Access Management System V5.0

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.

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.

- Combines high-end access control features, performance and availability with intuitive operation.
- Highly scalable: From 1,000 to 400,000 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.

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. All AMCs connect via highly encrypted communication to the MAC servers.

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 all access events. The latest version provides encryption to protect personal information from misuse or theft, and can run on a dedicated server.

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
Visitor Management is included in the AMS PRO license bundle.  
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 and receive email notifications when their visitor has arrived.  
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 50 B and G Series intrusion panels, and up to 500 panels for user management. 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 API
This REST-API facilitates the integration of 3rd party systems with AMS, for instance an Identity Management or Facility Management app.

Integration of wireless online locks
Integration of SimonsVoss SmartIntego wireless online locks (lock cylinders, door handles and padlocks) for doors, which require medium-level security, such as offices and classrooms. Available in certain countries only.

Integration of remote offline locks
Integration of OSS-SO compliant offline locks or Normbau (Pegasys) offline locks for remote doors, which connection via cabling is not possible due to distance, construction conditions or cost. Available in certain countries only.

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. An export of time stamps to an external Time and Attendance system is also possible.

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
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.
  - Send e-mail notification to host when visitor has arrived.
  - 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 1,000 maps (100 for better usability), 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 while the network or the system itself is down.

- **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 500 Bosch B Series (Bx512) and G Series (Bx512G) control panels for central user management and 80 for command & control.
  - A full contingent of panels provides up to 12,800 intrusion detectors.
  - Supports Bosch B901 door controllers for Wiegand card readers.

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**Installation/configuration notes**

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

<table>
<thead>
<tr>
<th>Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported operating systems.</td>
</tr>
<tr>
<td>Installations on other operating systems may succeed, but are entirely without warranty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Remote database</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQL Server 2019</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum hardware requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel i7 processor generation 10</td>
</tr>
<tr>
<td>16 GB RAM (32 GB recommended)</td>
</tr>
<tr>
<td>250 GB of free hard disk space</td>
</tr>
<tr>
<td>Hard disk transfer rate 300 MB/s with &lt; 10 ms average response time (SSD recommended)</td>
</tr>
<tr>
<td>Graphics adapter with</td>
</tr>
<tr>
<td>- 256 MB RAM</td>
</tr>
<tr>
<td>- 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).</td>
</tr>
<tr>
<td>- At least 32 k colors</td>
</tr>
<tr>
<td>1 Gbit/s Ethernet card</td>
</tr>
<tr>
<td>A free USB port or network share for installation files</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Client, including the Map View client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported operating systems.</td>
</tr>
<tr>
<td>Installations on other operating systems may succeed, but are entirely without warranty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum hardware requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel i5 or higher</td>
</tr>
<tr>
<td>8 GB RAM (16 GB recommended)</td>
</tr>
<tr>
<td>25 GB of free hard disk space</td>
</tr>
<tr>
<td>Graphics adapter</td>
</tr>
<tr>
<td>- 256 MB RAM</td>
</tr>
<tr>
<td>- To use the AMS Dialog manager, a resolution of 1280x1024 is sufficient.</td>
</tr>
</tbody>
</table>
Client, including the Map View client

- 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

Visitor Management and OSO Configurator clients

Supported browsers: Google Chrome, Mozilla Firefox, Microsoft Edge (Chromium based)

Minimum recommended screen resolution: Full HD 1920x1080

<table>
<thead>
<tr>
<th>Web Browser</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Chrome</td>
<td>90 or higher</td>
</tr>
<tr>
<td>Microsoft Edge</td>
<td>90 or higher</td>
</tr>
<tr>
<td>Mozilla Firefox</td>
<td>88 or higher</td>
</tr>
</tbody>
</table>

MAC server

Supported operating systems:

- Windows Server 2016, Windows Server 2019 (64 bit, Standard, Datacenter)
- Windows 10 Version 1809 LTSC; Windows 10 version 21H2 LTSC; Windows 10 Professional and Enterprise, Version 21H2
- Ensure that the latest software updates are installed.
  - Intel i5 or higher
  - 8 GB RAM (16 GB recommended)
  - 60 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

Minimum hardware requirements

Compatibility with auxiliary and optional software tools

The following table lists the versions of auxiliary software tools that are compatible with this version of the system.

