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Access control

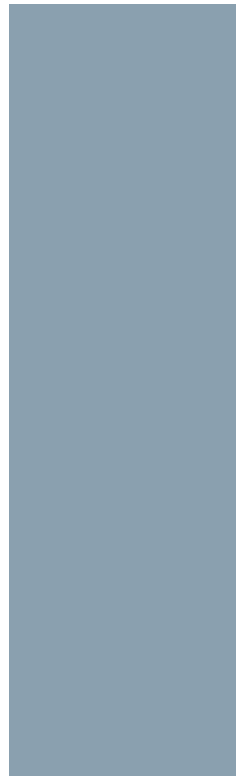
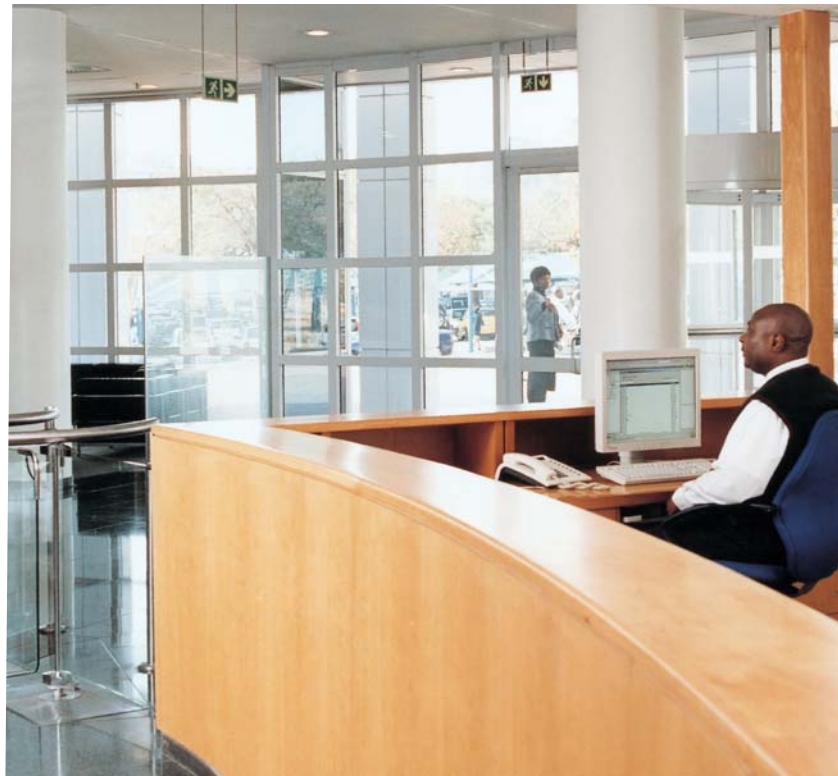
SiPass integrated

The perfect balance between  
security and accessibility



Answers for infrastructure.

**SIEMENS**



## SiPass integrated: freedom of movement in a secure environment

SiPass® integrated is an extremely powerful and flexible access control system that provides a very high level of security without compromising convenience and ease of access for system users. Designed to fit into a state-of-the-art IT environment, the modular structure and scalability of SiPass integrated make it easy to adjust to keep pace with the changing needs of any organization.

As a result, thousands of corporations, airports, ports, government agencies, hospitals and universities, and other organizations in all parts of the world have chosen to rely on SiPass integrated access control systems.

Universities



# Access control that is tailored to your specific needs

## ■ Flexible and highly secure

SiPass integrated is built to meet access control requirements that range from non-critical to critical and from quite simple to very complex. Designed for organizations of all sizes with operations on one or more sites, it is ideal both for existing facilities and for newly constructed buildings. The total number of cardholders and doors in a SiPass integrated system is virtually limitless. System management can be handled by many different operators with varying levels of authority.

Infinitely flexible, SiPass integrated can be used to manage access to anything from a single low-rise office or residential building with just a few doors to massive high-rise complexes with tens of thousands of doors, gates, barriers and elevators at multiple sites around the globe.

## ■ Customizable functionality

SiPass integrated is particularly useful in environments where information is highly sensitive and concerns about potential espionage exist. Standardized interfaces enable easy integration with existing security processes and business systems.

