

SIEMENS



Access Control

SiPass integrated

Product Release Notes

MP 2.76 SP1

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1 Introduction

SiPass® integrated is a powerful and extremely 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. Some of the noticeable features include:

- Design to fit into a state-of-the-art IT environment
- Modular structure and scalability for keeping pace with changing needs of any organization
- Intuitively designed software that is easy to use and administer
- Support for broad range of readers, various technologies and manufacturers
- Support for offline doors – SALTO
- Wireless locking system, APERIO, utilizing the powerful ACC-AP controller
- Touchless Biometric Systems integration with web client enrolment

SiPass integrated -- Opening doors to a secure environment.

1.1 What this document covers

This document details the introduction to the new user interface, security features, information on supported technology, compatibility with other devices and the important information that users need to be aware of when ordering, installing and troubleshooting.

1.2 Ordering

To order the SiPass integrated software, please use the order forms that can be found on the SiPass integrated intranet site or the SIOS transfer site, and the part numbers specified on these forms.

2 Important Release Information

Before installing SiPass integrated, refer to the *SiPass integrated Installation Guide* that contains all the necessary procedures to install and upgrade the software, and other associated hardware and software components.

To ensure setting up the system with highest level of security, follow the recommendations given in the *SiPass integrated IP Security and Network Guide*.

Both the documents are available in the software bundle.

2.1 Security Recommendations

This section details important security recommendations regarding the installation of SiPass integrated on public domains. It also deals with the important issue of protecting your software system from virus infections.

2.1.1 Installing SiPass integrated on a Public Domain

Users please note that installing SiPass integrated on a public domain presents vulnerabilities (e.g., being infected by computer viruses) like any application running on a Windows environment.

If SiPass integrated, controllers or an integrated system are to be installed on a public domain, it is recommended that a dedicated network (like a VLAN) be used for optimal security. Telnet and SSH on the ACC and ACC-AP controllers should be disabled after installation. Further, installation of the server and the client as dedicated applications on the computer is advisable.

SiPass integrated users are also advised to lockdown USB ports on the computers where SiPass integrated has been installed. Further, it is recommended that client computers for non-administrator operators should be locked down.

2.1.2 Reducing Security Risks with Anti-Virus Software

It is recommended that all SiPass integrated operators install and run an Anti-Virus or Virus Scan application to protect your computer from viruses, and other security threats that can compromise the performance of the system. SiPass integrated has been tested with the TREND MICRO Office Scan software.

As there are numerous brands of anti-virus software available in the market, it is recommended that you first investigate the source of software before downloading and installing it. It is advisable that you choose a virus scanner that best meets the needs of your particular software environment. It is also important that you test your anti-virus application with SiPass integrated before going live to ensure that the anti-virus application does not impact the performance of your security management.

2.2 Windows Patches and Hot Fixes

It is expected that SiPass integrated will continue to operate as normal if you automatically update your PC with any updates or patches provided by Microsoft. However, some exceptional changes made by Microsoft to their operating system may cause unexpected results. In these instances, report your problem to your local support representative and the issue will be investigated as soon as possible.

3 New Features in SiPass integrated MP 2.76 SP1

3.1 Wiegand Reader Support on ACC-AP

With SiPass integrated MP 2.76 SP1 onwards, the ACC-AP supports the widely used Wiegand Reader interface. The onboard DR1e device can be created with the Wiegand Reader option and configured during FLN Configuration.

See the following documents in the SiPass integrated Software Bundle for more information:

- *Controller and Device Installation Guide*: Technical information on setting up the ACC-AP and Wiegand Reader Devices
- *Configuration Client User Guide*: Information on configuring the Wiegand Readers with ACC-AP through SiPass integrated user interface

3.2 Multiple Aperio Hubs

With the enhancements made to SiPass integrated MP2.76 SP1, the Aperio® Wireless Lock technology is expanded to support multiple (up to 15) Aperio Hubs connected to one ACC-AP through the Aperio FLN Bus (RS485 communication channel). Up to 32 wireless Aperio Lock devices can be paired across all the Aperio Hubs connected to one ACC-AP FLN. You can select the Card Technology for selected locks and also assign a custom card format.

See the *Configuration Client User Guide* in the SiPass integrated Software Bundle for more information.

3.3 SALTO justIN Support

With this enhancement, the SiPass integrated field data can be sent to the SALTO system using the *justIN Mobile* app (or a third-party app using justIN SDK). The SiPass Server Configuration file must be modified to add the justIN support as a flag.

See the *SALTO Configuration Manual* in SiPass integrated software bundle for more information.