<table>
<thead>
<tr>
<th>Component</th>
<th>Version</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importer/Exporter</td>
<td>1.1.18</td>
<td>AMS Media Package Folder: AddOns/Standard/ImportExport</td>
</tr>
<tr>
<td>Occupancy Monitor</td>
<td>1.1.13</td>
<td>AMS Media Package Folder: AddOns/Advanced/OccupancyMonitor</td>
</tr>
<tr>
<td>AECT tool</td>
<td>1.0.0.7</td>
<td>AMS Media Package Folder: AddOns/Advanced/AECT</td>
</tr>
<tr>
<td>Biometric IP-config tool</td>
<td>5.0</td>
<td>AMS Media Package Folder: AddOns/Advanced/BioConfig</td>
</tr>
<tr>
<td>AMC IPconfig tool</td>
<td>1.10.9</td>
<td>AMS Media Package Folder: AddOns/Standard/AccessIpConfig</td>
</tr>
<tr>
<td>SDK version</td>
<td>5.0</td>
<td>AMS Media Package Folder: AddOns/Advanced/API</td>
</tr>
<tr>
<td>Key Management tool</td>
<td>2.4.9</td>
<td>AMS Media Package Folder: AddOns/Advanced/ReaderConfigTool</td>
</tr>
<tr>
<td>Intrusion RPS API</td>
<td>2.2.27914</td>
<td>AMS Media Package Folder: AddOns/Advanced/Intrusion-RPS-API</td>
</tr>
<tr>
<td>Milestone plug-in</td>
<td>5.0</td>
<td>AMS Setup Folder: &lt;Language\ServerPlugin</td>
</tr>
<tr>
<td>BVMS Version</td>
<td>11.1.1</td>
<td>Download Store / Product Catalogue</td>
</tr>
<tr>
<td>VisitorManagement</td>
<td>5.0</td>
<td>Download Store / Product Catalogue</td>
</tr>
<tr>
<td>Milestone Xprotect</td>
<td>2020 R3</td>
<td>Download Store Milestone Milestone</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th></th>
<th>Licensed number</th>
<th>Maximum number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of doors (with 1 or 2 readers):</td>
<td>16</td>
<td>80</td>
</tr>
<tr>
<td>Number of cards:</td>
<td>200</td>
<td>5,000</td>
</tr>
<tr>
<td>Number of divisions:</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Number of clients configurable:</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Number of MACs</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Number of AMCs</td>
<td>Maximum 125 per MAC Up to 60 (on the network) recommended for high performance</td>
<td></td>
</tr>
<tr>
<td>Number of authorizations</td>
<td>Maximum 1,024 per MAC</td>
<td></td>
</tr>
<tr>
<td>Number of guard tours</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>SDK available</td>
<td>-</td>
<td>✔</td>
</tr>
<tr>
<td>BVMS integration available</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

#### License bundle PLUS

<table>
<thead>
<tr>
<th></th>
<th>Licensed number</th>
<th>Maximum number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of doors (with 1 or 2 readers):</td>
<td>32</td>
<td>288</td>
</tr>
<tr>
<td>Number of cards:</td>
<td>2,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Number of divisions:</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Number of clients configurable:</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Number of MACs</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Number of AMCs</td>
<td>Maximum 125 per MAC Up to 60 (on the network) recommended for high performance</td>
<td></td>
</tr>
<tr>
<td>Number of authorizations</td>
<td>Maximum 1,024 per MAC</td>
<td></td>
</tr>
<tr>
<td>Number of guard tours</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>SDK available</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>BVMS integration available</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

#### License bundle PRO

<table>
<thead>
<tr>
<th></th>
<th>Licensed number</th>
<th>Maximum number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of doors (with 1 or 2 readers):</td>
<td>128</td>
<td>10,000</td>
</tr>
<tr>
<td>Number of cards:</td>
<td>5,000</td>
<td>400,000</td>
</tr>
<tr>
<td>Number of divisions:</td>
<td>5</td>
<td>200</td>
</tr>
<tr>
<td>Number of clients configurable:</td>
<td>5</td>
<td>200</td>
</tr>
<tr>
<td>Number of MACs</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Number of AMCs</td>
<td>Maximum 125 per MAC Up to 60 (on the network) recommended for high performance</td>
<td></td>
</tr>
<tr>
<td>Number of authorizations</td>
<td>Maximum 1,024 per MAC</td>
<td></td>
</tr>
<tr>
<td>Number of guard tours</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>SDK available</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>BVMS integration available</td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

Intrusion integration:
- Maximum number of Bosch B Series (Bx512) and G Series (Bx512G) control panels:
  - for command and control: 80
  - for central user management: 200

Intrusion integration:
- Maximum number of Bosch B Series (Bx512) and G Series (Bx512G) control panels:
  - for command and control: 50
  - for central user management: 50
Specifications for AMS server and client reference systems
The following are specifications for a reference system with good overall performance.

<table>
<thead>
<tr>
<th></th>
<th>Server system (with no client running)</th>
<th>Client system</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel Xeon E-2144G @ 3.6 GHz (4 cores, 8 logical)</td>
<td>Intel Core i7-8700 @ 3.2 GHz (6 cores, 12 logical)</td>
</tr>
<tr>
<td><strong>RAM</strong></td>
<td>32 GB (2667 MHz)</td>
<td>8 GB (2667 MHz)</td>
</tr>
<tr>
<td><strong>GPU</strong></td>
<td>Integrated graphics from CPU</td>
<td>Intel UHD Graphics 630 (4GB GPU memory)</td>
</tr>
<tr>
<td><strong>System disk</strong></td>
<td>NVMe</td>
<td>SSD disk</td>
</tr>
<tr>
<td></td>
<td>Write speed: 1440MB/s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read speed: 2250MB/s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average response time 10ms</td>
<td></td>
</tr>
<tr>
<td><strong>Disk where AMS is installed</strong></td>
<td>SSD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Write speed: 1000MB/s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Read speed: 1100MB/s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average response time 10ms</td>
<td></td>
</tr>
<tr>
<td><strong>Operating system</strong></td>
<td>Microsoft Server 2019 Standard Edition</td>
<td>Microsoft 10 Pro Edition</td>
</tr>
</tbody>
</table>

