

Access Management System V3.0

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Invented for life



- ▶ Stand-alone deployment, with own map viewer and alarm & event viewer, or as integral part of a video management system (e.g. BVMS).
- ▶ Combines high-end access control features, performance and availability with intuitive operation.
- ▶ Future proof investment through high scalability: small Lite package can be expanded over years with more doors, cardholders and functions to fit any size and customer need.
- ▶ Situation always under control for doors, elevators, car parks and visitors, with alarm list and for different threat scenarios.
- ▶ Centralized user and event management of intrusion panels like B and G Series.

Access Management System (AMS) is an access control system for stand-alone application or for integration with video management systems, e.g. BVMS.

- As a stand-alone system it features a simple-to-use map and alarm viewer for a rapid assessment of all the devices and entrances on the site.
- As an integrated system it allows the video management operator to perform door related actions like video based ID verification and grant access or block doors.
- AMS combines the robustness, performance and features of high-end access control products with a modern UI that makes it faster to install and configure.

The existing portfolio of Bosch access control devices can be easily scanned and integrated.

Data privacy and IT security is state-of-the-art in order to comply with the latest data-protection regulations.

System overview

Access Management Server:

The server is the main component for processing all data. It coordinates the activities of all the hardware and software components described below.

Master Access Controller (MAC):

The MAC is an additional security layer to increase system availability. It holds its own database to exchange information between AMCs, even if the main server or the network is down.

Access Modular Controller (AMC):

The AMC is a robust and reliable field controller to connect to up to 8 doors with readers and door strikes. With its large on-board memory the AMC can make autonomous decisions and store hundreds of thousands of access events, regardless of network interruptions.

Access Management Database

The SQL server holds all master data (cardholder, cards, authorizations, schedules, etc.) and also all access events. The latest version provides encryption to protect personal information from misuse or theft.

Access Management Dialog Manager

The Dialog Manager is the main user interface for configuring the system, and for collecting and maintaining access-related information. In particular its personnel dialogs are used for enrolling new cardholders, and maintaining their access authorizations and credentials.

Access Management Map View

The map view is a simple-to-use application to show door situation of the building in one glance. It shows door, tamper or malfunction alarms and allows to send commands directly from the map.

Access Management BVMS Interface:

The seamless integration into BVMS (version 10.1 or higher) allows video verification of cardholders from the BVMS operator client: a person requesting access with a valid card can be manually verified through camera live stream and the cardholder's photo from the database. Camera events can trigger door actions. Door events can trigger camera actions.

Access Management Intrusion Interface:

User management of up to 25 B and G Series intrusion panels. Shows area states (e.g. armed, ready to arm), detector states and intrusion events (e.g. burglar alarm) on Map View.

Allows to send commands (e.g. arm, disarm) to panels.

Access Management SDK:

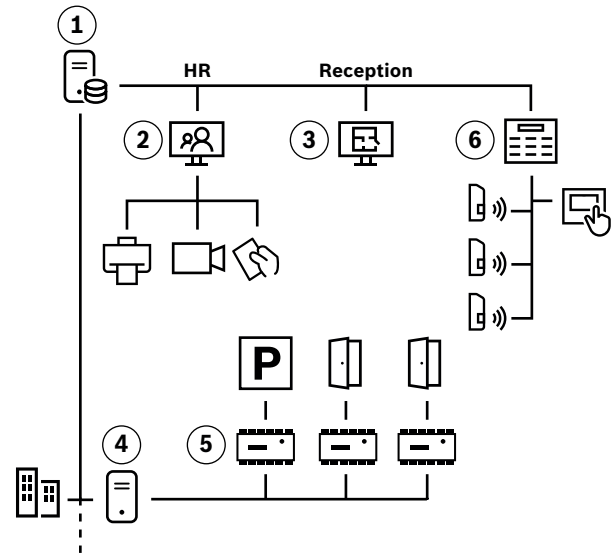
This SDK facilitates the integration of 3rd party systems with AMS, for instance an Identity Management or Visitor Management system. A particular advantage is its ability to re-use 3rd party integrations initially written for BIS Access Engine.