4 SiPass integrated Installation Compatibility

The following tables outline the components that have been tested with this version of SiPass integrated.

4.1 License

Upgrade from SiPass integrated version MP2.76

A new license is not required if upgrading from MP2.76.

Upgrade from SiPass integrated version MP2.75 to MP2.76

SiPass integrated MP2.76 uses your existing MP2.75 version license. However, due to removal of the bus and CCTV feature, values of 0 are expected for the *Number of Buses* and *Number of CCTV Stations*.

If this is not the case for your MP2.75 license, you must get the MP2.75 license re-issued and updated on your system first, before the direct upgrade to MP2.76. Contact Siemens Support in your region for help with this matter.

Upgrade from SiPass integrated version earlier than MP2.75

You can order a new MP2.75 / MP2.76 license which has been prepared as mentioned above.

4.2 SiPass integrated Backup / Restore Path

The following table displays the versions of SiPass integrated among which you can perform a **database backup/restore**. This does not represent upgrade compatibility among different versions of SiPass integrated.

Note: You can always perform a backup and restore within the same version if performing a fresh install. For example, backing up MP2.76 database, uninstalling, re-installing MP2.76 and restoring the Mp2.76 database.

Version Currently Installed	Version You Want To Restore To				
	MP 2.65	MP 2.70	MP 2.75	MP 2.76	MP 2.76 SP1
MP 2.60	Yes	Yes	Yes	No	No
MP 2.65*	Yes	Yes	Yes	Yes	Yes
MP 2.70	No	Yes	Yes	Yes	Yes
MP 2.75	No	No	Yes	Yes	Yes
MP 2.76	No	No	No	Yes	Yes



*In case of MP2.76, the database can be restored from MP2.65 Service Pack 4 onward.



Note

The time taken to upgrade to another version of SiPass integrated depends on the number of Cardholder images, Site Plans and Card templates.

4.3 SiPass integrated Server

Windows Server 2019	Windows Server 2016	Windows Server 2012 R2
Windows 10 (Professional, Enterprise) (64-bit)	Windows 8.1 (64-bit)	Windows 7 (Professional, Enterprise) SP1 (64-bit)



Some additional configuration settings are required to ensure that the specified versions of Windows operating systems operate correctly with SiPass integrated. For further information, see *Appendix - Windows Settings* in the *SiPass integrated Installation Guide* for this market package of SiPass integrated.

4.4 SiPass integrated Client

Windows Server 2016		Windows Server 2012 R2
Windows 10 (Professional, Enterprise) (32-bit & 64-bit)	Windows 8.1 (32-bit & 64-bit)	Windows 7 (Professional, Enterprise) SP1 (32-bit & 64-bit)



The same SiPass integrated version, as well as the same build / patch of SiPass integrated should be installed on the SiPass integrated server and on all clients (local and remote), within the same system.

Only ONE LANGUAGE VERSION must be used for SiPass integrated. Using more than one language is not supported and might result in malfunction.

*Some additional configuration settings are required to ensure that the specified versions of Windows operating systems operate correctly with SiPass integrated. For further information, see *Appendix - Windows Settings* in the *SiPass integrated Installation Guide* for this market package of SiPass integrated.

4.5 Microsoft SQL Server

Microsoft SQL Server is the system that meets the numerous and complex database needs of SiPass integrated. Microsoft SQL Server provides the level of software security necessary to safeguard the records created and modified in SiPass integrated.

The following table indicates the supported SQL Server software on which SiPass integrated will run:

SQL 2017 Express	SQL 2017	SQL 2016 Express	SQL 2016
SQL 2014 SP2 Express	SQL 2014 SP2	SQL 2012 SP2 Express	SQL 2012 SP2



For SiPass integrated MP 2.76, a standalone update must be installed for SQL Server 2017 Express. The update files are provided in the SiPass integrated Software bundle at the following location:

SQL Server Express\SQL Server 2017 Express\Cumulative Update

The following information must be noted carefully:

- SQL 2017 and SQL 2016 are compatible with WINDOWS 10 and Windows Server 2016 64-bit only. Do not install on a computer having the Windows 10 32-bit Operating System.
- SQL 2017 and SQL 2016 ARE NOT SUPPORTED ON WINDOWS 7 (by Microsoft). Hence, this version SHOULD NOT BE INSTALLED on a computer with Windows 7 Operating System to prevent SiPass integrated from malfunctioning.
- SQL 2008 IS NO LONGER SUPPORTED. During SiPass integrated installation, if you see SQL 2008 as the installed SQL Server instance on the *SQL Options* screen, you MUST UNINSTALL SQL 2008, run the SiPass integrated setup again and select the second option on the screen to install another SQL Express instance.
- If there are no SQL server versions installed on the computer where SiPass integrated is installed, a runtime version of Microsoft SQL Server 2014 SP2 Express will be installed for Operating System versions earlier than Windows 10. In case of Windows 10 and Windows Server 2016 / Windows Server 2019 Operating Systems, a runtime version of Microsoft SQL Server 2017 Express will be installed.
- Sites with multiple clients and higher activity (for example, a large number of doors / cardholders / or event transactions, involving more than 5 clients, 100 readers, or 10000 cardholders) are recommended to purchase a higher performance version of SQL optimized for both scalability and performance. See the Microsoft website for more information regarding SQL versions and performance at the following link:

<http://www.microsoft.com/en-us/server-cloud/products/sql-server-editions/default.aspx>

Failure to install the appropriate version of SQL Server may have an adverse impact upon the performance of SiPass integrated.

4.6 .NET Framework

The following .NET Framework version is tested to be compatible with SiPass integrated:

.NET Framework Version 4.8

4.7 Installation Requirements

4.7.1 Pre-requisites

Before installing the SiPass integrated, ensure that the following prerequisites are installed in the system.

- **Java Runtime 8 (64 bit):** SiPass integrated MP2.76 Server Component requires Java as a pre-requisite. Both the versions of Java mentioned below are supported and depending on the Java License you wish to use, one of the following can be installed before installing SiPass integrated:
 - **Oracle Java Runtime Environment SE 8**
 - **Amazon Corretto 8 (an OpenJDK build)**

!	NOTICE
	<p>The free OpenJDK 8 build can be downloaded from the link https://docs.aws.amazon.com/corretto/latest/corretto-8-ug/downloads-list.html and must always be kept updated to the latest version of Amazon Coretto 8.</p> <p>Note that this link is valid at the time of writing this document and can change in future. In that case, a web search can be performed to obtain the latest website for updating to the latest version of Amazon Corretto 8.</p>

- Internet Information Services (IIS) 7 & above (for Server and Website only)
- **Browsers:** Chrome, Firefox, and IE. Recommended browser versions are:
 - Chrome 71 or higher
 - Firefox 59 or higher
 - IE v11

!	NOTICE
	Enable IIS for SiPass Server and Website installation.

The following are installed automatically and must not be uninstalled at any time to ensure uninterrupted operation of SiPass integrated .

- .NET Framework 4.8
- Microsoft ODBC Driver 13 for SQL Server
- Microsoft OLE DB Driver for SQL Server (v18)
- Microsoft SQL Server Compact 4.0 SP1
- Microsoft Visual C++ 2015-2019 Redistributable
- OPC Core Components Redistributable (v3.0.102)
- .NETCore 2.1.2 Hosting
- SQL Server 2014 Express LocalDB
- Apache Tomcat 9.0.5

!	<i>NOTICE</i>
	No other applications should be hosted in Apache Tomcat.

- MongoDB 3.4.6
- Erlang OTP 20.3
- RabbitMQ 3.7.7
- Microsoft Application Request Routing 3.0
- IIS URL Rewrite Module 2.0
- Web Enroll Client 2.12 (for Windows Service)

!	<i>NOTICE</i>
	In the machine where SiPass web client is browsed, the Web Enroll Client 2.12 (TBS) must be installed manually using HTTPS (secured communication). The manual installation takes place in the port 8282 automatically. Refer to <i>TBS Configuration and Settings Guide</i> for more information. If the port 8282 is changed, TBS cannot be accessed. Contact Siemens Support Team for more information.

- neXus SDK 5.3.0.8

!	<i>NOTICE</i>
	Only required if Web Credential Design, Imaging and Printing are used.

4.8 System Compatibility

4.8.1 Firmware

AC5100 (ACC-020 / ACC-010) Version 2.76.24		AC5102 (ACC-G2) Version 2.76.24 Platform Version CCP v2.17.4		ACC-AP Version 2.76.24 Platform Version 1.1.1	
AC5200 (ACC lite) Version 2.70.50		Granta Mk3 (ACC-Granta) Version 2.70.50		Granta Mk3 Backboard Version 1.29	
ADD51x0 (DRI) Version 3.58	ADD51x0 (DRI-OSDP Crypto) Version 5.31	ADS52x0* (SRI) Version 3.25	AFI5100 (IPM) Version 2.36	AFO5100 (OPM) Version 1.16	
ADE5300 (ERI) Version 3.54		AFO5200 (8IO) Version 1.06		ATI5100 (IAT-010) Version 1.10	



If upgrading to MP2.70 (or later):

The ACC-G2 must be running ACC V2.65.44 (MP2.65 SP3) or later. If it is running an earlier version than this, then install ACC V2.65.44.

