

# Access Management System V2.0

www.boschsecurity.com



**BOSCH**

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 scenarios (threats, company events).
- ▶ Support for the latest and safest operating systems: Windows Server 2016, Windows 10 and SQL Server 2017.

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 video-based ID verification at entrances.

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 management 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. AMS also supports serial reader connection with secure OSDPv2 protocol.

**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 now 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.

**Access Management Web Interface:**

Different web interfaces show an overview of cardholders (virtual tableau), visitors (with alerts for overdue departures) or available capacity in parking lots.

**Access Management SDK:**

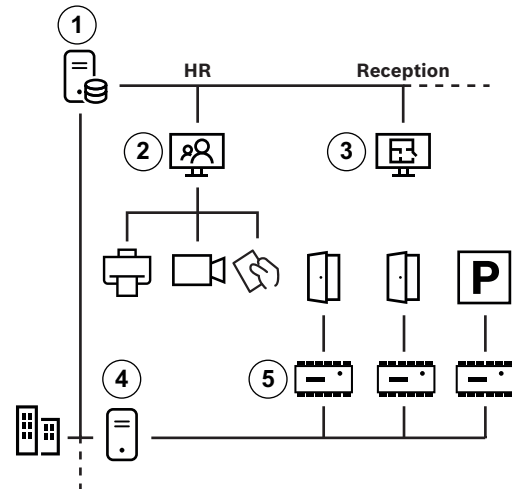
An API (Application Programming Interface) that facilitates the integration of 3<sup>rd</sup> party systems into AMS, for instance an identity management or visitor management system.

**Access Management Data Importer:**

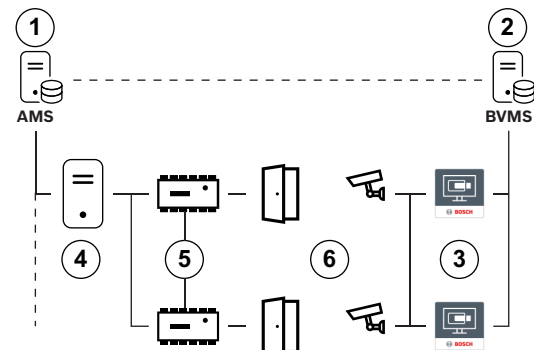
This tool facilitates data import and export from 3<sup>rd</sup> party systems for 1-time data migration or regular synchronization with external systems.

**Topology diagrams**

The following diagrams illustrate AMS configurations with and without BVMS

**Stand-Alone topology**

- (1) Access Management server with Access Management Database
- (2) Client workstation with Dialog Manager
- (3) Client workstation with Map View
- (4) MACs
- (5) AMCs

**BVMS Integration**

- (1) Access Management server with Access Management Database and BVMS Interface
- (2) BVMS management server
- (3) Client workstation for video supported access control
- (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 scheduled or reoccurring mass import of personnel data stored on files or central Active Directory server.
- 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 turnstiles, elevators and parking barriers, to accelerate the configuration phase of your project.
  - Use access readers also for time and attendance recordings and arm/disarm of intrusion areas.
  - 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.
  - Use the SimonsVoss SmartIntego technology to enhance your system with card-programmable remote online doors, as commonly used in hotels, healthcare, offices and higher education.
  - Threat Level Management: one click, any input signal or a special alert card can change access rights on many doors simultaneously allowing for quick system re-configuration in case of threats (fire, intruder) or special events (Open Day).
- Reporting:
  - Take advantage of a large number of ready to use 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, get alerts from overstayed visits.
  - Monitor the number of available parking spaces in different parking lots.
- 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 Integration:
  - Use AMS to increase the coverage of the Bosch Video Management System (BVMS) to include video verification at entrances.
- Milestone XProtect Integration:
  - Use AMS to support XProtect with access events and alarms for further processing on XProtect client.

