

Access Management System V3.0.1



Access Management System (AMS) is an access control system for stand-alone application or for integration with other systems, such as the Bosch video management system BVMS or Bosch B and G series intrusion panels.

- 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 operator of a video management system to perform door-related tasks like video-based ID verification, to grant and deny access, or to disable doors.
- Intrusion areas can be armed directly from the Map View, and intrusion panel users can be centrally managed.

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.













- ► Combines high-end access control features, performance and availability with intuitive operation.
- ► Highly scalable: From 1000 to 200,000 users, and from 32 to 10,000 doors.
- ► Easy to use: Intuitive GUI for maps and alarm viewer, and web-based visitor management.
- ► Easy to configure: Pre-packaged licenses, simple installation and set-up.
- ► Comprehensive security management: Integrates with intrusion and video systems.

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 both to visualize the overall security situation of the premises, and zoom into close detail. It displays access violations, tampering and malfunction alarms, and allows the sending of commands directly from the maps themselves.

Badge designer

Card personalization is included in the product, providing you with the means to design your badges, to perform image acquisition with USB cameras and to use most commercially available Card Printers.

Visitor Management

Receptionist view: a browser-based user interface where receptionists can efficiently register and monitor visitors and visits.

Host view: a browser-based user interface where employees can pre-register their visits.

Visitor view: a browser-based user interface in **kiosk mode**, where visitors can maintain their own stored profiles, scan their ID papers and digitally sign required documents, so substantially reducing waiting times and crowding at reception.

Access Management BVMS Interface

The seamless integration with BVMS (version 10.1 or higher) allows the video verification of cardholder identities 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

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 on Map View. Allows the sending of commands (e.g. arm, disarm) to panels.

Access Management SDK

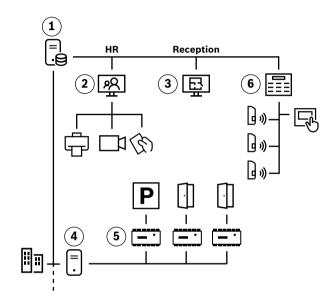
This SDK facilitates the integration of 3rd party systems with AMS, for instance an Identity Management or Visitor Management system. A particular advantage is its ability to re-use 3rd party integrations initially written for BIS Access Engine.

Access Importer/Exporter

This tool facilitates data import and export from external systems for 1-time data migration, such as from Access PE systems, or regular data transfer from Active Directory via the LDAP protocol.

Topology diagrams

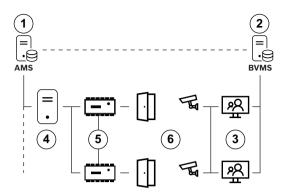
The following diagrams illustrate AMS configurations with integrated intruder-detection panels and with BVMS.



Intruder-detection topology

- (1) AMS server
- (2) Client workstation for enrollment
- (3) Client workstation for access control, visitor management, alarm management and the centralized arming/disarming of intrusion areas
- (4) Optional MAC servers (one MAC license is always included, on the AMS server)
- (5) AMCs for parking lot and door control

(6) Intrusion panel with detectors and touch-screen keypad



BVMS Integration

- (1) AMS server
- (2) BVMS management server or DIVAR IP all-in-one
- (3) BVMS Client workstation for access and video management
- (4) Optional MAC servers (one MAC license is always included, on the AMS server)
- (5) AMCs
- (6) Entrances with cameras

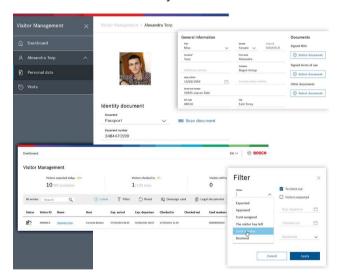
Functions

- · 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 by random screening of cardholders.
 - Verify cardholder identity with biometric checks at entrances, and with additional video-based ID verification powered by BVMS.

- Disarm an intrusion area and grant access with a 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.
- · Visitor Management
 - Pre-register appointments in the system, to shorten processing time.
 - Allow visitors to create their own profiles in kiosk mode, to avoid queues at reception.
 - Use a dashboard to monitor the day's expected visits, how many visitors are on the premises, which credentials are in use, and which credentials still need to be collected.
 - Set expiration dates on visitor profiles and their attachments to comply with national data privacy regulations, such as European GDPR.

Welcome

Please enter your visitor ID.



- · Guard Tours and patrols:
 - Define up to 200 guard tours, and monitor up to 8 patrols simultaneously.
- Monitor car parks and muster points:
 - Display customizable summaries of employees and vehicles on site.
 - Monitor the number of available parking spaces.
- Divisions:
 - Provide unified access control for a facility that is shared by any number of independent parties.

- Individual operators can be restricted to manage only the persons, devices and entrances of those divisions assigned to them.
- · Alarm Monitor, Command & Control:
 - The Map View supports up to 1000 maps, which can be nested to provide both overviews and close detail.
 - 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.
 AMS does not buffer intrusion alarms that occur



- · BVMS and DIVAR IP 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. Intelligent Video Analytics).
 - 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 50 Bosch B Series (Bx512) and G Series (Bx512G) control panels for central user management and 25 for command & control.
 - A full contingent of panels provides up to 12,800 intrusion detectors.
- · 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.

Serve

Supported operating systems.

Installations on other operating systems may succeed, but are entirely without warranty.

- Windows Server 2016 (64 bit, Standard, Datacenter)
- Windows 10 Version 1809 LTSC, Windows 10 Professional and Enterprise, Version 20H2
- 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

- 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.

