

AC2000  
AIRPORT

IN THE FAST MOVING WORLD  
OF AVIATION YOU CAN RELY ON  
**AC2000 AIRPORT**; A POWERFUL  
ACCESS CONTROL AND SECURITY  
MANAGEMENT SYSTEM



**tyco** | CEM Systems

Johnson  
Controls 



## SECURING THE GATEWAYS OF THE WORLD

USED BY MANY OF THE WORLD'S LEADING AIRPORTS FOR OVER 30 YEARS, AC2000 AIRPORT IS AN AVIATION-SPECIFIC SECURITY MANAGEMENT SYSTEM THAT HAS A PROVEN RECORD AS ONE OF THE MOST RELIABLE AND RESILIENT SECURITY SOLUTIONS AVAILABLE. THE FLEXIBILITY AND HIGH QUALITY OFFERED BY AC2000 AIRPORT IS A KEY FACTOR IN ITS SUITABILITY FOR THE AVIATION ENVIRONMENT.

## WHAT CAN AC2000 AIRPORT OFFER YOU?



### Airport access control

AC2000 Airport encompasses all the core software features of the powerful AC2000 system with a host of additional functions that have been specifically designed for airports including card charging, authorizers, airport utilities and IATA code.



### Flexible, customized solution

CEM Systems understands that airport security needs and legislation requirements change over time. As such, AC2000 Airport software and hardware is highly flexible to meet project needs for integration or customization. AC2000 software also incorporates built-in user definable fields that enable airports to build a self-configured, customized system.



### Integration

Acting as the Security Management System (SMS), AC2000 Airport provides high levels of integration and one powerful command and control front-end for alarm management of multiple airport security systems; including access control, video, intrusion, fire, perimeter detection and much more.



### Scalability

AC2000 Airport supports unlimited cardholders and doors, featuring virtually unlimited expansion capabilities. This is ideal for airports that are sizable and subject to continuous growth over time.



### System resilience

AC2000 system architecture features layers of resilience. The AC2000 server is built on a highly stable operating system that can be further enhanced with a failover/redundant server. The use of distributed intelligence at all levels of the system is also achieved using CEM intelligent card readers with an LCD screen and a large internal database for offline card validation; a critical requirement for airports.

## KEY SYSTEM FEATURES

- Highly stable Linux operating system
- Windows® based operator workstations
- Virtually unlimited system expansion
- Intelligent, multi-technology CEM card readers
- Seamless integration with external systems; CCTV, intrusion, fire, perimeter detection and more
- Multi-language support
- Extensive web-based AC2000 applications
- Redundant server

**And much more**





## INNOVATIVE ACCESS SOLUTIONS FOR MISSION CRITICAL AIRPORTS

CEM AC2000 HARDWARE IS HIGHLY INNOVATIVE AND REFLECTS THE LATEST IN SECURITY TECHNOLOGY.

### Intelligent card readers

CEM card readers offer multiple layers of security throughout airports, controlling airside and landside boundaries, gates, Air Traffic Control Towers and associated remote buildings. With an internal database, readers can validate cards and store transactions offline, ensuring zero system downtime and a 24/7 operational airport environment. With a keypad feature for additional PIN security and an LCD, messages such as Access Denied and Card Expiring are easily displayed. This prevents operational delays as ID cardholders can quickly communicate reasons for denied entry to the airport ID unit.

### Touch screen card reader / terminal

CEM emerald access terminal is a revolutionary edge device. Featuring a touch screen reader and controller in one, with built in Voice over IP (VoIP) intercom functionality, emerald uniquely enables data normally only available on the AC2000 client PC to be accessed securely at the door for functions including reader maintenance, aviation check-lists, display of airport advertisements and much more.