A wide variety of software extensions can be used to customize the system to meet any organization's specific needs. In cases where an organization has outgrown its current access control system, a new SiPass integrated system can incorporate previously installed readers (Siemens or third-party), as well as existing cards and cardholder data. There is no need to take a loss on previous security investments – everything is simply migrated to the new system.

## ■ Integration with other systems

As well as providing top-of-the-line access control functionality, SiPass integrated fully supports the integration of video surveillance and intrusion detection systems – either Siemens' own or third-party – thereby creating a total security system. Basic integration with fire safety systems is also available.

Siemens' decades of experience with system integration and standardized technologies enable us to offer integrated access control, intrusion detection, video surveillance and fire safety systems that provide unparalleled functionality, quality and investment protection.

## Highlights

- Virtually unlimited number of cardholders and controllers to suit any facility size
- Supports a broad range of readers – various technologies/manufacturers
- Intuitively designed software that is easy to use and administer
- Modular system architecture enables tailoring to suit the needs of any facility
- Operates in an existing IT environment using TCP/IP over WAN/LAN
- Advanced card management, multimedia alarm handling and complete event logging in a single system
- Comprehensive audit trail that monitors all administrative changes within the system

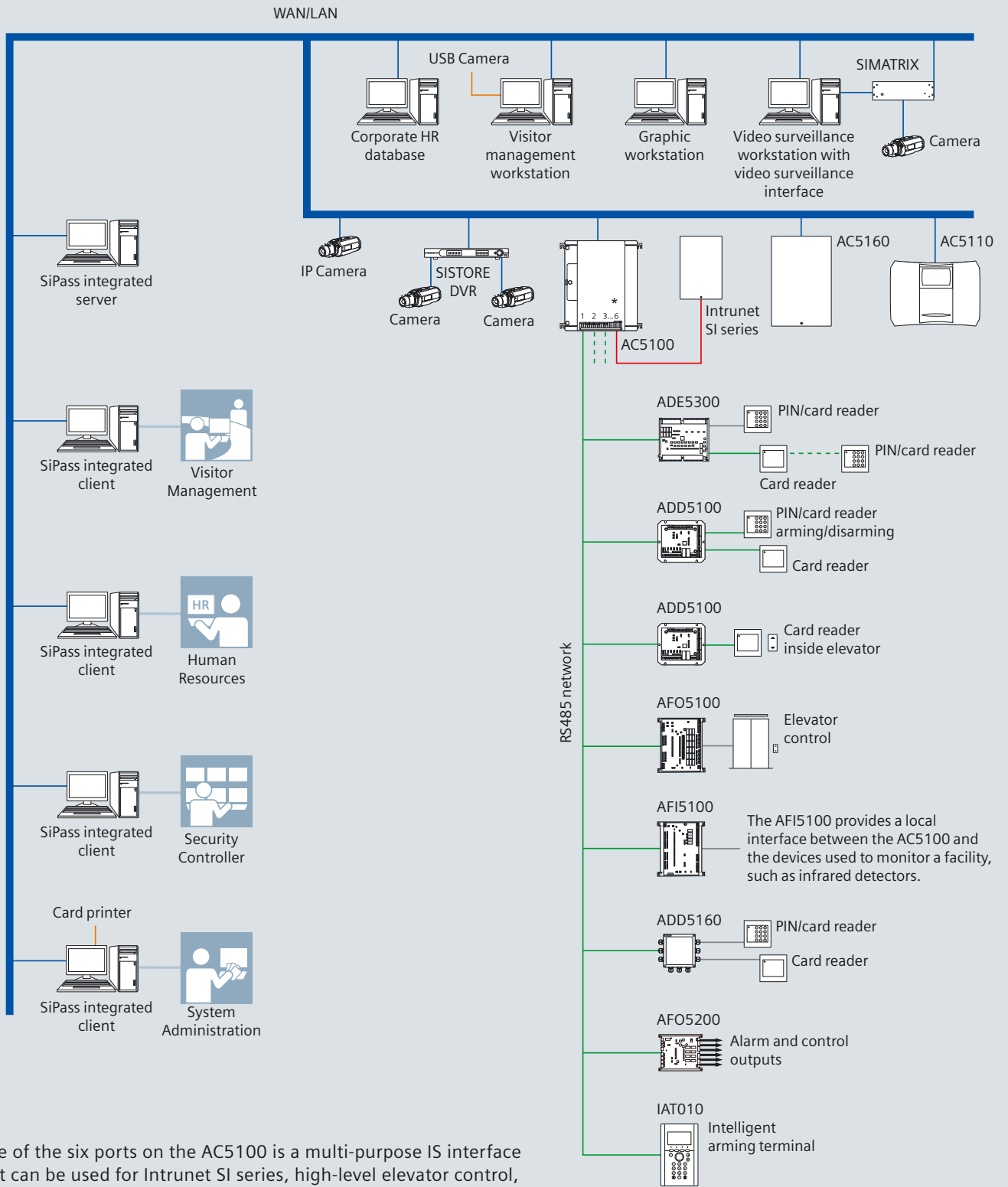
Government agencies



Hospitals



# SiPass integrated system architecture



\* One of the six ports on the AC5100 is a multi-purpose IS interface that can be used for Intrunet SI series, high-level elevator control, Securitel or, if none of these are in use, for any other FLN.

# SiPass integrated – hardware components

SiPass integrated is fully customized to meet the needs of the organization at which it is installed. It can be set up to monitor entries only, or both entries and exits (anti-passback), and/or it can be used to control the operation of elevators. Areas of a building that have a higher security requirement than others can be secured with video surveillance technology.