Performance of the reference system

<table>
<thead>
<tr>
<th></th>
<th>SQL Server 2019 Express version</th>
<th>SQL Server 2019 Standard version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. events per second</td>
<td>70</td>
<td>150</td>
</tr>
<tr>
<td>Max. events that can be stored in the event database</td>
<td>2x10^6</td>
<td>Limited by storage capacity, not by database version.</td>
</tr>
</tbody>
</table>

• The system can process a maximum of 100 access events per second (for example: door open/close, audit trail entries).
• With intrusion integration, one point change can trigger three or more access events, for example Point shorted, Area not ready to arm, Point state changed. Consider this factor when calculating performance.

Languages of the user interface
• AR: Arabic
• DE: German
• EN: English
• ES: Spanish
• FR: French
• HU: Hungarian
• NL: Dutch
• PL: Polish
• PT: Portuguese
• RO: Romanian
• 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](https://www.boschsecurity.com)
• Bosch AMC2 extension boards
  See corresponding datasheets in the product catalogs at [https://www.boschsecurity.com](https://www.boschsecurity.com)
• SimonsVoss SmartIntego remote online door components
• Uhlmann & Zacher Clex public or Allegion offline locks (OSS-SO compatible). Available in certain countries
• Normbau Pegasys offline locks (V2.1). Available in certain countries
• Idemia Sigma, Morpho, VisionPass biometric fingerprint and face recognition readers

Other supported systems
• ISS SecurOS face and license plate recognition system
• Oosto OnAccess face recognition system
• Otis Compass elevator dispatch system
• Deister flexx and maxx key management systems

For Visitor Management
• Card enrollment reader: LECTUS enroll 5000 MD, HID OMNIKEY
• Signature reader: signotec LITE, signotec Omega
• Scanner for ID documents: ARH Combo, ARH Osmond

Ordering information

**AMS-BLIT License lite base**
License for the LITE base
Order number [AMS-BLIT | F.01U.406.304](https://www.boschsecurity.com)

**AMS-BPLU License plus package**
License for the PLUS base
Order number [AMS-BPLU | F.01U.406.305](https://www.boschsecurity.com)

**AMS-BPRO License professional base**
License for the PRO base
Order number [AMS-BPRO | F.01U.406.338](https://www.boschsecurity.com)

**AMS-X32DORLIT License 32 door expansion**
License for 32 door expansion
Order number [AMS-X32DORLIT | F.01U.408.587](https://www.boschsecurity.com)

**AMS-XCLILIT License 1 operator client expansion**
License for 1 operator client expansion
Order number [AMS-XCLILIT | F.01U.408.586](https://www.boschsecurity.com)
AMS-X100CRDLIT License 100 ID card expansion
License for 100 ID card expansion
Order number AMS-X100CRDLIT | F.01U.408.588

AMS-X1KCRDLIT License 1000 ID card expansion
License for 1000 ID card expansion
Order number AMS-X1KCRDLIT | F.01U.408.589

AMS-XPANLIT License 1 G Series expansion
License for 1 G Series expansion
Order number AMS-XPANLIT | F.01U.408.590

AMS-FVISLIT Visitor management AMS Lite
License for Visitor management AMS Lite
Order number AMS-FVISLIT | F.01U.409.060

AMS-X32DORPLU License 32 door expansion
License for 32 door expansion
Order number AMS-X32DORPLU | F.01U.408.576

AMS-X128DORPLU License 128 door expansion
License for 128 door expansion
Order number AMS-X128DORPLU | F.01U.408.578

AMS-XCLIPLU License 1 operator client expansion
License for 1 operator client expansion
Order number AMS-XCLIPLU | F.01U.408.574

AMS-XDIVPLU License 1 division expansion
License for 1 division expansion
Order number AMS-XDIVPLU | F.01U.408.575

AMS-XMACPLU License 1 MAC expansion
License for 1 MAC expansion
Order number AMS-XMACPLU | F.01U.408.567

AMS-X1KCRDPLU License 1000 ID card expansion
License for 1000 ID card expansion
Order number AMS-X1KCRDPLU | F.01U.408.579

AMS-X10KCRDPLU License 10000 ID card expansion
License for 10000 ID card expansion
Order number AMS-X10KCRDPLU | F.01U.408.580

AMS-X25OFFPLU License 25 Pegasys doors expansion
License for 25 Pegasys doors expansion
Order number AMS-X25OFFPLU | F.01U.408.585

AMS-X25OSOPRO License 25 OSO offline doors expansion
License for 25 OSO offline doors expansion
Order number AMS-X25OSOPRO | F.01U.408.584

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Order number AMS-SMA-1CLI | F.01U.363.509
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