Access control

SiPass® integrated – The perfect balance between security and accessibility

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's tailored to your specific needs

Flexible and highly secure

SiPass® integrated is built to meet access control needs that range in complexity from medium to very high. 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. Infinitely flexible, it 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. The total number of cardholders in a SiPass integrated system is virtually limitless.

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 Si-Pass integrated system can incorporate previously installed third-party or Siemens readers, 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 CCTV, intrusion and fire alarm systems – either Siemens' own or third-party – thereby creating a total security solution.

Siemens' decades of experience with system integration and standardized technologies enable us to offer integrated access control, intrusion, CCTV and fire alarm 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
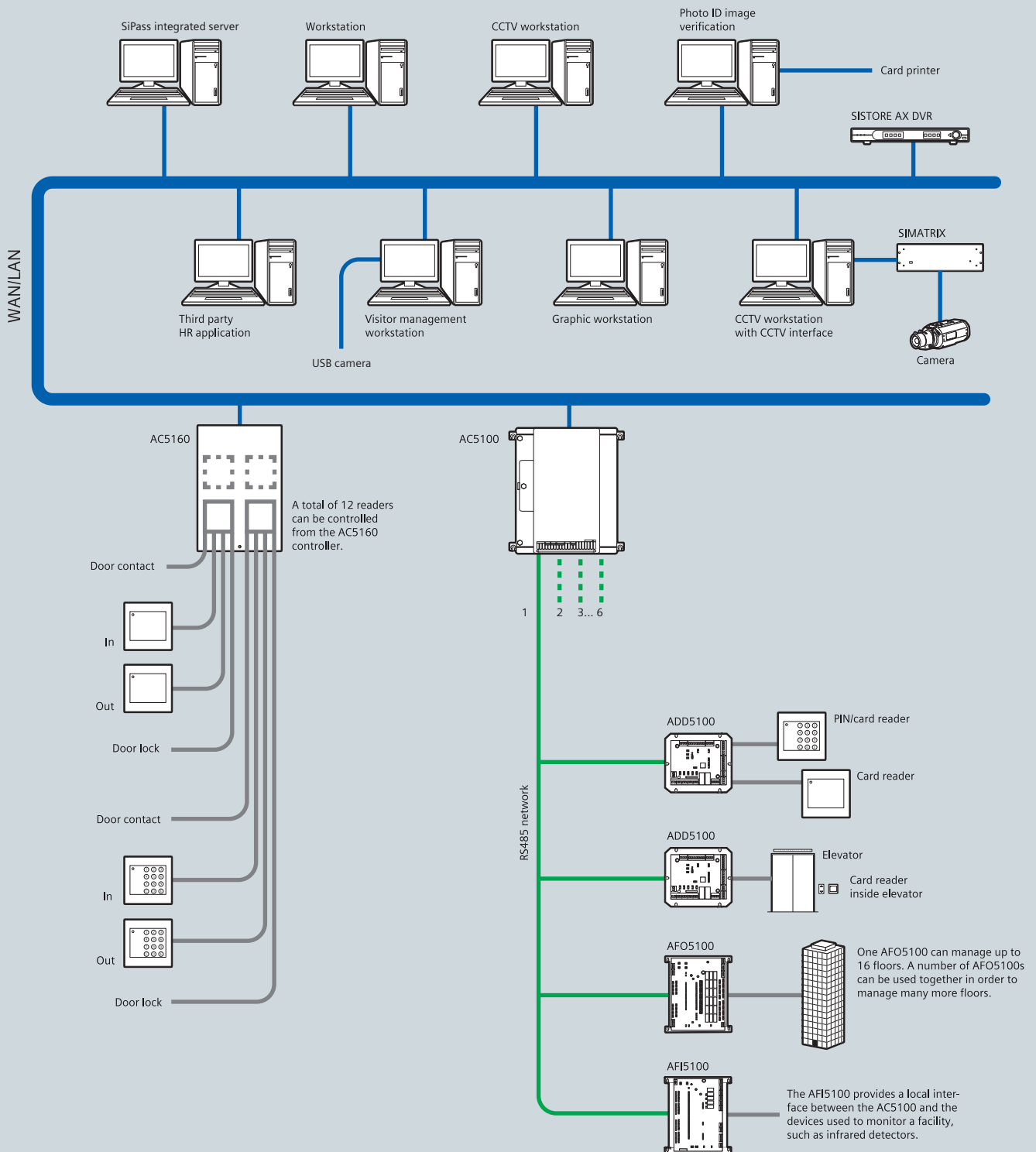
Government agencies

Hospitals

System architecture

SiPass integrated server

Workstation

CCTV workstation

Photo ID image verification

Card printer

SISTORE AX DVR

WAN/LAN

Third party
HR application

Visitor management
workstation

USB camera

Graphic workstation

CCTV workstation
with CCTV interface

SIMATRIX

Camera

AC5160

A total of 12 readers
can be controlled
from the AC5160
controller.

Door contact

In

Out

Door lock

Door contact

In

Out

Door lock

AC5100

1   2   3... 6

RS485 network

ADD5100

PIN/card reader

Card reader

ADD5100

Elevator

Card reader
inside elevator

AFO5100

One AFO5100 can manage up to
16 floors. A number of AFO5100s
can be used together in order to
manage many more floors.

AFI5100

The AFI5100 provides a local inter-
face between the AC5100 and the
devices used to monitor a facility,
such as infrared detectors.

SiPass® integrated – hardware components

A SiPass® integrated system 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 CCTV technology.

A SiPass integrated system is built using a variety of different hardware components: advanced central controllers, 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.

■ AC5100 advanced central controller
One of the most important hardware components in a SiPass integrated system is the AC5100 advanced central controller. It plays a crucial role in the func-

tioning of a SiPass integrated system, as it is the interface between the SiPass integrated software and the field-level devices (reader interface modules, input-point modules, and output-point modules). Communication between these "intelligent" controllers takes place independently of the SiPass server (peer-to-peer), so if the connection to the server is interrupted, system operation is unaffected.

■ 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 audit-trail logging, advanced alarm management, anti-passback functionality, CCTV 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.
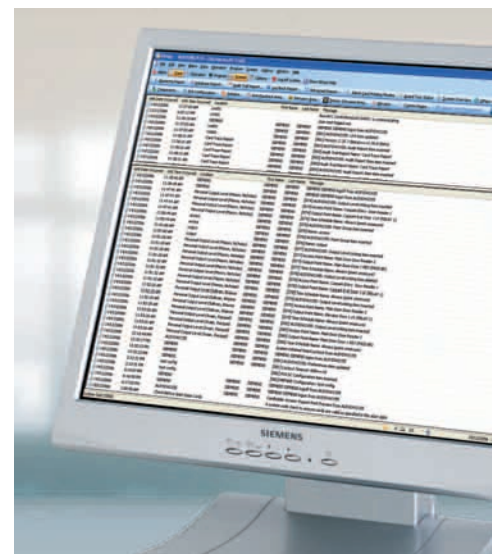
Core features

The standard edition of SiPass® integrated includes all the usual access control features – 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.

■ **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.

■ **Cardholder partitioning**
Cardholder partitioning splits operator privileges so that operators only have access to the cardholder fields they need to maintain. It is possible to limit access to the work group 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. It is also possible to set up the system so that only operators who need to view cardholder and visitor information are able to do so.

■ **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.

■ **Support for Microsoft SQL 2005**
SiPass integrated supports the latest Microsoft database applications: MS SQL Server 2005 Standard Edition and MS SQL Server 2005 Express Edition. As a result, SiPass integrated customers can take advantage of the latest MS technologies, which offer performance, data backup and GUI-management enhancements.