A SiPass integrated system is built using a variety of different hardware components: advanced central controllers (known as ACCs and ACC-Lites), door modules, signal modules, readers and cards. Automatic backup and restoration of the system database ensures system integrity. Secure data transmission throughout the entire transmission path – from the ID card to the server – provides a consistently high level of security.

## ■ Controllers

The AC5100 advanced central controller (ACC) and the AC5200 (ACC-Lite) play a crucial role in the SiPass integrated system, as they are the interface between the SiPass integrated software and the field-level devices (reader interface modules, input-point modules, and output-point modules).

The AC5200 provides nearly all the functions of the AC5100 and both types of controller can be mixed on the same site. Communication between all the controllers in the system takes place peer-to-peer, independent of the SiPass server, so if the connection to the server is interrupted, system operation is unaffected.

The AC5100 is generally used in larger installations while the AC5200 is ideal for smaller ones. Based on the SR34i hardware of the SiPass® Entro system, the AC5200 can control up to 8 doors and is a very cost-efficient alternative for branch locations or remote sites.

## ■ Readers and cards

Virtually any Wiegand standard reader can be connected to SiPass integrated, thanks to Siemens' custom Wiegand interface. The SiPass range of readers includes the following technology types: proximity (125 kHz), vicinity (13.56 MHz), Mifare smart card, Cotag and magnetic stripe. These can be combined freely to create a truly tailor-made system that suits the specific security needs of any organization, including functions such as secure PC login, vehicle identification, and cashless payment, for example.



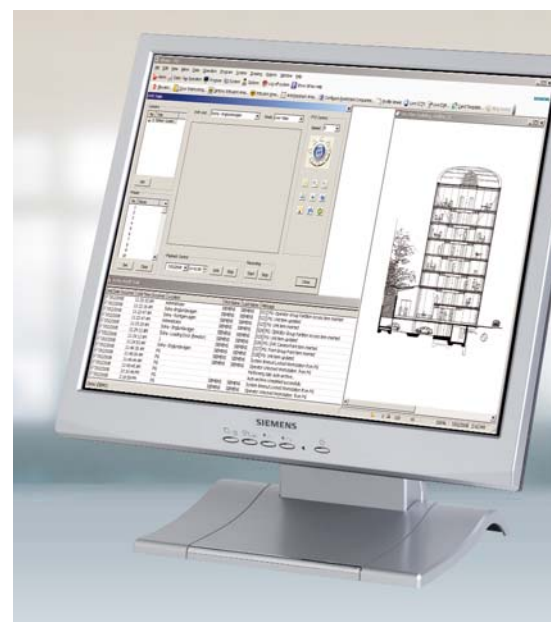
# SiPass integrated – software components

Robust and user-friendly, SiPass integrated software is the heart of any SiPass integrated system. The total number of controllers that can be connected is virtually unlimited. The Windows-certified software has a powerful client/server architecture, and it is easy to install and administer via its graphical user interface.

