

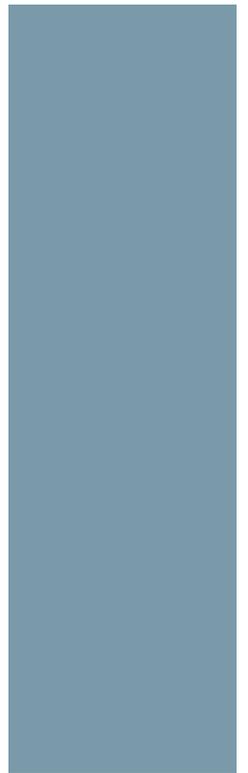


SIEMENS

# SiPass integrated

The perfect balance between security and accessibility

Answers for infrastructure.



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

SiPass® integrated is a powerful and almost infinitely flexible access control system that provides a very high level of security without compromising convenience and ease of access for system users. It is also possible to use SiPass integrated as a security management station (SMS) that integrates access control, intrusion detection and video surveillance into a single system.

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.

Hospitals



# Interoperable access control 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 usually 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.

## Interoperability & integration with third-party systems

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

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

## High level communication between SiPass integrated and SPC

When you add SPC to SiPass integrated you get a great deal more than the obvious advantages of a cutting-edge intrusion detection system and a world class access control system. The synergies between these two systems put all the power of a fully interoperable security management system in the palm of your hand.

With the high level communication between SiPass integrated and SPC it is easier than ever to keep people, property and processes safe, today and tomorrow.

## Highlights

- Modular system architecture enables tailoring to suit the needs of any facility
- Advanced identity management via biometric integration and DESfire encoding
- Programmable security control via Advanced Security Programming (ASP) feature
- Intuitively designed software that is easy to use and administer
- State-of-the-art interactive reporting
- Support for Salto offline components
- Operates in an existing IT environment using TCP/IP over WAN/LAN

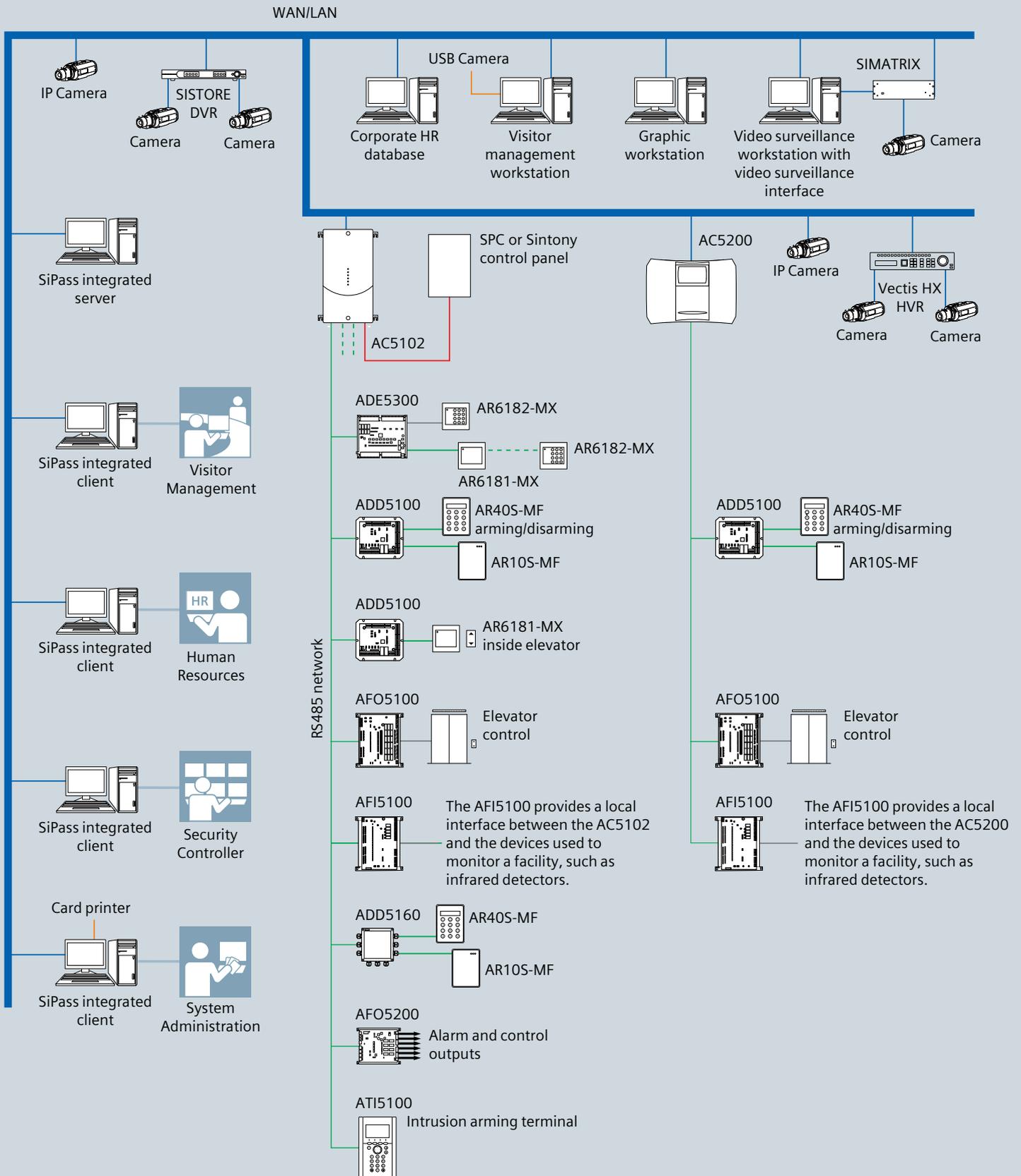
Universities



Airports



# SiPass integrated system architecture



## 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 AC5102 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 AC5102 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 AC5102 controller is generally used in larger installations while the AC5200 is ideal for smaller ones. Based on the SR35i 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

Any Wiegand standard reader can be connected to SiPass integrated, thanks to our custom Wiegand interface.

Readers in a SiPass integrated system 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 software features a powerful client/server architecture, and it is easy to install and administer via its graphical user interface.

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

and DVR interfaces – as well as our 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 access, where required.





## Core features

SiPass integrated includes all the access control features you would expect – such as DESfire encoding, support for fingerprint reading, support for GSM modems, 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:

### ■ Interactive reporting

The SiPass integrated Explorer 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. It is also possible to define watch lists in the system to flag people who might pose a security risk.

### ■ Comprehensive audit-trail logging

SiPass integrated offers system operators the opportunity to create multiple audit-trail windows to filter events. The audit-trail logging also 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 versions since MP2.4 can be used to build access control systems that are compliant with 21 CFR 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 workgroup 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.

### ■ Cardholder data management and web interface

Entering cardholder data into the SiPass integrated system is an easy process. If required, you can even assign multiple cards to a single cardholder. The custom page design tool allows for very flexible page layout via drag-and-drop configuration, including parameter settings for individual fields, buttons and different operator groups. It is also possible to import or export your custom pages in XML format between SiPass integrated systems. Additionally, via the web interface,

## Highlights

- Interactive reporting
- Partitioning of operator privileges
- Cardholder data management and web interface
- Venue and venue booking
- Escort control
- Advanced security programming (ASP)
- Full availability



card holders, venues and venue bookings can be managed, offering complete flexible management.

### ■ 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 and Vectis HX DVR interface

The SISTORE™ and Vectis HX interface makes it possible to use all DVR func-

tionality 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, analogue 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 (including GSM modems) that are activated automatically if the main connection fails.

### ■ Full availability

For applications that require full availability, it is possible to load the SiPass in-

tegrated software onto a stratus ever-Run FT server. The result is a system that is completely immune to server failures.

### ■ Upgrade paths for investment protection

SiPass integrated includes upgrade paths for the following Siemens systems: SiPass networked, advaNTage and SiPass Entro. These upgrade paths make it very easy and cost-effective to upgrade to SiPass integrated.

### ■ Advanced Security Programming

The Advanced Security Programming (ASP) feature in SiPass integrated enables system operators to create customized, site-specific activity programs and download them to the controller(s) with ease. ASP activities can be controlled and executed using time schedules. Virtual components (flags, timers, counters) can be incorporated into activities as triggers and effects.

