



## Hong Kong International Airport

About 1,000 aircraft movements and over 100 airlines link Hong Kong International Airport (HKIA) with about 180 destinations worldwide every day, making it the world's busiest cargo gateway and one of the world's busiest passenger airports.

Since its opening, HKIA have controlled access throughout the airport using the renowned CEM AC2000 access control and security management system.

CEM AC2000 provides a reliable and scalable access control and security management system. This solution helps HKIA protect passengers, staff and the airport premises, while providing a fully future proof and expandable security system.

### CASE SUMMARY

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**Location:**

Hong Kong, SAR China

**Systems Installed:**

AC2000 access control

AC2000 VIPPS (Visual Imaging Pass Production System)

AC2000 AED (Alarm Event Display)

**Hardware Installed:**

2000+ CEM readers:

- S610 intelligent IP readers

- S610f Fingerprint readers

- S3020 portable readers

CEM DIU 230 (high power PoE+) Door Interface Unit

CEM Lift Interface Unit

## Introduction

CEM Systems and HKIA have a long working relationship in which the AC2000 system has proven itself to be a highly reliable and powerful system. The fully integrated, alarm processing and photo badging system has given HKIA an innovative access control solution. In 2010, HKIA awarded CEM a \$2 million security management system upgrade contract.

The airport needed a seamless upgrade of their AC2000 security management system and card readers from serial to IP, as well as expansion of biometric security and the ability to implement portable security throughout the airport.

## Solution

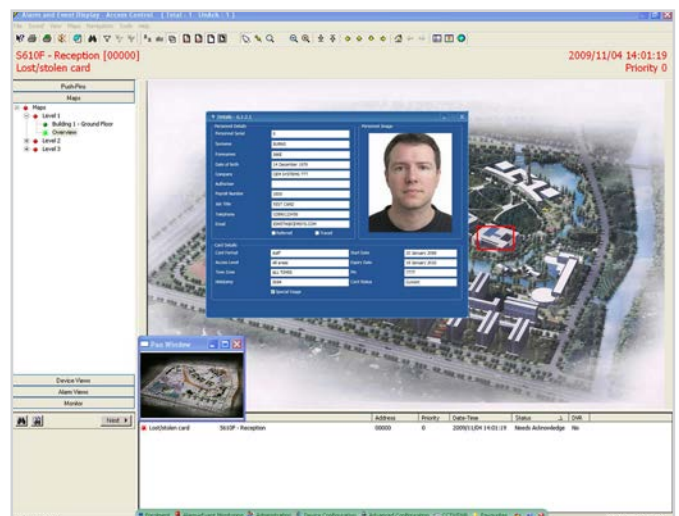
### AC2000 security management system

CEM's AC2000 system has been used to secure airports around the world. Its power and flexibility allows it to meet HKIA's unique requirements making it one of the most comprehensive security management systems available. Using CEM AC2000 VIPPS (Visual Imaging Pass Production System), HKIA manages permanent and temporary ID passes for airport staff, contractors and visitors.

The HKIA upgrade was significant as over 1000 serial CEM readers were seamlessly upgraded from Wiegand technology to PicoPass smart card technology using existing IP connectivity at the airport for simplified installation.

### Integrated alarm management

The HKIA system was designed in such a way that once alarm information is processed it is forwarded to the relevant operator and workstation. AED (Alarm Event Display) workstations contain state-of-the-art alarm monitoring software, allowing maps of the airport to be viewed as and when an alarm is raised. Each map is illustrated to show each alarm point within the selected area.



A networked TCP/IP interface allows transactions and alarms from air-bridges to be associated with tagged video and ID details e.g. when someone uses their card at an air-bridge their image and card details will appear on screen for security personnel to view. This increases security at high profile areas.

### **Biometric security**

The upgrade contract also included a further biometric expansion of CEM S610f fingerprint card readers to all air-bridges. The progressive move to biometric card readers was achieved to increase the overall efficiency of the airport. The CEM S610f fingerprint reader offers HKIA increased security by providing three levels of identity checks, including ID card authentication, PIN check and fingerprint verification.



The S610f has a large internal database which holds card and encrypted biometric templates at the door. This ensures zero system downtime at air-bridges. The S610f also features an LCD screen to show personnel meaningful user messages and has many airport specific door modes such as 'Passenger Mode' and 'Lobby Mode' for extended door open times at air-bridges. With S610f readers in place, only authorised and trained personnel can use the air-bridges.

### **Portable security**

HKIA also uses CEM S3020 portable readers for mobile security. The reader allows security personnel to make roaming checks throughout the airport and can also be used at temporary entrances where there is no mains power. This ensures the highest of security at all times throughout the airport in order to protect staff and travellers.



### Securing a prestigious site

HKIA had over 56 million passengers pass through the airport in 2012 making it one of the busiest international passenger airports worldwide. HKIA has been named the world's "Best Airport" at the TTG Travel Awards – an award it has claimed every year since 2002, except in 2003 when the awards were not held. The airport has also been named the 'Best Airport in China' in the Business Traveller China Awards for the sixth time in seven years, in recognition of its service excellence.



*"We will continue to work with CEM to explore new technologies that help HKIA maintain the highest level of safety and security in the future."*

*John Lamond*

*General Manager*

*Safety, Security, Environmental & Business  
Continuity, Hong Kong International Airport.*

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