Access Importer/Exporter:

This tool facilitates data import and export from 3rd party systems for 1-time data migration or regular synchronization with external systems, e.g. cardholder data from legacy APE systems can easily be imported.

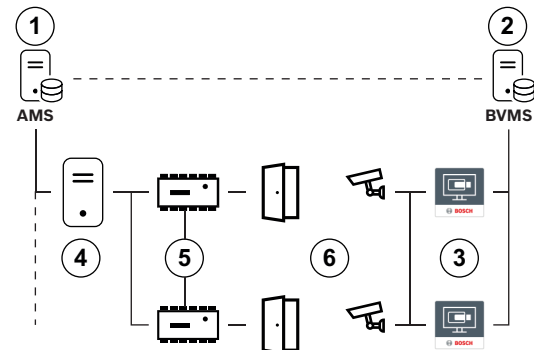
Topology diagrams

The following diagrams illustrate AMS configurations with and without BVMS



Stand-Alone topology

- (1) AMS server
- (2) Client workstation for enrollment
- (3) Client workstation for access control and intrusion monitoring
- (4) MACs
- (5) AMCs for parking and door control



BVMS Integration

- (1) AMS server
- (2) BVMS management server or DIP
- (3) BVMS Client workstation for access and video management
- (4) MACs
- (5) AMCs
- (6) Entrances with cameras

Functions

- Registration of new cardholders:
 - Use fully customizable enrollment dialogs to streamline the process of cardholder enrollment.

- Capture both conventional and biometric characteristics, including photos and signatures.
- Design and produce physical credentials.
- Take advantage of dialogs for the mass import of stored personnel data.
- Assigning of access authorizations:
 - Collect access authorizations into reusable profiles, and assign these to predefined or customized personnel types.
- Door functions:
 - Use a comprehensive set of template door models, including elevators and parking lots, to accelerate the configuration phase of your project.
 - Office mode: unlock doors for free access during office or shop hours.
 - Combat theft and security threats with random screening of cardholders.
 - Verify cardholder identity with biometric checks at entrances, and with additional video confirmation powered by BVMS.
 - Disarm the intrusion area and grant access with single card swipe.
 - Use the SimonsVoss SmartIntego technology to enhance your system with card-programmable remote online doors, as commonly used in hotels, healthcare, offices and educational establishments.
- Reporting:
 - Take advantage of a large number of predefined template reports.
- Guard Tours and patrols:
 - Define up to 200 guard tours, and monitor up to 8 patrols simultaneously.
- Monitor car parks, visitors, muster points:
 - Display customizable summaries of employees and visitors on site.
 - Monitor visiting times, including overstayed visits.
 - Monitor the number of available parking spaces.
- Divisions:
 - Provide joint access for a facility which is shared by any number of independent parties.
 - System operators then see only the persons, devices and entrances of those divisions assigned to them.
- Alarm Monitor, Command & Control:
 - Use the Map View to keep control of large numbers of entrances simultaneously.
 - Use the Map View to monitor incoming alarms and alerts in real time.
- BVMS and DIP Integration:
 - Video verification at entrances.
 - Camera actions (e.g. start recording, pan/tilt/zoom) triggered by access events (e.g. unauthorized door opening).
 - Door events (e.g. unlock/lock door) triggered by camera events (e.g. IVA).
 - Requires version 10.1 or higher.
- Milestone XProtect Integration:
 - Use AMS to support XProtect with access events and alarms for further processing on XProtect client.
- Intrusion Integration:
 - Supports up to 25 Bosch B Series (Bx512) and G Series (Bx512G) control panels for central user management and command & control.
- Mobile Device Integration:
 - Supports HID Mobile Access (on MIFARE CSN via NFC and Wiegand) and STid Mobile ID (on MIFARE CSN via Wiegand and OSDP, NFC and BLE).

Installation/configuration notes

The following tables illustrate hardware and software requirements for running AMS.