(The file *acc-g2_2.65.44_release.bin* is available in *System_Update_Step0* folder in the SiPass integrated software installation bundle.

After upgrading the ACCs to MP2.70 SP1, **all the FLN devices MUST be upgraded** to the latest firmware provided with the MP2.70 SP1 (or later) software bundle.

4.8.2 Hardware

4.8.2.1 Controllers

AC5102 ACC-G2	ACC-AP	AC5100 ACC Revision 3 ACC-020	AC5100 ACC Revision 2 ACC-010
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AC5200 SR34i Revision 1	AC5200 SR35i Revision 1.4	AC5200 SR35i MkII Revision 2	Granta Mk3 Revision 1
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4.8.2.2 Door Control

ADD51x0 DRI Revision D	ADS52x0 SRI Revision B	ADE5300 ERI Revision A	ATI5100 IAT Revision A	4322 COTAG	4422 SWIPE
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DC12 Rev. 05 MkI Version 1.36 MKII Version 1.43	DC22 Rev. 05 MkI Version 1.36 MKII Version 1.43	DC800 Rev. 04 Version 1.23	PD30/PD40 Rev. 02
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Aperio Hub and Locks

Aperio Hub AH30 FW Version 6.6.32718 *	Aperio Lock E100 V3 FW Version 3.7.1446 *	Aperio Lock AU100 V3 FW Version 3.7.1446 *	Aperio Programming Application Version 18.0.4-e617dba **
--	---	--	---

* The above-mentioned Firmware Versions are tested to work with SiPass integrated, and are not supplied or controlled by Siemens.

**The Aperio Programming Application is not provided by Siemens and ships with Aperio Hub/Lock hardware.

4.8.2.3 I/O

AFI5100 IPM Revision B Ver 2.36	AFO5100 OPM Revision A Ver 1.16	AFO5200 8IO Revision A Ver 1.06	4253 I/O	IOR6 Revision 04 Ver 1.00
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4.9 API / HLI Compatibility

The sections that follow provide information on the backwards compatibility of the current interfaces available in this release of SiPass integrated.

4.9.1 HR-API Interface

SiPass integrated HR-API allows data to be accessed and maintained from any programming language that supports COM automation. In addition, the RESTful HR-API Web Service is also available.

SiPass integrated implements and recommends high server security which means modification is required for any existing applications that have been built around versions prior to MP 2.70. SiPass integrated MP 2.70 onward requires establishing an authenticated connection to be set up with the HR-API application.

For more information, see the documentation in *SiPass integrated API and RESTful API* folder in the SiPass integrated software bundle.

4.9.2 Management / Enterprise Station API

SiPass integrated MS-API allows data to be accessed and maintained from any programming language that supports RESTful web services or COM automation.

SiPass integrated contains MS-API changes which do not require modification to any existing applications that have been built around versions previous to 2.70 MS-API.

For more information, see the documentation in *SiPass integrated API and RESTful API* folder in the SiPass integrated software bundle.

4.9.3 OPC A&E Server Interface

SiPass integrated supports OPC A&E version 1.0

4.9.4 SiPass integrated as head-end of Siveillance VMS

SiPass integrated (MP 2.75 onward) can be used as head-end for Siveillance VMS 2018 R3 using "SiPass Siveillance VMS Connector" v1.1.1 or greater.

4.10 Digital Video Recorder (DVR) System

Siveillance VMS 2018 R3

4.11 Directly Connected IP Camera Compatibility

AXISP1354 Fix Camera	AXIS M3007 Fix Dom	AXIS P5534 PTZ – Dom, Live View	AXIS P7214** Video Encoder
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While the above cameras have been specifically tested, an IP camera using the RTSP protocol should work properly. Please test before purchasing and installing onsite.

For live streaming with IP Cameras, SiPass integrated supports the RTSP as command protocol and RTP for the data stream. The Codecs that are supported are: MJPEG, MPEG4, and H264.

PTZ functions are not supported for any IP camera directly connected to SiPass integrated.

**Only IN1 is supported.

If recording is required, the IP camera has to be connected via DVR.

4.12 Intrusion Panel Compatibility

Intrunet SI 400 series (Sintony 400)	SPC 4300, 5300, 6300 Intrusion System
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ACC-AP and AC5200 (ACC lite) controller do not work with SPC Intrusion system or Sintony 400.