Features such as advanced audit-trail logging, advanced alarm management, anti-passback functionality (including workgroup anti-passback), door interlocking, escort control mode, video surveillance

and DVR interfaces – as well as Siemens' exclusive custom Wiegand functionality and advanced device firmware download – are all standard in SiPass integrated. A wide variety of other advanced features are also available as add-ons.

SiPass integrated also offers the possibility to set up customized interfaces to other applications in order to ensure smooth communication at all times. The software also supports CITRIX for remote services, where required.





## Core features

SiPass integrated includes all the access control features you would expect – such as time scheduling, manual system override, dynamic graphical status screen, instructional alarm response windows and a full system archiving and restoration function – as well as many more advanced ones. The following features are the ones that customers tend to find the most interesting:

### ■ Advanced reporting tool

The SiPass integrated report generator ensures fast identification and evaluation of system events. The software includes a visual online reporting tool, database information reporting, audit-trail information reporting, the ability to run simultaneous reports, advanced filtering options, advanced search criteria, and tree view for simplified use. The system offers point-and-click report availability, a highly configurable information structure, and targeted sorting of information.

### ■ Comprehensive audit-trail logging

SiPass integrated provides clear traceability of all changes in the system via audit-trail logging, which ensures that all database changes are logged in full detail. The exact changes are both logged and displayed on screen, including a record of the operator who made them. This functionality makes SiPass integrated very

well suited for market segments in which there are strict requirements for traceability. SiPass integrated MP2.4 can be used to build access control systems that are compliant with 21 CRF Part 11.

### ■ Advanced alarm management

SiPass integrated's standardized alarm management system enables the configuration of up to 1,000 alarm priority levels. To facilitate faster handling, the alarms are displayed and highlighted graphically according to priority. It also offers customizable alarm instructions that support security personnel.

### ■ Anti-passback and roll call

The purpose of anti-passback is to prevent the same card from being used to gain access twice. Entries to and exits from an anti-passback area must match, otherwise subsequent entries or exits can be denied. Anti-passback also enables roll call, which ensures the accuracy of counts of how many, and which, employees are in which rooms at a particular point in time, information that may be crucial in the case of an emergency.

SiPass integrated also includes a workgroup anti-passback feature, which means that once an anti-passback area is set up, it is also possible to control how many individuals from a particular work-

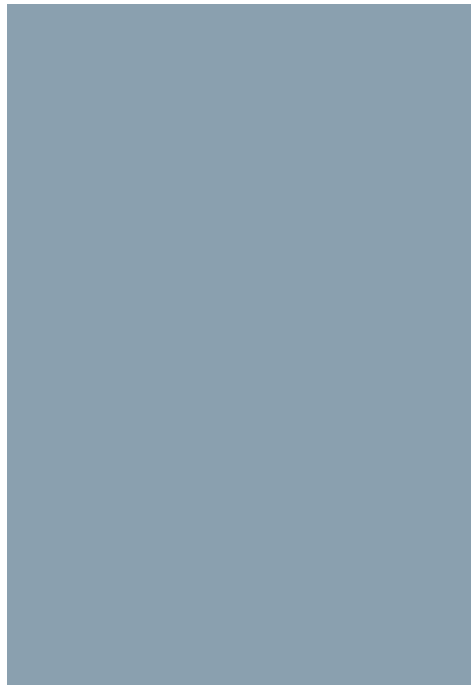
group are allowed in that area at one time. This can be done while at the same time maintaining overall area limits.

