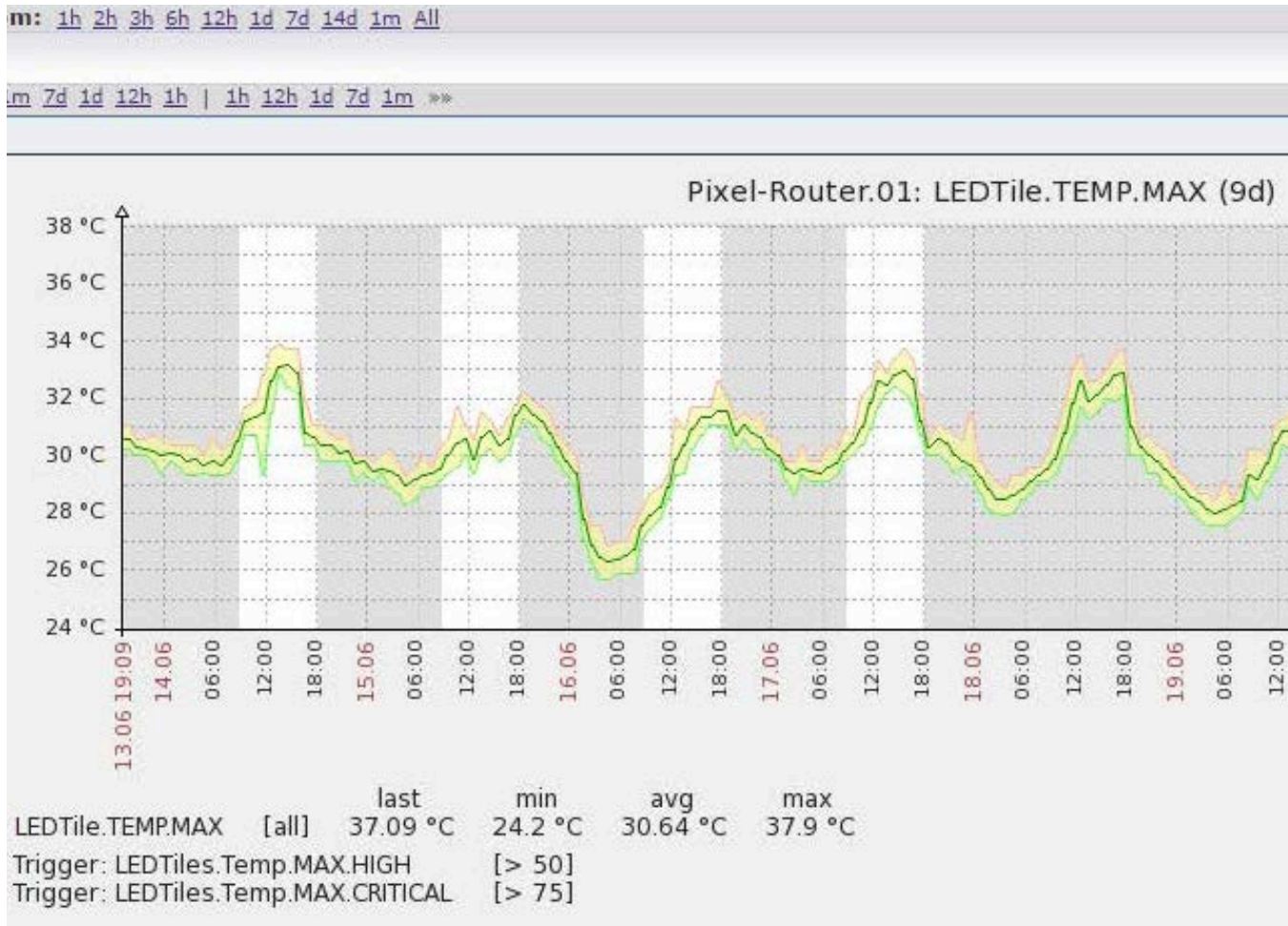
The Solution. Lighting, perfectly timed, slot for slot.

The planners from S[quadrat] designed strip lighting 434 meters long with sections of different lengths, various curves and radii. Work began with the construction of the substructure. It was embedded into the wall in pre-prepared shafts and created the basis for 2,300 coated LED Tiles C50, followed by a laminated safety glass VSG8 covered with a foil 1.52 mm thick. The highlight: to fulfil the requirement of 'outdoor suitability' each individual tile was custom made. In contrast to the conventional Tile C50, Schnick-Schnack-Systems equipped them with plugs suitable for outdoor use.

Eighty Outdoor Pixel-Routers ensured the power and data supplies. Their advantage in the context of this ambitious concept: they function without DMX input, buttons or displays and offer an optimal price/performance ratio. What's more, they are among the few devices on the market that can process Ethernet bursts with more than 250 universes. A special, multi-tasking, real-time operating system that processes and transmits video data, synchronized and latency-free.

The Ethernet hardware can in itself handle large amounts of data and forward it to the processor without any significant delay. The result: data packages don't get lost and delays are avoided when data is forwarded. Finally, system control is provided by 16 Pixel-Gates Plus.

Another important aspect: tiles and routers have a feedback function. This enables a monitoring system to check the status of the LED tiles and the Outdoor Pixel-Router at all times, to collect and analyze data. If disruption does occur, the system sets off an alarm automatically. The monitoring system is programmed by MESO Digital Interiors.



Above Feedback function: the system analyzes a wide range of real-time data, here for example the temperature of the Outdoor Pixel-Router

Left The construction of the LED Tiles (C50) substructure

Why Schnick-Schnack-Systems?

As installation times become increasingly shorter, systems are becoming increasingly complex in order to meet growing customer expectations.

We are a partner, who delivers premium quality, reliable systems under tight deadline constraints that are not only quick to install but are also simple to operate and service.

Schnick-Schnack-Systems GmbH

Mathias-Brüggen-Straße 79
50829 Cologne (Germany)

Phone +49 (0) 221/99 2019-0
Fax +49 (0) 221/16 85 09-73

info@schnickschnacksystems.com
www.schnickschnacksystems.com