4.13 Network Communication

Encryption of ACC and SiPass communication	AES 128 Bit
SSL Encoding protocol for SiPass client/server communication	TLS 1.2

4.14 Modem Compatibility

ETM9440-1 HSPA+/UMTS/GSM/GPRS Terminal (3G GSM modem)



While some previous modems have been discontinued, Windows-based modems compatible with your operating system will work. It is recommended that the same modem type be installed throughout an installation to ensure compatibility. Other modem brands may be compatible but have not been tested. It is recommended that you test the compatibility of these modems prior to installation at any facility. Further, additional checks should be performed to ensure that your modem is compatible with your Operating System. For any specific modem capabilities, contact your local support.

4.15 Card Printer Compatibility

Fargo Pro - Series	Fargo High Definition HDP8500, HDP 5000, HDP600, HDP800
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Fargo Direct-to-Card (DTC500 Series)	Fargo Persona (C25)	Zebra ZXP Series-1
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For **Fargo HDP8500** card printer, different set of drivers configuration settings are required depending on whether the printer is used for *Local Connection (USB)* or *Network Connection (Ethernet)*.

See the SiPass integrated *Configuration Client User Guide*(Version MP2.76 and later) for setup and configuration of the printer. For troubleshooting information, see the *Troubleshooting* section in SiPass integrated *Installation Guide* (Version MP2.76 and later).



Note

For optimum configuration and operation, HDP5000 printer should not be used as a network port printer.



The above table only lists those card printers that have been tested with SiPass integrated. All Windows compatible card printers should operate correctly with SiPass integrated. However, it is recommended that you test your card printer for correct operation before installation in a live environment. Further, additional checks should be performed to ensure that your card printer is compatible with your Operating System.

Ensure that the firmware of your Card Printer is upgraded to be compatible with the Operating System on your computer.

4.16 Mifare Classic/ DEsfire EV1 Card Encoding (while printing)

Fargo with GEM Plus 680 SL encoder installed by Interproc (www.intraproc.com – GC1680 Driver)	Fargo with GEMeasyAccess332 encoder, installed by Interproc (www.intraproc.com – GC1680 Driver)
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HID OMNIKEY 5021	HID OMNIKEY 5121 (embedded)
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Supported for Single printing and encoding, and Batch printing and encoding

4.17 Enrolment Reader Compatibility

4.17.1 USB Enrolment readers

Omnikey 5321	Omnikey 5421	Omnikey 5422	Omnikey 5022
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4.18 Card Format Compatibility

4.18.1 Reader Connection Types

Wiegand	RS-485	Clock & Data
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(DRI Version D1) does not support the connection of RS-232 type readers.

4.18.2 Siemens Proprietary Card Formats

CerPass/SiPass RS-485	Siemens Corporate Card	31-bit STG	36-bit Asco	Siemens 52-bit
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4.18.3 Proximity Formats

26-bit (industry standard)	36-bit ASCO	27-bit Indala	27-bit Cotag	HID Proximity SIEMENS Encrypted 52 Bit
HID Corporate 1000/2000	Custom Wiegand	34-bit Europlex	37-bit REMEC	

4.18.4 Smart Card Formats

32-bit CSN (CSN32)	40-bit CSN (CSN40)	26-bit Standard* stored in sector)	HID* iCLASS UID
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*SiPass integrated supports CSN, UID, and Data on-card for iCLASS HADP readers. Please note that the format for Data on-card should be a maximum of 8 bytes of binary data (no special format, just a 64-bit card number).

4.19 Card Reader Compatibility

4.19.1 Readers Supporting the DESFire EV1 Card Technology

Siemens RS485 UID	Siemens Reader Clk/Data UID	Siemens Reader Clk/Data Extended
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AR40S-MF	AR10S-MF	AR41S-MF	AR11S-MF
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The above readers are all mapped to the Siemens Reader Card Technology, and become available with the Siemens RS485 Clk / Data reader license. They can be configured on the FLN Configuration dialog of SiPass integrated.

The AR readers should be configured with Siemens OSDP NGCR (76).

Not all of the compatible readers listed above support the reader offline indication. Different reader manufacturers follow their own practices to include such features.