■ **SIMATRIX CCTV interface**
This interface to the SIMATRIX video matrix switching system makes it possible to send commands from SiPass integrated to SIMATRIX CCTV 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.

Anti-passback functionality

Using this functionality it is possible to program the system to track both entries to and exits from some or all of your facilities. The purpose of this is to always have accurate figures available regarding how many, and which, employees are in which rooms at a particular point in time.

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.

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.

Networking options that enable 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 CerPass, SiPass networked and SiPass Entro

The latest version of SiPass integrated includes upgrade paths for CerPass, SiPass networked and SiPass Entro, which make it much easier and more cost-effective for current users of those systems to upgrade to SiPass integrated.

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.

■ **Low-level elevator management**
With the SiPass low-level elevator management interface, 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.

■ **HR application programming interface**
The HR application programming interface (API) allows SiPass cardholder and access control data 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 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. The Mifare encoding option makes it possible to use Mifare cards in a SiPass integrated system.

■ **Third-party CCTV matrix interface**

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

■ **CCTV enabled workstation**

This powerful add-on feature makes it possible to view CCTV 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 CCTV 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 makes it possible to use SiPass integrated both as an access control system and an intrusion detection system. When it is activated the card readers are used both for access control and to turn the intrusion system on and off. Alternatively, this module can be used to integrate a dedicated Sintony intrusion panel into a SiPass integrated system. Existing Sintony customers can use this module to add a fully featured access control application to their suite of building management tools.
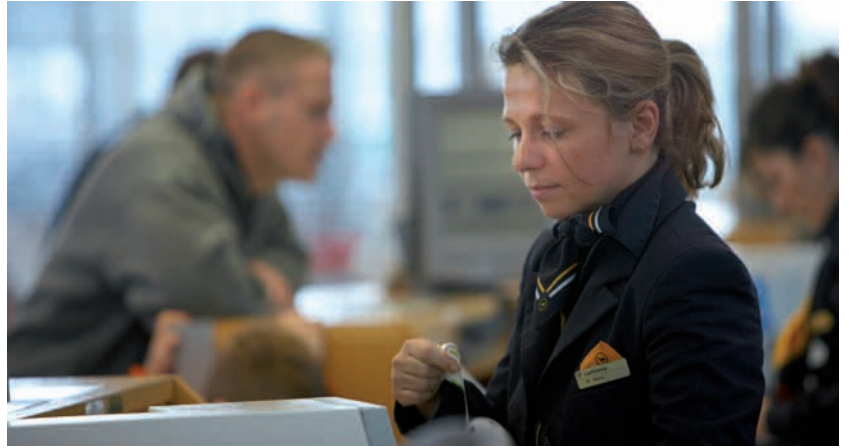
SiPass® integrated applications

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 CCTV 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.

Features overview	
System	
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
Interfaces	
Integrated Siemens CCTV interface	SIMATRIX
Third-party CCTV integration	Optional
Integrated Siemens DVR interface	SISTORE CX, SISTORE MX
Third-party DVR integration	Optional
HR API	Optional
Operation	
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
Database	
Extensive personal data administration	Yes
Additional database fields	User-definable
Backup / restoration of system data	Manual or automatic
System requirements	
Operating system	Windows XP, Windows 2000, Windows 2000 Server, Windows 2003 Server
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

Siemens invests a great deal in both manpower and research and development. This results in a steady stream of new insights, technologies and inventions that enable us to improve the reliability of our products and systems, ensuring the securest products and making our systems even more simple and convenient to operate.

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

■ Reliability

With a history of over a hundred years, if you need an established, reliable partner you are in the very best of hands with Siemens. System expansions and upgrades can be continuously made over a period of years, which ensures your investment for the future.

■ Security

Siemens products and systems provide you with security. Today, tomorrow and for decades to come. That's why countless customers around the world place their trust in Siemens.

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