

Customer Installation for Aviation and Transport

Flughafen Düsseldorf GmbH

New FIDS: First-Class Visualisation in 24/7 Operation



Passenger information systems provide guests and passengers with important information about their entire airport visit: from check-in and boarding, to departures and arrivals. Their reliability is a key component for smooth airport operations. To keep guests up to date at all times, SITA Airport IT GmbH at Düsseldorf Airport relies on Sharp NEC Display Solutions.

Düsseldorf Airport is the largest airport in North Rhine-Westphalia. Located in one of the economically strongest regions in Europe with 18 million inhabitants within a radius of 100 kilometers, Düsseldorf Airport is of outstanding importance for meeting the mobility needs of citizens and the economy in North Rhine-Westphalia. The airport connects NRW, one of the largest industrial regions in Europe, with global economic areas and thus drives central trade and information flows.

SITE INFORMATION

Sector

- Aviation and Transport

Client Information

- Flughafen Düsseldorf GmbH
www.dus.com
- SITA Airport IT GmbH
www.sita-airport-it.aero

Integration Partner

- BEN HUR GmbH
www.benhur.de

Installation date

- March 2020

EQUIPMENT

- 785 x NEC MultiSync® V323-3 PG
- 225 x NEC MultiSync® V484 PG
- 110 x NEC MultiSync V554 PG
- 990 x OPS Celeron (Win IoT)
- 38 x OPS Celeron (without operating system)



Reliable communication and IT structures are the basis for the smoothest possible operation at this important traffic hub. The partner for this is SITA Airport IT GmbH, a subsidiary of Düsseldorf Airport and SITA – a specialist in communications and IT solutions for the aviation industry. SITA Airport IT serves several airports, as well as public authorities and more than 250 large and medium-sized companies worldwide. At Düsseldorf Airport, the experts are responsible, among other things, for the Flight Information System (FIDS) and thus for the operation of around 1,000 displays.

High demand in airport operations

When the existing passenger information system reached the end of its service life after five years of operation, the project managers were faced with the challenge of finding a modern successor solution for around 1,000 displays in use. This had to meet various basic criteria.

Since the displays are used in both the public and security areas of the airport grounds, it had to be possible to install them with different suspensions, some of them custom-made. Areas accessible to passengers



also require robust display housings with protective glass. From a technical point of view, the key requirement is reliable 24/7 continuous operation so that passengers can access information at all times. In addition, the displays used should have a high level of brightness so that the information displayed can be easily read even in difficult lighting conditions. Power consumption also played an important role in the decision-making process. Even at high performance, the display and controller should consume as little energy as possible.

Reliable, first-class visualisation in 24/7 continuous operation

„Due to their reliable and at the same time energy-saving operation, even in 24/7 continuous operation, and their high-quality, robust hardware, we decided on the display solutions from Sharp/NEC“, says Daniel Rasokat, Project Manager at SITA Airport IT. The IT specialists at Düsseldorf Airport were also convinced by the expertise of the display specialists and their project management support. Sharp/NEC has a strong integration partner at its side in the systems house Ben Hur, which SITA Airport IT already knew from previous projects – another advantage for a smooth and speedy implementation. This is because some of the systems to be installed are located in security areas of the airport that are only accessible with special permits. Since Ben Hur’s experts already had these from past cooperation with the airport, nothing stood in the way of a quick start to the installation.

The passenger information system at Düsseldorf Airport now uses NEC displays in three different sizes: 785 x NEC MultiSync V323-2 PG (32-inch) and 225 x NEC MultiSync V484 PG (48-inch), as well as 110 x 55-inch LFD NEC MultiSync V554 PG.

With their robust hardware, the displays meet the particularly stringent security requirements at the airport: They feature a tough 4 mm thick protective glass that can withstand external impacts. This aspect is particularly important because the monitors are partly installed in places that are accessible to passengers. With their flame-retardant metal construction, the displays also meet fire safety requirements.

Thanks to precise 10-bit colour reproduction and a high-contrast IPS panel, the devices deliver razor-sharp images in full HD. Readability is also assured by the anti-reflective coating of the glass surface (Conturan® protective glass) and a screen brightness of 500 cd/m². This means passengers are always well informed in different lighting conditions and from any viewing angle, whether at check-in, at the departure counter or in the baggage hall.

Equipped with Intel Celeron dual-core processors, the displays deliver reliable performance at up to 2.4 GHz at turbo speed during 24/7 operation. At the same time, the system is designed to be power efficient with ECOMode and also offers a CO₂ savings display. SITA Airport IT also



benefits from high usage flexibility – thanks to extensive connectivity options such as 3 x USB, Gigabit Ethernet, audio and optional Wi-Fi and mobile web (4G/LTE). Using OMi (Open Modular Intelligence), the performance of the displays can be increased at any time, so the FIDS is also prepared for future requirements.

Excellent solution-oriented collaboration

In just three months, the FIDS at Düsseldorf Airport was upgraded with NEC displays. Sharp/NEC and partner Ben Hur integrated about 1,000 new displays across a number of areas throughout the airport. In the process, some installations had to be custom-made, for example due to special suspensions or integrations in walls that were structurally predetermined. But here too, suitable solutions were quickly found. „*The good, cooperative partnership between all those involved was evident right from the start of the project*“, praises Pascal Pohl, Business-Relationship-Manager at Düsseldorf Flughafen. „*Thus, despite the challenge of short-time work, which can sometimes complicate the coordination effort, suitable solutions were quickly found. This proactive cooperation is a success with which we are very satisfied at the airport.*“



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