4.19.2 HID Proximity, iCLASS (SE), iCLASS Seos and Mifare Classic/DESFire

ProxPro Wiegand (Keypad) (5355)	MiniProx Wiegand (5365)	MaxiProx (5375)	ThinLine II Wiegand (5395)	ProxPro II Wiegand (5455)	ProxPoint Plus (6005)
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iCLASS LCD/Keypad	iCLASS SE and multiCLASS SE Mini Mullion	iCLASS SE and multiCLASS SE Mullion	iCLASS SE and multiCLASS SE Wall Switch
RKL55 – 6170B*	R10 – 900N* RP10 – 900P* Options include Wiegand or OSDP v1/v2, Mobile Ready or Mobile Enabled.	R15 – 910N* RP15 – 910P* Options include Wiegand or OSDP v1/v2, Mobile Ready or Mobile Enabled.	R40 – 920N* RP40 – 920P* Options include Wiegand or OSDP v1/v2, Mobile Ready or Mobile Enabled.

iCLASS SE and multiCLASS SE Wall Switch Keypad	iCLASS SE and multiCLASS SE Décor	iCLASS SE 13.56MHz Long Range	iCLASS SE UHF Long Range
R4K0 – 921N* RPK40 – 921P* Options include Wiegand or OSDP v1/v2, Mobile Ready or Mobile Enabled.	R95 – 95A* RP95 - 95AP* Options include Wiegand or OSDP v1/v2.	R90 – 940N*	U90 – RDRSEU90*

iCLASS, iCLASS SR, Seos (Part No. 928NFNTEK000TE)
<p>RDR/ENROLLER, RKL55, ICLASS, SE E, HF STD BIO/SEOS BIO, LCD/BIO, WIEG, TERM, BLK, STD-1, LED RED, FLSH GRN, BZR ON, LCD 1F, KPF, BFFRD 1 KEY, NO PAR, 4-BIT MSG, IPM OFF</p> <ul style="list-style-type: none"> • Wiegand/Clock & Data output • iCLASS, iCLASS SR, Seos biometric templates only • bioCLASS Rev B iCLASS legacy template support <p>Not Supported</p> <ul style="list-style-type: none"> • bioCLASS Rev A iCLASS legacy template • ISO14443A UID

4.19.3 HID Readers for Siemens Sites

Form Factor	Low Frequency (125 kHz) Interpreter	High Frequency (13.56 MHz) Interpreter	Communication Protocol	Connection Style	SE Part No.	Description
R10 Series	N	Y	Wiegand	Pig tail	900NWNNE KE00K9	LF OFF, HF STD/SIO/SEOS/MIGR, WIEG, PIG, BLACK, HF MIGR PFL EVC00000_ICE 0527
R10 Series	N	Y	OSDP/RS-485	Pig tail	900NWPNEK E00PJ	LF OFF, HF STD/SIO/SEOS/MIGR, 485HDX, PIG, BLACK, A/V OFF, OSDP V1, HF MIGR PFL EVC00000_ICE 0527
R15 Series	N	Y	OSDP/RS-485	Pig tail	910NWPNEK E00PJ	LF OFF, HF STD/SIO/SEOS/MIGR, 485HDX, PIG, BLACK, A/V OFF, OSDP V1, HF MIGR PFL EVC00000_ICE 0527
R 40 Series	N	Y	Wiegand	Pig tail	920NWNNE KE00K9	LF OFF, HF SEOS/MIGR, WIEG, PIG, BLACK, HF MIGR PFL EVC00000_ICE 0527

Form Factor	Low Frequency (125 kHz) Interpreter	High Frequency (13.56 MHz) Interpreter	Communication Protocol	Connection Style	SE Part No.	Description
R 40 Series	N	Y	OSDP/RS-485	Pig tail	920NWPNEK E00PJ	LF OFF, HF STD/SIO/SEOS/MIGR, 485HDX, PIG, BLACK, A/V OFF, OSDP V1, HF MIGR PFL EVC00000_ICE 0527
R95A Series	N	Y	OSDP/RS-485	Term	95ANWPTEK E00PJ	LF OFF, HF STD/SIO/SEOS/MIGR, 485HDX, TERM, BLACK, A/V OFF, OSDP V1, HF MIGR PFL EVC00000_ICE 0527
R95A Series	N	Y	OSDP/RS-485	Term	95ANWPTE WE00PJ	LF OFF, HF STD/SIO/SEOS/MIGR, 485HDX, TERM, WHITE, A/V OFF, OSDP V1, HF MIGR PFL EVC00000_ICE 0527
R95A Series	N	Y	OSDP/RS-485	Term	95ANWPTE GE00PJ	LF OFF, HF STD/SIO/SEOS/MIGR, 485HDX, TERM, GREY, A/V OFF, OSDP V1, HF MIGR PFL EVC00000_ICE 0527

Note: For more information, check product documentation on www.hidglobal.com

4.20 Card Technology Compatibility

ARxxs-MF OSDP ¹	ARxxs-MF OSDP All HID Prox ²	ARxxs-MF OSDP ASCII	ARxxs-MF OSDP BCD Packed	ARxxs-MF OSDP BCD Unpacked	ARxxs-MF OSDP Custom ³
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ARxxs-MF OSDP Mifare Facility ⁴	ARxxs-MF OSDP Mifare GID ⁵	ARxxs-MF OSDP Mifare Numeric	ARxxs-MF OSDP Raw	ARxxs-MF OSDP Sector 7 26-bit ⁶
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¹All data from the reader is the card number. The license is as Siemens reader.