### Installation/configuration notes

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

Server	
Supported operating systems	<ul style="list-style-type: none"> <li>• Windows Server 2016 (64 bit, Standard, Datacenter)</li> <li>• Windows 10</li> <li>• <b>Note:</b> The default database delivered with this system is SQL Server 2017 Express edition with advanced services</li> </ul>
Minimum hardware requirements	<ul style="list-style-type: none"> <li>• Intel i5 processor with at least 4 physical cores</li> <li>• 8 GB RAM (32 GB recommended)</li> <li>• 200 GB of free hard disk space (SSD disks recommended)</li> <li>• Graphics adapter with 256 MB RAM</li> <li>• A resolution of 1280x1024</li> <li>• At least 32 k colors</li> <li>• 1 Gbit/s Ethernet card</li> <li>• A free USB port or network share for installation files</li> </ul>

Client	
Supported operating systems	<ul style="list-style-type: none"> <li>• Windows 10, version 1803 (LTSB, LTSC)</li> </ul>
Minimum hardware requirements	<ul style="list-style-type: none"> <li>• Intel i5 or higher</li> <li>• 8 GB RAM (16 GB recommended)</li> <li>• 20 GB of free hard disk space</li> <li>• Graphics adapter with 256 MB RAM</li> <li>• A resolution of 1920x1080</li> <li>• At least 32 k colors</li> <li>• DirectX® 11</li> <li>• 1 Gbit/s Ethernet card</li> <li>• A free USB port or network share for installation files</li> </ul>

MAC server	
Supported operating systems	<ul style="list-style-type: none"> <li>• Windows Server 2016</li> <li>• Windows 10 Pro</li> </ul>
Minimum hardware requirements	<ul style="list-style-type: none"> <li>• Intel i5 or higher</li> <li>• 8 GB RAM (16 GB recommended)</li> <li>• 20 GB of free hard disk space</li> <li>• 1 Gbit/s Ethernet card</li> </ul>

### 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	16	144
Number of cards:	1000	200,000
Number of concurrent clients:	1	2

LITE	Licensed number	Maximum number
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	✓	
SMA years included	1	

### License bundle PLUS

PLUS	Licensed number	Maximum number
Number of doors	32	512
Number of cards:	2000	200,000
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	✓	
SMA years included	1	

### License bundle PRO

PRO	Licensed number	Maximum number
Number of doors	32	10,000
Number of cards:	5000	200,000
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	✓	
SMA years included	1	

### 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 (global launch by the end of 2019).  
See corresponding datasheets in the product catalogs at <https://www.boschsecurity.com>
- Bosch access readers and enrollment readers.  
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-LITE20 Lite license**

Basic license LITE

Order number **AMS-BASE-LITE20****AMS-BASE-PLUS20 Plus license**

Basic license PLUS

Order number **AMS-BASE-PLUS20****AMS-BASE-PRO20 Pro license**

Basic license PRO

Order number **AMS-BASE-PRO20****AMS-XDIV-1V20 License for 1 division**

License for 1 additional division

Order number **AMS-XDIV-1V20****AMS-XCLI-1V20 License for 1 operator client**

License for 1 operator client

Order number **AMS-XCLI-1V20****AMS-XCLI-5V20 License for 5 operator clients**

License for 5 operator clients

Order number **AMS-XCLI-5V20****AMS-XMAC-1V20 License for 1 MAC server**

License for 1 MAC server

Order number **AMS-XMAC-1V20****AMS-XMAC-5V20 License for 5 MAC servers**

License for 5 MAC servers

Order number **AMS-XMAC-5V20****AMS-XCRD-100V20 License for 100 ID cards**

License for 100 ID cards

Order number **AMS-XCRD-100V20****AMS-XCRD-1KV20 License for 1.000 ID cards**

License for 1000 ID cards

Order number **AMS-XCRD-1KV20****AMS-XCRD-10KV20 License for 10.000 ID cards**

License for 10,000 ID cards

Order number **AMS-XCRD-10KV20****AMS-XCRD-50KV20 License for 50.000 ID cards**

License for 50,000 ID cards

Order number **AMS-XCRD-50KV20****AMS-XDRS-32V20 License for 32 doors**

License for 32 doors

Order number **AMS-XDRS-32V20****AMS-XDRS-128V20 License for 128 doors**

License for 128 doors

Order number **AMS-XDRS-128V20****AMS-XDRS-512V20 License for 512 doors**

License for 512 doors

Order number **AMS-XDRS-512V20****AMS-XOND-25V20 License for 25 remote online doors**