### Integrated biometrics

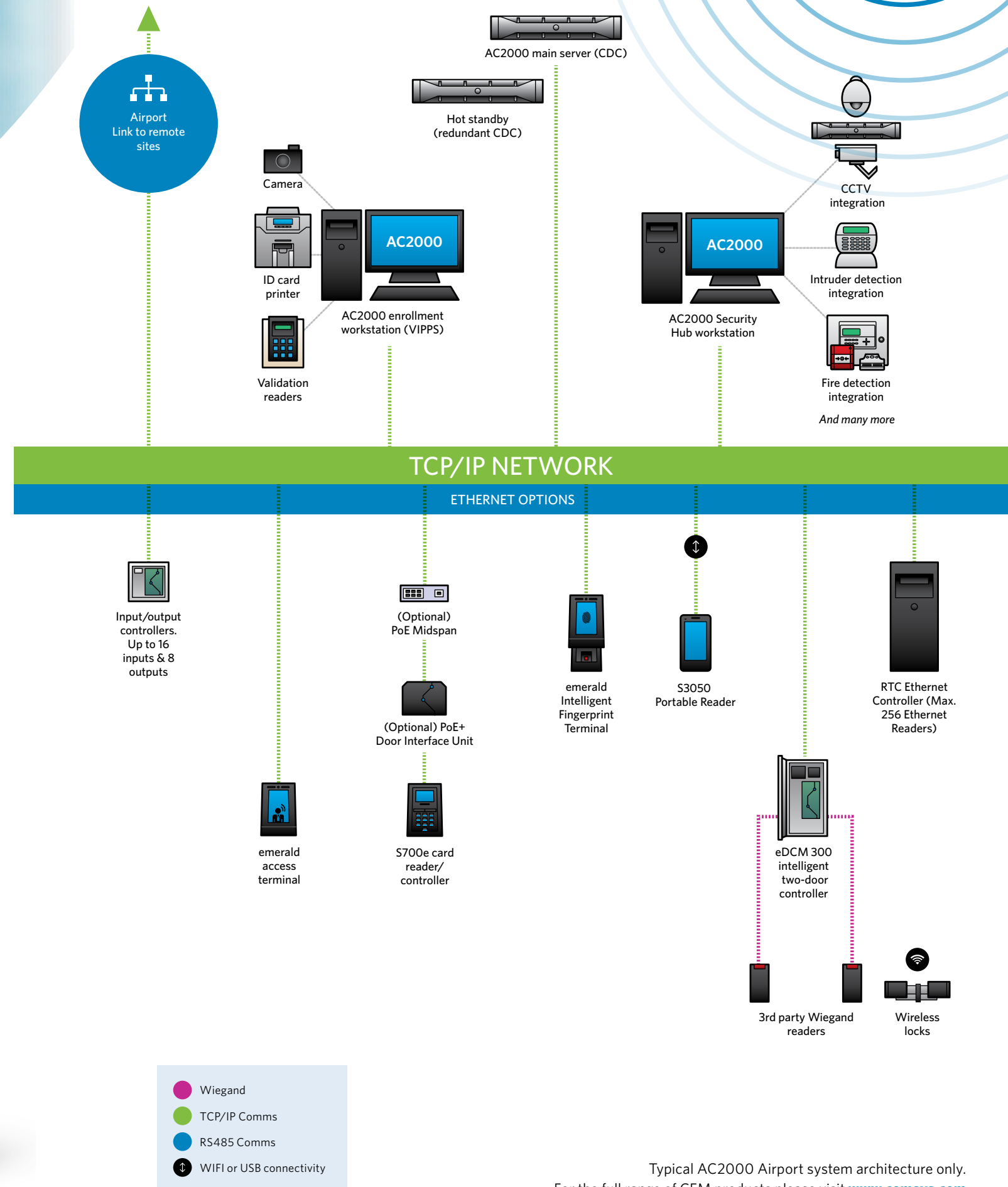
Featuring a controller, card reader and fingerprint solution in one, the CEM fingerprint reader range are fully integrated biometric and access control readers that are used to control access where an additional biometric layer of security is required. They provide fully integrated fingerprint biometric solutions without the need to use a door controller or third part biometric equipment and software.

### Portable card readers

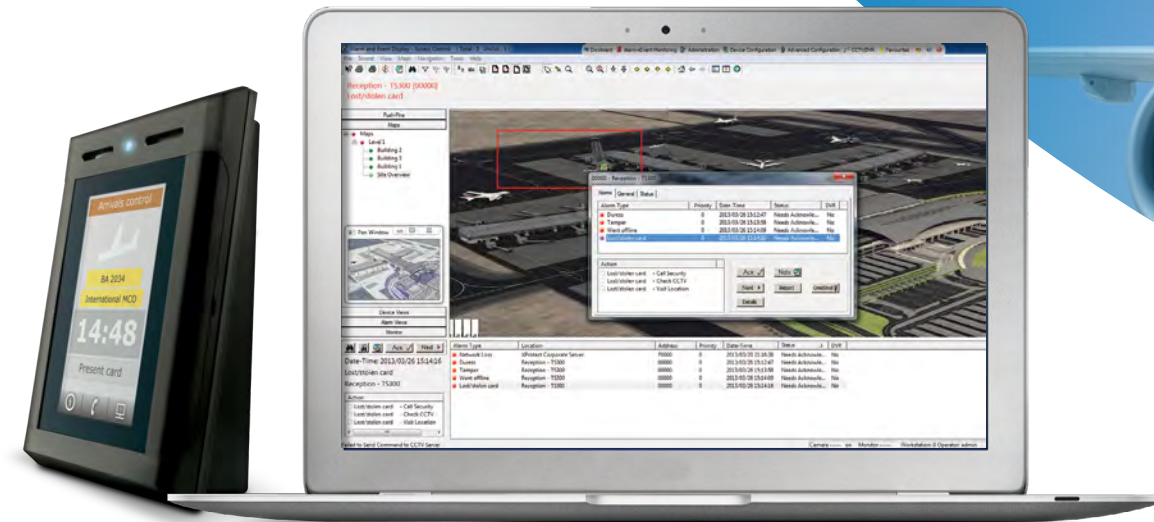
CEM portable handheld card readers offer airports a quick way of providing temporary guard check points for random security spot checks around the airport or can be used for external areas inaccessible for cables.