Server	
Supported operating systems. Installations on other operating systems may succeed, but are entirely without warranty.	<ul style="list-style-type: none"> • Windows Server 2016 (64 bit, Standard, Datacenter) • Windows 10, version 1809 (LTSC) • Ensure that the latest software updates are installed. • Note: The default database delivered with this system is SQL Server 2017 Express edition with advanced services
Minimum hardware requirements	<ul style="list-style-type: none"> • Intel i5 processor with at least 4 physical cores • 8 GB RAM (32 GB recommended) • 200 GB of free hard disk space (SSD disks recommended) • Graphics adapter with 256 MB RAM • A resolution of 1280x1024 (Use the graphic resolution recommended for the client if you wish to run the Map View client on the AMS server). • At least 32 k colors • 1 Gbit/s Ethernet card • A free USB port or network share for installation files

Client, including the Map View client

Supported operating systems. Installations on other operating systems may succeed, but are entirely without warranty.	<ul style="list-style-type: none"> Windows 10, version 1809 (LTSC) Ensure that the latest software updates are installed.
Minimum hardware requirements	<ul style="list-style-type: none"> Intel i5 or higher 8 GB RAM (16 GB recommended) 20 GB of free hard disk space Graphics adapter 256 MB RAM To use the AMS Dialog manager, a resolution of 1280x1024 is sufficient. For AMS Map view, a resolution of 1920x1080 (Full HD) is required. At least 32 k colors DirectX® 11 1 Gbit/s Ethernet card A free USB port or network share for installation files

MAC server

Supported operating systems. Installations on other operating systems may succeed, but are entirely without warranty.	<ul style="list-style-type: none"> Windows Server 2016 (64 bit, Standard, Datacenter) Windows 10, version 1809 (LTSC) Ensure that the latest software updates are installed.
Minimum hardware requirements	<ul style="list-style-type: none"> Intel i5 or higher 8 GB RAM (16 GB recommended) 20 GB of free hard disk space Graphics adapter with 256 MB RAM A resolution of 1280x1024 At least 32 k colors 1 Gbit/s Ethernet card

The complexity of security systems has increased significantly over the last couple of years. At the same time, you are still relying on your system to mitigate security risks. With Bosch Software Assurance, you can always approach us for help to ensure your system keeps on running.

You can find the terms and conditions of Bosch Software Assurance on the Bosch Building Technologies website: <https://www.boschsecurity.com/xc/en/solutions/management-software/bosch-software-assurance/>

Technical specifications

The following tables specify the dimensions of an AMS access control system from two aspects:

- As per the respective license bundle: **LITE**, **PLUS** or **PRO**.

- As a maximum, if the necessary licenses are purchased.

License bundle LITE

LITE	Licensed number	Maximum number
Number of doors (with 1 or 2 readers):	16	144
Number of cards:	1000	200,000
Number of divisions:	1	400
Number of concurrent clients:	1	2
Number of MACs	1	1
Number of AMCs	Maximum 125 per MAC Up to 60 (on the network) recommended for high performance	
Number of authorizations	Maximum 1024 per MAC	
Number of guard tours	200	
SDK available	✓	
BVMS integration available	✓	
Intrusion integration	Maximum 25 panels B and G Series	

License bundle PLUS

PLUS	Licensed number	Maximum number
Number of doors (with 1 or 2 readers):	32	512
Number of cards:	2000	200,000
Number of divisions:	1	400
Number of concurrent clients:	1	5
Number of MACs	3	10
Number of AMCs	Maximum 125 per MAC Up to 60 (on the network) recommended for high performance	
Number of authorizations	Maximum 1024 per MAC	
Number of guard tours	200	
SDK available	✓	
BVMS integration available	✓	
Intrusion integration	Maximum 25 panels B and G Series	

License bundle PRO

PRO	Licensed number	Maximum number
Number of doors (with 1 or 2 readers):	32	10,000
Number of cards:	5000	200,000