²This is equivalent to AllHidProx – Wiegand data encoded onto a smart card. The license is as the appropriate Prox. Card technology (This is useful for iCLASS MultiProx readers).

³Custom Wiegand profile. License is as Custom Wiegand.

⁴This is a Mifare Facility card, encoded by SiPass. The license is as Mifare Facility.

⁵This is a Siemens GID format. The license is as Siemens GID.

⁶This is a 26-bit wiegand card, as encoded by SiPass onto a smart card. The license is as Mifare 26-bit.

4.21 Morpho 4G V-Station Reader Compatibility

The following 4G V-Station reader (previously known as L1 reader) versions have been tested and verified as working with SiPass integrated. These are supported for updated systems and not for new systems. For enrolment capabilities in the installed client, the L1 Bioscrypt reader must be used. Field devices listed below must be in legacy mode for compatibility with the enrolled templates.

For enrolment using the Morpho Biomanager, all devices listed below can be used without the need for legacy mode to be enabled.

Design	Product Number	Model	Description
MA SIGMA Indoor / Outdoor	293638835	WR Sigma Bio	<ul style="list-style-type: none"> Multi-factor Bio/PIN (3K users, 10K, 50K and 100K with license) 1M logs storage capacity Poe included
	293638898	WR Sigma Prox	<ul style="list-style-type: none"> Multi-factor Bio/Card/PIN/BioPIN (3K users, 10K, 50K and 100K with license) HID Prox 1M logs storage capacity Poe included
	293638856	WR Sigma iClass	<ul style="list-style-type: none"> Multi-factor Bio/Card/PIN/BioPIN (3K users, 10K, 50K and 100K with license) HID iClass 1M logs storage capacity Poe included
	293638877	WR Sigma Multi	<ul style="list-style-type: none"> Multi-factor Bio/Card/PIN/BioPIN (3K users, 10K, 50K and 100K with license) MIFARE®/DESFire® Smartcard Reader 1M logs storage capacity Poe included
MA SIGMA LITE	293678615	MA SIGMA Lite	<ul style="list-style-type: none"> Mono-factor Bio (500 users, 3K and 10K users with license) IP65 and IK 08 Certifications: CE, CB, FCC
	293678628	MA SIGMA Lite iClass	<ul style="list-style-type: none"> Multi-factor Bio/Card (500 users, 3K and 10K users with license) HID i-class® Smartcard Reader IP65 and IK 08 Certifications: CE, CB, FCC
	293673665	MA SIGMA Lite Prox	<ul style="list-style-type: none"> Multi-factor Bio/Card (500 users, 3K and 10K users with license) HID Prox® Smartcard Reader IP65 and IK 08 Certifications: CE, CB, FCC
	293678636	MA SIGMA Lite Multi	<ul style="list-style-type: none"> Multi-factor Bio/Card (500 users, 3K and 10K users with license) MIFARE®/MIFARE® Plus/DESFire® Smartcard Reader IP65 and IK 08 Certifications: CE, CB, FCC

Design	Product Number	Model	Description
MA SIGMA LITE +	293678657	MA SIGMA Lite +	<ul style="list-style-type: none"> Multi-factor Bio/PIN (500 users, 3K and 10K users with license) 2.8" colour touchscreen IP65 and IK 08 Certifications: CE, CB, FCC
	293673644	MA SIGMA Lite + iClass	<ul style="list-style-type: none"> Multi-factor Bio/Card/Pin (500 users, 3K and 10K users with license) 2.8" colour touchscreen HID i-class® Smartcard Reader IP65 and IK 08 Certifications: CE, CB, FCC
	293678678	MA SIGMA Lite + Prox	<ul style="list-style-type: none"> Multi-factor Bio/Card/Pin (500 users, 3K and 10K users with license) 2.8" colour touchscreen HID Prox® Smartcard Reader IP65 and IK 08 Certifications: CE, CB, FCC
	293678660	MA SIGMA Lite + Multi	<ul style="list-style-type: none"> Multi-factor Bio/Card/Pin (500 users, 3K and 10K users with license) 2.8" colour touchscreen MIFARE®/MIFARE® Plus/DESFire® Smartcard Reader IP65 and IK 08 Certifications: CE, CB, FCC



The fingerprint template layout is defined using the reader setup tool but the enrolment can be performed using SiPass.