## TYPICAL SYSTEM ARCHITECTURE







## AN OPERATIONAL SOLUTION FOR AIRPORTS

AC2000 AIRPORT IS MORE THAN AN ACCESS CONTROL SYSTEM. IT HELPS AIRPORTS TO RUN MORE EFFECTIVELY IN TERMS OF BOTH COST AND OPERATIONS.

### **Passenger segregation**

AC2000 Airport allows airports/airlines to segregate arriving and departing passengers by using CEM card readers. The readers are interlocked so that if one reader is in Passenger mode (for multiple throughput) the other can only be put in Staff mode (for individual entry). This enables the free flow of passengers through departure and arrival gates without compromising security and creating security airlocks across the RZ 'Restricted Zone' line.

### **Boarding Deplaning Route Management (BDRM)**

To help manage passenger flow the CEM systems emerald terminal uniquely features a sophisticated and built-in 'boarding deplaning route management' (BDRM) solution. Using the emerald solution, individual airports can easily configure and programme their own BDRM gate logic to suit their individual airport scenarios and seamlessly improve their 'gates arrivals' process, without incurring custom PLC gate programming charges.

### **Check-in desk enabling**

CEM card readers can be used to enable/disable shared check-in desks or luggage carousels. The system provides a report on check-in desk usage which can then be sent to the finance system for invoicing airlines for their appropriate use.

### **Air-bridge monitoring**

CEM card readers installed at each air-bridge ensure that only authorized and trained personnel can operate them. A valid card and/or PIN must be presented before activation. The system provides data for advanced reporting which enables airports to reduce air-bridge maintenance costs and charge airlines for faults and usage.

### **Temporary cardholder management**

AC2000 Airport provides a powerful tool to monitor and control access of temporary cardholders (visitors), recording information such as reason for temporary card and the name of the airport sponsor. The powerful AC2000 WEB Visitor Management application also enables temporary cardholders to be requested and managed from any location via a standard web browser.

### **Vehicle management**

AC2000 Vehicle Management ensures that only authorized passengers within a vehicle can pass a control point. It also provides the ability to monitor and report on vehicle usage within an area such as a car park, identifying when maximum occupancy levels are reached.

### **Green initiatives**

Using Equipment Enable feature on CEM card readers, all equipment throughout the airport can be controlled and monitored for cost efficiency purposes. For example, escalators, heat curtains and fixed electrical equipment can be enabled when required and automatically shut down for energy conservation.

### **Airport link**

Airports that are owned by the same operator can be linked and networked upon request, allowing valid cardholders to go from one airport to another and use the same ID card at each airport.

### **Advanced reporting**

Using AC2000 Airport system data for sophisticated reporting purposes, airports can reduce costs without compromising security.

### **Data clear down**

Very often legislation dictates that an airport must not hold cardholder personal data for more than a set number of years. AC2000 Airport meets these legal requirements by enabling airports to automatically remove inactive cards/stored images from the system that have not be used within the given time period.

### **Integration**

The AC2000 Security Hub application provides one powerful platform for the control and monitoring of access control and integrated systems. Airports have access to one graphical command and control center, with CCTV, fire and access control alarms / devices highlighted. This enables airport operators to monitor multiple systems and instigate corrective action in real time from one central source.

## OPERATIONAL APPLICATIONS

- Check-in desk enabling
- Luggage carousel enabling
- Passenger segregation
- Air-bridge monitoring
- Green initiatives
- Panic button facility
- Temporary cardholder (visitor) management
- Vehicles management
- Direct link to airport invoicing
- Card parking facility
- Airport link
- Equipment enable
- Threat levels
- And much more**



**AC2000 Airport is used by leading airports around the world, including over 80% of UK airports to:**

- Manage access throughout the airport and prevent unauthorized access to secure areas
- Manage the flow of passengers, temporary cardholders and baggage through access points inside the airport
- Provide command and control for airport security, law enforcement and airport management personnel
- Provide one fully integrated graphical user interface for all electronic systems within the airport
- Enable shared check-in desk usage by airlines
- More efficiently use and control air bridges
- Manage vehicle flow and control of vehicle access
- Manage lift control of common use passenger lifts
- Enhance overall safety
- Manage the staff ID pass production system with an interface for invoicing