

# Keflavik International Airport



**Location:**  
Keflavik, Iceland

**System:**  
CEM:

- AC2000
- S600e

Keflavik International Airport lies on the Reykjanes peninsula, seven minutes from the town of Reykjanesbaer (Keflavik) and 50km southwest of Iceland's capital Reykjavik. Keflavik is the main international airport for Iceland and features modern passenger and commercial facilities as well as extensive aircraft operation areas. Sitting astride the North Atlantic route linking Europe and North America, the airport is of major importance for technical stops and as an alternate airport on the North Atlantic.

In July 2005 expansion works began at Keflavik Airport and operating 24 hours a day, 7 days a week, the airport required a highly reliable security solution that could be customised to meet their specific environment, as well as help secure the 1.8m passengers they service per year.

## High security solution...

The CEM AC2000 security management solution was installed by CEM Reseller, Securitas HF and proved the ideal choice for Keflavik Airport. Featuring advanced hardware and sophisticated software, CEM was able to customise the AC2000 system to meet the airport's unique requirements.

*"As the only airport-tailored access control system, the CEM AC2000 system was the best solution for Keflavik International Airport," commented Einar Gudlaugsson, Product Development Manager of Securitas HF. "Working in consultation with CEM we designed a highly secure and flexible access control system to meet all of the requests of Keflavik Airport. The advanced security system design incorporates a dual redundant server, integrated CCTV, elevator control, and door level intelligence using CEM S600e fingerprint card readers and the CEM xProx 200 MiFare smart card range of readers," Gudlaugsson continued.*

### **xProx 200 card readers...**

One of the industry's most advanced card readers, the xProx 200 MiFare range controls over 300 airside/ landside doors at the airport. To utilise existing cabling the client opted to use a combination of InfoProx™ serial card readers and EtherProx™ IP card readers, with the Ethernet readers installed at new door locations throughout the airport. The supplied xProx 200 readers support MiFare smart cards and come equipped with an LCD display, keypad and internal database for card validation at the door. With readers continuing to validate ID cards even if offline from the host controller, Keflavik Airport is ensured a high level of system stability.

To further strengthen the system design Keflavik Airport also opted to install a failover dual redundant server to ensure zero operational downtime and the highest level of system resilience.

### **Ethernet fingerprint readers...**

As an added security measure at airport police locations, Keflavik also opted for CEM S600e fingerprint readers. Fingerprint templates are captured on the CEM AC2000 enrolment station at the same time as cardholders' personnel details and image, and then saved to the AC2000 Server. The templates are then distributed via the access control system over Ethernet to the S600e fingerprint reader eliminating the need for an additional biometric network. This provided Keflavik with a flexible, single solution for biometric template management.

### **Flexible solution...**

"With our ability to customise the system hardware and software, our solutions have added flexibility to the design of the security system at Keflavik Airport," commented Andrew Fulton, Business Development Director of Tyco International's CEM products. "To help operations at the airport run more efficiently we developed a web interface for airport contractors to apply online for temporary passes. We additionally made a number of customisations to the xProx 200 card reader firmware to provide client-specific door modes".

### **Customised door modes...**

Customisation for this particular project involved a 'Panic Mode' for emergency situations and a 'Schengen Mode' which help the airport manage the segregation of passengers according to their country status in the European Schengen Federation. This is an agreement among European states that allows for the abolition of systematic border controls between participating countries, such as Iceland. Airline staff at Keflavik Airport can use the xProx 200 card reader, remotely or via card swipe, to select the Schengen Mode and subsequently interlocking groups of doors to route passengers from non-Schengen countries to customs for passenger identity checks and border controls.

### **Online pass application...**

To enhance operational efficiency and add flexibility to the ID Pass unit at Keflavik Airport, CEM designed a customised 'Online ID Card Application' for users such as temporary contractors to request a permanent or temporary ID card via the web. Users can request an ID card in advance of visiting the pass office by submitting personal details and specifying access requests such as required airport zone(s), time zone, card validity period e.t.c. Upon submission of the online form, ID unit staff then review and determine application status accordingly. If accepted, the data is transferred permanently to the access system (via the AC2000 personnel screen) where a pass is printed, validated and issued as normal.

With future expansion plans and passenger traffic at the airport expected to reach 3.2 million by 2015, the flexible AC2000 access control system can easily continue to grow to meet ongoing security requirements at Keflavik International Airport.

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