The entire reader configuration is done with the reader setup tool, such as time schedules.

SiPass integrated supports card + fingerprint. It is not possible to use fingerprint-only as a credential in SiPass integrated.

Using 4G V-Station readers, multiple fingerprints can be encoded on the Mifare Classic and Mifare DESFire cards. In addition to storing the fingerprint image on the card, SiPass can also store multiple fingerprints in the database that can be retrieved if a card is lost.

4.22 TBS 3D Enroll

The following TBS 3D Enrollment USB based device have been tested and verified as working with SiPass integrated Web Client.

Design	Product Number	Model	Description
TBS	053-1000-002	3D Enroll	<ul style="list-style-type: none"> • Access Control, T&A, Civil ID • Highest security level • No "Failure to Enroll" • Superior image quality • Nail-to-nail images • Quality assessment and duplicate check • Hygienic for sensitive applications • Touchless,3D-Multiview • Certifications: CE



The fingerprint template layout is defined using the enrollment reader setup but the enrolment can be performed using SiPass.

The reader configuration requires installation of drivers.

It is not possible to use fingerprint-only as a credential in SiPass integrated.

TBS server holds the fingerprint in its own database that can be retrieved by SiPass integrated web client by the authorized user only.

4.23 Granta MK3 Reader PIN Pad Type Compatibility

SiPass integrated supports the Pin Pad types 1, 2 and 3. The type can be configured on the FLN Configuration dialog.

See Chapter 6 of the 4101-3 Controller Installation Handbook for information on Installation and Configuration.

1	2	3
4	5	6
7	8	9
★	0	#

Type 1

0	1	2	3
4	5	6	7
8	9	A	B
C	D	E	F

Type 2

1	2	3	A
4	5	6	B
7	8	9	C
0	F	E	D

Type 3



For the 4422 Swipe module and the 4322 Cotag module, the keypad type has to be selected on an extra Key tab during configuration.

The system does not support entry of your own PIN for first-time use.

An External Swipe reader, combined with a keypad, can be configured as an M43 Keypad Type.

4.24 Signature Capture Tablet Compatibility

Topaz HSB (USB) signature capture pads	T-LBK460-HSB-R
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4.25 Messaging System Compatibility

Microsoft Exchange Server 2013 or newer



Email forwarding may not be supported or may not support the sending of emails externally, under certain corporate email conditions or specific corporate implementations.

4.26 Server Redundancy

Stratus Technologies EverRunFT



The above software is recommended based on tests done with SiPass integrated. Contact *Stratus Technologies* directly for any support with the software.

The redundancy is based completely on the hardware, and is not based on the SiPass services.

4.27 Offline Door System

SALTO SPACE Version 5.2.3.4



The SHIP protocol (version 1.31a) should be enabled for this feature.

Refer to the SALTO documentation for the maximum length of text or other potential limitation.

SiPass supports up to 40 characters for naming entities (like Cardholder First Name and Last Name, Access Level, Access Groups and Time Schedules) and this can be lesser in SALTO. If the entity name in SiPass integrated is longer than the naming character limit in SALTO, the name will be truncated before being sent to SALTO. After truncation, if the name is duplicated in SALTO, it results in an error (logged in SiPass server log file) and the information is not sent.

The maximum number of time schedules is 65000 in SiPass integrated and 256 in SALTO. These time schedules are the ones having a value of 1-256 in the Time Schedule No. field on the Time Schedule dialog. Hence, any time schedule having a number less than 256 can be used for the SALTO system.

The maximum number of holiday types is 8 in SiPass integrated and 3 in SALTO. Hence, only the holiday types 1-3 in SiPass system can be used for SALTO.

The maximum number of offline doors that can be assigned to one cardholder is 96 in SALTO. To configure more, the doors must first be added to a zone in the SALTO system (up to 1000 doors per zone and 1000 zones per system).and then the zone can be assigned to the cardholder in SiPass integrated (multiple zones can be assigned to a cardholder).

4.28 Identity Management

Siveillance Identity 1.4

4.29 Virtualization

Citrix XenApp Version 6.0	Microsoft Windows Server 2012 Terminal Services	Microsoft Windows Server 2016 Terminal Services	Microsoft Windows Server 2019 Terminal Services
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It is highly recommended that your system is based on suitable hardware and system specifications.

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