License for 25 remote online doors

Order number **AMS-XOND-25V20****AMS-FUPG-TOPLUS Upgrade from Lite to Plus**

Upgrade from LITE to PLUS

Order number **AMS-FUPG-TOPLUS****AMS-FUPG-TOPRO License from Plus to Pro**

License from PLUS to PRO

Order number **AMS-FUPG-TOPRO****AMS-SMA-LITE License for AMS-BASE-LITE\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-BASE-LITE

Order number **AMS-SMA-LITE****AMS-SMA-PLUS License for AMS-BASE-PLUS\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-BASE-PLUS

Order number **AMS-SMA-PLUS****AMS-SMA-PRO License for AMS-BASE-PRO\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-BASE-PRO

Order number **AMS-SMA-PRO****AMS-SMA-1CLI License for AMS-XCLI-1V\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XCLI-1V

Order number **AMS-SMA-1CLI****AMS-SMA-5CLI License for AMS-XCLI-5V\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XCLI-5V

Order number **AMS-SMA-5CLI****AMS-SMA-1MAC License for AMS-XMAC-1V\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XMAC-1V

Order number **AMS-SMA-1MAC****AMS-SMA-5MAC License for AMS-XMAC-5V\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XMAC-5V

Order number **AMS-SMA-5MAC****AMS-SMA-100CRD License for AMS-XCRD-100V\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XCRD-100V

Order number **AMS-SMA-100CRD****AMS-SMA-1KCRD License for AMS-XCRD-1KV\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XCRD-1KV

Order number **AMS-SMA-1KCRD****AMS-SMA-10KCRD License for AMS-XCRD-10KV\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XCRD-10KV

Order number **AMS-SMA-10KCRD****AMS-SMA-50KCRD License for AMS-XCRD-50KV\*, 1 yr**

1-year Service and Maintenance Agreement (SMA) for AMS-XCRD-50KV

Order number **AMS-SMA-50KCRD**

**AMS-SMA-32DRS License for AMS-XDRS-32V\*, 1 yr**  
1-year Service and Maintenance Agreement (SMA) for  
AMS-XDRS-32V  
Order number **AMS-SMA-32DRS**

---

**AMS-SMA-128DRS License for AMS-XDRS-128V\*, 1 yr**  
1-year Service and Maintenance Agreement (SMA) for  
AMS-XDRS-128V  
Order number **AMS-SMA-128DRS**

---

**AMS-SMA-512DRS License for AMS-XDRS-512V\*, 1 yr**  
1-year Service and Maintenance Agreement (SMA) for  
AMS-XDRS-512V  
Order number **AMS-SMA-512DRS**

---

**AMS-SMA-25OND License for AMS-XOND-25V\*, 1 yr**  
1 year Software Maintenance Agreement  
Order number **AMS-SMA-25OND**

---

**AMS-SMA-1DIV License for AMS-XDIV-1V\*, 1 yr**  
1-year Service and Maintenance Agreement (SMA) for  
AMS-XDIV-1V  
Order number **AMS-SMA-1DIV**

---

**AMS-SMA-TOPLUS License for AMS-FUPG-TOPLUS, 1 yr**  
1-year Service and Maintenance Agreement (SMA) for  
AMS-FUPG-TOPLUS  
Order number **AMS-SMA-TOPLUS**

---

**AMS-SMA-TOPRO License for AMS-FUPG-TOPRO, 1 yr**  
1-year Service and Maintenance Agreement (SMA) for  
AMS-FUPG-TOPRO  
Order number **AMS-SMA-TOPRO**

---

**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**

---

**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, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
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