### ■ Partitioning of operator privileges

Partitioning can be used to split operator privileges so that operators only have access to the fields they need to maintain. The system can control which cardholders, units, FLN devices and time periods can be modified by which operators. A tree-based structure makes it easy to drill down and select the appropriate privileges for operator assignment. When partitioning by cardholder, it is possible to limit access to the workgroup field and/or limit access to the cardholder and visitor dialogs themselves. The result is greater control over information security and the ability to prevent unauthorized assignment of access privileges.

### ■ Escort control

SiPass integrated provides an escort control feature (a.k.a. dual custody), which means that before a door can be unlocked two valid cards must be presented at the door. This feature can be useful in high-security areas that require visitors or junior employees to be escorted by a security guard or supervisor. Both self-authorize mode and supervisor/escort mode are available, and it is possible to configure the on/off times and timeout.



#### ■ Door interlocking

This feature makes it possible to define a group of doors and ensures that when one door in that group is open, none of the others can be unlocked. Door interlocking enables the creation of man traps and air locks, which are often of interest in medical, bio-tech, airport and other high-security applications.

#### ■ SIMATRIX video surveillance interface

This interface to the SIMATRIX video matrix switching system makes it possible to send commands from SiPass integrated to SIMATRIX video surveillance equipment either manually or using automated tasks, thereby creating a more comprehensive security system.

#### ■ SISTORE™ DVR interface

The SISTORE DVR interface makes it possible to use all SISTORE functionality via SiPass integrated, including advanced functions such as recording based on activity in the SiPass integrated system and single-click event playback. Depending on the DVR chosen, analog and/or IP cameras can be used.

#### ■ Advanced device firmware download

SiPass integrated provides a quick and easy method for changing the operation of hardware devices directly in the SiPass integrated graphical user interface (GUI).

The firmware on all connected devices can be easily upgraded at the same time to ensure that all are running the latest version available. All of this can be done in a fraction of the time it would take to physically visit each device, thereby saving a great deal of time and money.

#### ■ Custom Wiegand

SiPass integrated can read virtually any Wiegand output-based card technology, which enables existing sites to easily up- or cross-grade without the expense and hassle of having to purchase new cards.

#### ■ Networking options for global reach

Various networking options (LAN/WAN/PSTN) enable the system to be expanded to include a number of buildings and locations all over the world. The connection to individual locations can be secured by redundant communication pathways that are activated automatically if the main connection fails.

#### ■ Upgrade paths for investment protection

SiPass integrated includes upgrade paths for the following Siemens systems: CerPass®, SiPass networked, advaNTage and SiPass Entro (including support for SR34i controllers). These upgrade paths make it very easy and cost-effective for users of those systems to upgrade to SiPass integrated.

### Highlights

- Advanced reporting tool
- Comprehensive audit-trail logging
- Anti-passback and roll call
- Partitioning of operator privileges
- Escort control
- Door interlocking
- SIMATRIX video surveillance interface
- SISTORE DVR interface
- Advanced device firmware download
- Custom Wiegand
- Networking options for global reach
- Upgrade paths for investment protection





## Add-on features

The optional software modules for SiPass integrated make it possible to tailor the system to meet almost any access control requirement.

### ■ Photo ID and image verification

The photo ID and image verification option enhances the cardholder record-keeping function by making it easy to capture photographs and signatures. Once captured, images can be incorporated on an access card and/or be used as a means of visual verification.

### ■ Time and attendance export

Using this feature it is easy to extract all of the logged activity data in SiPass integrated and export it to the time and attendance application of your choice, in the appropriate format.

### ■ Elevator management

When the elevator management interface is used, each floor is treated like any other entry point in SiPass integrated, with associated access control options such as the time during which access is possible, daily code access, PIN assignment and even image verification for complete security.

### ■ Guard tour

The guard tour option uses a combination of existing access or input points in the SiPass system to define routes for guard tours. It also tracks guards' progress and logs time and "tour stop" data about all tours.

### ■ Message forwarding

The message forwarding option enables the system to automatically send customized text messages to the pagers, mobile telephones or e-mail addresses of key personnel whenever security is breached or other important events occur.

### ■ HR application programming interface (API)

The HR API allows cardholder and other access control data in SiPass integrated to be accessed and modified using a third-party application, such as a human resources system or a Web browser.

### ■ Visitor management

The visitor management option enables the use of the same graphical user interface that is used for permanent cardholders to also be used to register visitors. It is possible to capture visitors' facial images, paste in existing image files, record personal details, print access cards and locate a visitor easily.

### ■ Graphics

The graphics option makes it possible to design, import and construct customized graphic maps that are used by security operators to visually handle alarm conditions and continually monitor the status of all points within the system.

### ■ Mifare card encoding

Mifare card technology makes it possible to use a single card for a variety of purposes, including unlocking doors and paying for goods and services. Complete Mifare card encoding and profile configuration is a unique feature of SiPass integrated. The system can also support the encoding of 4K Mifare cards.



■ **Third-party video surveillance matrix interface**

This software extension enables you to interface with a wide range of video surveillance systems to transform your standard SiPass client into an interactive video surveillance station, thereby controlling the operation of video surveillance components from the convenience of the SiPass graphical user interface.

■ **Video surveillance enabled workstation**

This powerful add-on feature makes it possible to view video surveillance images directly in the SiPass integrated client. Using a video capture card you can view the output of virtually any camera and use the screen tools for standard video surveillance functions like zoom, pan, tilt and camera movement.

■ **Third-party DVR interface**

Using this software interface, it is possible to begin recording from any camera with a single click of the mouse button using recording-based shortcuts that can be easily created and placed on graphical maps. All recording events and their statuses appear in real time in the audit trail, and can be played back instantly by simply clicking on the recording event.

■ **Intrusion module**

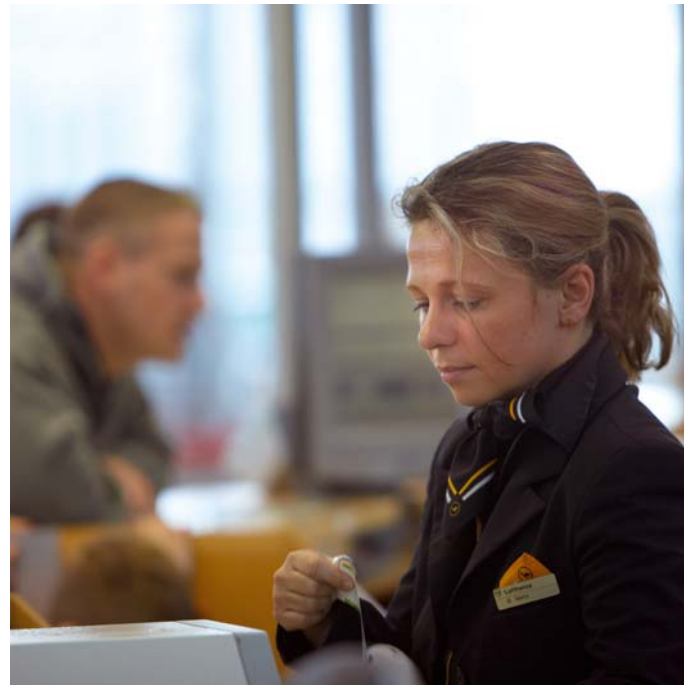
The intrusion module in SiPass integrated provides native intrusion detection functionality. When it is installed, motion detectors can be connected directly to SiPass integrated and the system can be used both as an access control system and an intrusion detection system. The same card readers are then used both for access control purposes and to turn the intrusion detection system on and off.

Alternatively, in cases where a certified intrusion detection system is required, the intrusion module can be used to integrate a dedicated Intrunet SI series intrusion control panel into a SiPass integrated system.

It is also possible for existing Intrunet SI series customers to use the SiPass integrated intrusion module to add a fully featured access control application to their suite of building management tools.

**Highlights**

- Photo ID and image verification
- Time and attendance export
- Elevator management
- Guard tour
- Message forwarding
- HR application programming interface (API)
- Visitor management
- Graphics
- Mifare card encoding
- Third-party video surveillance matrix interface
- Video surveillance enabled workstation
- Third-party DVR interface
- Intrusion module



## SiPass integrated applications

The flexibility, robustness, and superior expandability of SiPass integrated ensure that it can be implemented in nearly any environment – large office buildings, government agencies, commercial premises, pharmaceutical corporations, and financial institutions are all good examples. The advanced functionality of SiPass integrated can help different types of organizations overcome real-life challenges in a variety of different ways, such as:

■ **Universities and other campuses**  
SiPass integrated is ideal for campuses as it can easily manage access to multiple buildings with differing security requirements, as well as storing and processing large amounts of cardholder data. During particularly busy times like enrolment periods, it has no difficulty assigning access rights, issuing card numbers, and printing large numbers of cards while simultaneously communicating with the university's student database systems.

■ **Airports**  
Since SiPass integrated is built to manage very large amounts of access control traffic, it is the perfect choice for airports. It provides a complete access control and security solution with integration to video surveillance systems and other airport infrastructure. The simple-to-use interface ensures that airport security staff can easily and effectively monitor their security systems at all times.

■ **Multi-segment complexes**  
SiPass integrated includes tenancy functionality that enables a number of companies to use the same access control system completely independently of one another. This is particularly useful in environments with residential units, commercial offices and retail outlets all under a single roof. All levels of the system are capable of handling client groups. Existing installations can be integrated without difficulty, and the use of different card technologies is not a problem.

■ **Hospitals**  
Striking the right balance between security and accessibility is of critical importance in hospital environments. The large traffic flow typically associated with a hospital and the combination of low-security and high-security areas make a flexible and user-friendly system like SiPass integrated the obvious access control choice.

■ **Manufacturing operations**  
Safety is of paramount importance within a manufacturing or industrial facility. SiPass integrated helps address occupational health and safety issues by controlling access, providing anti-passback features, and carrying out head counts so that it is fast and easy to produce a mustering report and track cardholders during emergency situations.

## SiPass integrated features overview

<b>System</b>	
Number of doors	Up to 96 per controller (depending upon the system configuration)
Number of registered cardholders (users)	Up to 500,000 per controller (depending upon the system configuration)
Number of controllers	Up to 499 per system
Hardware installation	Plug & play (ACC requires initial configuration)
Client/server architecture	Yes
Networking options for controllers and servers	LAN/WAN/PSTN (redundancy possible)
Core languages	English, German, French, Spanish (additional languages may also be available)
<b>Interfaces</b>	
Integrated Siemens video surveillance interface	SIMATRIX
Third-party video surveillance integration	Optional
Integrated Siemens DVR interface	SISTORE AX, SISTORE CX, SISTORE MX
Third-party DVR integration	Optional
HR API	Optional
<b>Operation</b>	
Intuitive graphical user interface	Windows XP certified
Report generator	Manual or automatic with more than 60 standard reports
Alarm management	1,000 alarm priority levels and multimedia alarm notification
Extended access control functions	Administration of access rights (individuals or groups), temporary access profiles, global anti-passback, four-eyes access control
Event log	Real-time update
Graphical status window	Yes
Operator log	Yes
<b>Database</b>	
Extensive personal data administration	Yes
Additional database fields	User-definable
Backup/restoration of system data	Manual or automatic
<b>System requirements</b>	
Operating system	Windows XP, Windows 2000, Windows 2000 Server, Windows 2003 Server, Windows Vista
Database management systems	MS SQL Server 2005 Standard Edition, MS SQL Server 2005 Express Edition, MS SQL Server 2000, Microsoft MSDE (max. five workstations)

# Welcome to the world of innovative thinking

## ■ Innovation

For the last 160 years, Siemens has been investing a great deal in both manpower and research and development. This has ensured a constant stream of new insights, technologies and inventions that enable us to continuously improve the reliability of our products and systems to make them easier to install and operate.

Advances in digital technologies are creating a whole new world of possibilities. Siemens has been at the leading edge of progress in this field and continues to redefine both current and future technologies.

## ■ Interoperability

Interoperable systems are now supplied alongside such basic requirements as lighting, heating and water in a building. As a company, we know that integration supports the business environment through the interaction of products and systems. We break down the barriers between our access control, intrusion detection and video surveillance product lines in our security portfolio and listen to what the market actually wants. We then develop to deliver both fully integrated and interoperable security systems, based on our 30 years of know-how in security.



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