PRO	Licensed number	Maximum number
Number of divisions:	1	400
Number of concurrent clients:	1	40
Number of MACs	5	40
Number of AMCs	Maximum 125 per MAC Up to 60 (on the network) recommended for high performance	
Number of authorizations	Maximum 1024 per MAC	
Number of guard tours	200	
SDK available	✓	
BVMS integration available	✓	
Intrusion integration	Maximum 25 panels B and G Series	

Languages of the user interface

- AR: Arabic
- DE: German
- EN: English
- ES: Spanish
- FR: French
- HU: Hungarian
- NL: Dutch
- PL: Polish
- PT: Portuguese
- RU: Russian
- TR: Turkish
- ZH-CN: Chinese (simplified)
- ZH-TW: Chinese (traditional)

Hardware devices supported

- The Bosch AMC2 family of access controllers
See corresponding datasheets in the product catalogs at <https://www.boschsecurity.com>
- Bosch AMC2 extension boards
See corresponding datasheets in the product catalogs at <https://www.boschsecurity.com>
- Bosch 2-reader controller AMC2-2W
See corresponding datasheets in the product catalogs at <https://www.boschsecurity.com>
- SimonsVoss SmartIntego remote online door components
- Signotec signature pad

Ordering information

AMS-BASE-LITE30 Lite license

Basic license LITE

Order number **AMS-BASE-LITE30**

AMS-BASE-PLUS30 Plus license

Basic license PLUS

Order number **AMS-BASE-PLUS30**

AMS-BASE-PRO30 Pro license

Basic license PRO

Order number **AMS-BASE-PRO30**

AMS-XCLI-1V30 License for 1 operator client

License for 1 operator client

Order number **AMS-XCLI-1V30**

AMS-XCLI-5V30 License for 5 operator clients

License for 5 operator clients

Order number **AMS-XCLI-5V30**

AMS-XMAC-1V30 License for 1 MAC server

License for 1 MAC server

Order number **AMS-XMAC-1V30**

AMS-XMAC-5V30 License for 5 MAC servers

License for 5 MAC servers

Order number **AMS-XMAC-5V30**

AMS-XCRD-100V30 License for 100 ID cards

License for 100 ID cards

Order number **AMS-XCRD-100V30**

AMS-XCRD-1KV30 License for 1,000 ID cards

License for 1000 ID cards

Order number **AMS-XCRD-1KV30**

AMS-XCRD-10KV30 License for 10,000 ID cards

License for 10,000 ID cards

Order number **AMS-XCRD-10KV30**

AMS-XCRD-50KV30 License for 50,000 ID cards

License for 50,000 ID cards

Order number **AMS-XCRD-50KV30**

AMS-XDIV-1V30 License for 1 division

License for 1 additional division

Order number **AMS-XDIV-1V30**

AMS-XDRS-32V30 License for 32 doors

License for 32 doors

Order number **AMS-XDRS-32V30**

AMS-XDRS-128V30 License for 128 doors

License for 128 doors

Order number **AMS-XDRS-128V30**

AMS-XDRS-512V30 License for 512 doors

License for 512 doors

Order number **AMS-XDRS-512V30**

AMS-XOFF-25V30 License for 25 offline doors

License for 25 remote online doors

Order number **AMS-XOFF-25V30**

AMS-XOND-25V30 License for 25 remote online doors

License for 25 remote online doors

Order number **AMS-XOND-25V30**

AMS-XPAN-1V30 License for 1 intrusion panel

License for 1 intrusion panel

Order number **AMS-XPAN-1V30**

AMS-XPAN-10V30 License for 10 intrusion panels

License for 10 intrusion panels

Order number **AMS-XPAN-10V30**

AMS-FUPG-TOPL30 License from Lite to Plus

Upgrade from Lite to Plus

Order number **AMS-FUPG-TOPL30**

AMS-FUPG-TOPR30 License from Plus to Pro

Upgrade from Plus to Pro

Order number **AMS-FUPG-TOPR30**

TRA-AMS-CE Training AMS - Expert

Local training for AMS Expert

Order number **TRA-AMS-CE**

TRA-AMS-EE Training AMS - Expert

Headquarters training for AMS Expert

Order number **TRA-AMS-EE**

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