### ■ Venue and Venue booking

With a similar user interface to the Microsoft Outlook calendar, the Venue and venue booking platform provides a concise overview of reservations, and minimises operator workload by offering efficient, simultaneous cardholder and booking management without the requirement of 3rd party applications.



## Add-on features

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

### ■ Support for Salto offline components

This option makes it possible to add Salto offline components (doors) to a SiPass integrated system. Access control rights can be assigned to both online and offline components simultaneously in the SiPass integrated software.

### ■ 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.

### ■ 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

SiPass integrated offers two methods of implementing elevator management. When elevator management 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 interfaces (API)

The HR API enables third-party business applications to communicate with SiPass integrated and exchange common information, which eliminates the need to enter identical data into multiple applications. The interface provides users with more flexibility to assign access rights, manage cardholders, venues, venue bookings and other access control data in SiPass integrated via 3rd party applications, and allows easy automatic synchronisation between these systems to be accessed and modified using a Web

browser or human resources system, for example.

### ■ Apogee interface

The Apogee interface enables integration between the Apogee Insight building management system and SiPass integrated.

### ■ MM8000 interface

The MM8000 interface enables interoperability between SiPass integrated and the MM8000 danger management system, providing a single location for monitoring all the security and safety needs of a site.

### ■ Management station application programming interface (API)

The management station API enables integration with virtually any third-party management system.

### ■ 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 graphical 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 (including DESfire)

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 supports the encoding of both 1K and 4K Mifare cards, as well as Mifare DESfire cards.

#### ■ DVR application programming interface (API)

This interface allows two-way high-level communications to be established between the SiPass integrated system and almost any DVR unit. Many DVR management features are available, such as live image viewing, event-activated recording, image verification, and full PTZ camera movement.

#### ■ 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 integrated client into an interactive video surveillance station, thereby controlling the operation of video surveillance components from the convenience of the SiPass integrated graphical user interface.

#### ■ Video surveillance enabled workstation

This powerful add-on feature makes it possible to view video surveillance images from either IP or analogue cameras directly in the SiPass integrated client. Using a video capture card you can view the output of virtually any analogue 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 SPC or Sintony series intrusion control panel into a SiPass integrated system.

#### ■ OPC alarm & event interoperability

SiPass integrated provides both an OPC server interface and an OPC client. The OPC server interface makes it possible to broadcast details of SiPass integrated events and alarms to OPC clients such as building management systems and receive acknowledgements from those systems. The OPC client makes it possible to connect to OPC servers so that SiPass integrated can receive alarm and event information from other systems, creating a single application for real-time monitoring and notification. Once a message is received, SiPass integrated displays it within its own graphical user interface (GUI), which means that the operator does not need to change applications to view it.

### Highlights

- Seamless integration with SPC and Sintony intrusion detection systems
- Mifare and Mifare DESfire card encoding
- Advanced elevator management
- Apogee interface
- Management station API
- DVR API
- OPC alarm & event interoperability



## 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.

# Technical data

## SiPass integrated MP2.6

<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	Approximately 500 per system (for larger sites, please contact Siemens' Customer Support Center for assistance)
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, Italian (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, Vectis HX HVR
Third-party DVR integration	Optional
HR API	Optional
<b>■ Operation</b>	
Intuitive graphical user interface	Yes
Report generator	Manual or automatic with completely configurable 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, escort 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 8, Windows 7, Windows XP, Windows Server 2012, Windows Server 2008, Windows 2003 Server, Windows Vista
Database management systems	MS SQL Server 2005 Standard Edition, MS SQL Server 2005 Express Edition, MS SQL Server 2008, MS SQL Server 2008 Express Edition, MS SQL Server 2012,



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The information in this document contains general descriptions of technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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#### Answers for infrastructure.

Our world is undergoing changes that force us to think in new ways: demographic change, urbanization, global warming, and resource shortages. Maximum efficiency has top priority – and not only where energy is concerned. In addition, we need to increase comfort for the well-being of users. Also, our need for safety

and security is constantly growing. For our customers, success is defined by how well they manage these challenges. Siemens has the answers.

**“We are the preferred partner for energy-efficient, safe, and secure buildings and infrastructure.”**