Minimum hardware requirements

- Windows 10 Version 1809 LTSC, Windows 10 Professional and Enterprise, Version 20H2
- Ensure that the latest software updates are installed.
- 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

Client, including the Map View client

- 1 Gbit/s Ethernet card
- A free USB port or network share for installation files

Visitor Management client

Supported browsers.

Google Chrome, Mozilla Firefox, Microsoft Edge

(Chromium based)

Minimum

Full HD 1920x1080

recommended screen

resolution

MAC server

Supported operating systems.

Installations on other operating systems may succeed, but are entirely without warranty.

Windows Server 2016 (64 bit, Standard, Datacenter)

Windows 10 Version 1809 LTSC, Windows 10 Professional and Enterprise, Version 20H2

Ensure that the latest software updates are installed.

Minimum hardware requirements

- 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 clients configurable:	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	50	
SDK available	√	
BVMS integration available	✓	
Intrusion integration	Maximum number of Bosch B Series (Bx512) and G Series (Bx512G) control panels:	
		and control: 25 er management: 50

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 clients configurable:	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	100	
SDK available	V	

PLUS	Licensed number	Maximum number	
BVMS integration available	v		
Intrusion integration	Maximum number of Bosch B Series (Bx512) and G Series (Bx512G) control panels:		
	 for command 	for command and control: 25	
	• for central us	er management: 50	

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
Number of divisions:	1	400
Number of clients configurable:	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 number of Bosch B Series (Bx512) and G Series (Bx512G) control panels:	
	101 00111114114	and control: 25 er management: 50

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) *
- (*) This language is not available for Visitor Management in AMS minor version 3.0.1

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
- · SimonsVoss SmartIntego remote online door components

For Visitor Management

- Card enrollment reader: LECTUS enroll 5000 MD
- · Signature reader: signotec LITE, signotec Omega
- · Scanner for ID documents: ARH Combo, ARH Osmond

Ordering information

AMS-BASE-LITE30 Lite license

Basic license LITE

Order number AMS-BASE-LITE30 | F.01U.386.724

AMS-BASE-PLUS30 Plus license

Basic license PLUS

Order number AMS-BASE-PLUS30 | F.01U.386.725

AMS-BASE-PRO30 Pro license

Basic license PRO

Order number AMS-BASE-PRO30 | F.01U.386.726

AMS-XDIV-1V30 License for 1 division

License for 1 additional division

Order number AMS-XDIV-1V30 | F.01U.387.838

AMS-XCLI-1V30 License for 1 operator client

License for 1 operator client

Order number AMS-XCLI-1V30 | F.01U.386.727

AMS-XCLI-5V30 License for 5 operator clients

License for 5 operator clients

Order number AMS-XCLI-5V30 | F.01U.386.728

AMS-XMAC-1V30 License for 1 MAC server

License for 1 MAC server

Order number AMS-XMAC-1V30 | F.01U.386.729

AMS-XMAC-5V30 License for 5 MAC servers

License for 5 MAC servers

Order number AMS-XMAC-5V30 | F.01U.386.730

AMS-XCRD-100V30 License for 100 ID cards

License for 100 ID cards

Order number AMS-XCRD-100V30 | F.01U.386.736

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

License for 1000 ID cards

Order number AMS-XCRD-1KV30 | F.01U.386.737

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

License for 10,000 ID cards

Order number AMS-XCRD-10KV30 | F.01U.386.738

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

License for 50,000 ID cards

Order number AMS-XCRD-50KV30 | F.01U.386.739

AMS-XDRS-32V30 License for 32 doors

License for 32 doors

Order number AMS-XDRS-32V30 | F.01U.386.731

AMS-XDRS-128V30 License for 128 doors

License for 128 doors

Order number AMS-XDRS-128V30 | F.01U.386.732

AMS-XDRS-512V30 License for 512 doors

License for 512 doors

Order number AMS-XDRS-512V30 | F.01U.386.733

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

License for 25 remote online doors

Order number AMS-XOND-25V30 | F.01U.386.734

AMS-XPAN-1V30 License for 1 intrusion panel

License for 1 intrusion panel

Order number AMS-XPAN-1V30 | F.01U.387.836

AMS-XPAN-10V30 License for 10 intrusion panels

License for 10 intrusion panels

Order number AMS-XPAN-10V30 | F.01U.386.740

AMS-FVIS-WEBV30 License for visitor management

License for visitor management

Order number AMS-FVIS-WEBV30 | F.01U.395.536

AMS-FUPG-TOPL30 License from Lite to Plus

Upgrade from Lite to Plus

Order number AMS-FUPG-TOPL30 | F.01U.386.742

AMS-FUPG-TOPR30 License from Plus to Pro

Upgrade from Plus to Pro

Order number AMS-FUPG-TOPR30 | F.01U.386.743

TRA-AMS-CE Training AMS - Expert

Local training for AMS Expert

Order number TRA-AMS-CE | F.01U.367.232

TRA-AMS-EE Training AMS - Expert

Headquarters training for AMS Expert

Order number TRA-AMS-EE | F.01U.367.233

Represented by:

Europe, Middle East, Africa: Bosch Security Systems B.V. P.O. Box 80002 5600 JB Eindhoven, The Netherlands Phone: + 31 40 2577 284 emea.securitysystems@bosch.com emea.boschsecurity.com Germany: Bosch Sicherheitssysteme GmbH Robert-Bosch-Ring 5 85630 Grasbrunn Germany www.boschsecurity.com North America: Bosch Security Systems, LLC 130 Perinton Parkway Fairport, New York, 14450, USA Phone: +1 800 289 0996 Fax: +1 585 223 9180 onlinehelp@us.bosch.com www.boschsecurity.us Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia