BOSCH

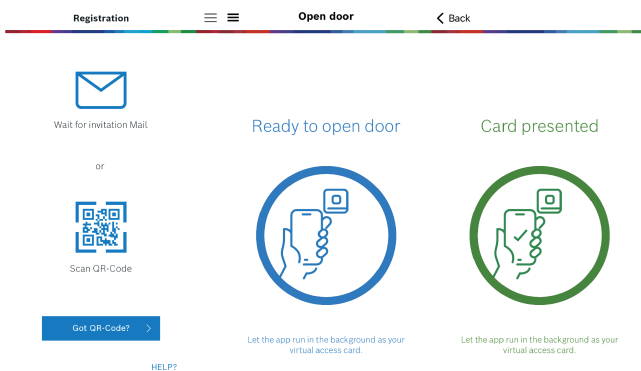# Mobile Access V5.2

▶ Use of mobile phone for physical access

▶ Allows multi-factor authentication on the mobile phone for access

▶ Uses secure encrypted communication

▶ On-premise setup possible

▶ Supports Bosch LECTUS select readers

This document describes the components, characteristics and advantages of the Mobile Access solution offered by Bosch.
The application allows seamless access by managing the credentials remotely and by using a mobile phone for authentication in front of an access reader.

The Mobile Access solution consists out of several components that interact with each other. To set up a complete system the following components are needed:
Software
• Choice of AMS software license (PLUS, LITE, PRO). Please see the AMS Datasheet for more information.
• Mobile Access software license (includes Credential Management to manage employee data).
• Optional: Visitor Management (to manage visitor data).
• Alternatively a license bundle can be bought that includes the respective AMS license, Visitor Management as well as Credential Management and a certain number of credentials.
• End-user app called "Bosch Mobile Access" (available free via the App store) to store the virtual credentials.
• Installer app called "Bosch Setup Access" to manage configurations of the reader.
Hardware
• LECTUS select reader with BLE (Bluetooth ® Low Energy)
• AMC2-RS485 Controller
• Accessories as applicable

The LECTUS select reader with BLE can be configured to accept:
• A reading distance from 5 cm to 10 m (may vary depending on phone types used and the installation environment).
• In addition, biometric identification can be used on the smartphone.
The enrollment services Visitor Management and Credential Management (part of the Mobile Access software license) enable the management of virtual cards, called mobile credentials. The configuration of access authorizations is done in the Access Management System AMS or in the Access Engine BIS ACE.

Mobile Access includes the following features with benefits for the operator, building owner or end-user:
• Integration of the smartphone as an access medium, expanding the classic access control card.
• Remote management of access rights by sending a virtual entry token (a virtual card, to use in the app) to a visitor or employee.
• Different user types (visitor, employee) can be managed in the browser via Visitor or Credential Management.
• Allows reader configuration.
• Adjustable communication range that allows access over long distances for different applications.

- Different mobile credentials, corresponding to different sites, can be stored in one mobile application.
- Configurable biometric identification, such as touch ID and face ID.

System overview

The Mobile Access application is a supplement to the classic card in the Access Control System. The organizational administrator registers a user or a group of users either in the Visitor Management or in Credential Management front end. Depending on the enrollment type, the user receives an e-mail or a QR code to complete the registration. The user can then authenticate in front of a reader through the mobile application.

The diagram shows the communication chain between the elements of the Access Control System with Mobile Access solution by Bosch.
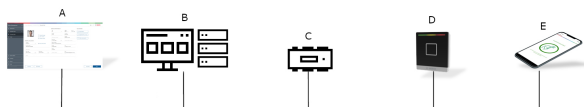

Fig. 1: Diagram of the Access Control System with Mobile Access solution

A	Visitor Management or Credential Management
B	Access Management System (AMS) or
	Building Integration System - Access Control Engine (BIS-ACE)
C	AMC2-4R4CF controller(s)
D	LECTUS select reader(s)
E	Bosch Mobile Access applications

Functions

Licensing options
You can order one of the available packages and always extend the number of mobile credentials with extension licenses. The mobile credentials can be re-used multiple times.
License bundles can be ordered as well containing the needed AMS license, also Visitor Management and Credential Management and a certain number of credentials.
For more information on the available packages options, refer to ordering information.

Multifactor authentication options
The authentication options are:
- Card mode: In this model, the app runs in the background so the screen can be locked.
- 2-factor authentication after presenting the smartphone: hold the unlocked smartphone in front of the reader and confirm authentication with 2 factors.

Administration of Mobile Access

Action	Instructions
Getting the credentials	With an e-mail address: 1. The organizational administrator enrolls the user via Visitor or Credential Management and an e-mail invitation is sent to the user e-mail address. 2. The user clicks on the **Complete Registration** button of the e-mail invitation and the URL will launch the end-user Bosch Mobile Access application.
	With a QR code: 1. The organizational administrator enrolls the user Visitor or Credential Management with a QR code. 2.The user scans the generated QR code from the administrator application and the end-user Bosch Mobile Access application is launched.
Deleting the credentials	The credentials can be revoked via Visitor Management and Credential Management. The user receives a notification in his app informing that the credentials are no longer valid. Since the credentials represent a card number, the authorizations can also be changed at any time in the AMS or BIS-ACE.

Installation/configuration notes

Smartphones

Brand	Device	Default Operating System
Apple	iPhone 6s	iOS version 15.6.1
Apple	iPhone XR	iOS version 15.7 - 16.0
Apple	iPhone SE (2nd generation)	iOS version 16.2
Apple	iPhone SE (3rd generation)	iOS version 15.7 / 16.1
Apple	iPhone 11	iOS version 16.0.2
Apple	iPhone 13 Pro / iPhone Pro Max	iOS version 15.6.1 / 16.0
Samsung	Galaxy A50	Android version 11.0
Samsung	S20 FE	Android version 12.0
Samsung	A22 5G	Android version 12.0

Brand	Device	Default Operating System
Others	Xiaomi Redmi Note 9 Pro	Android version 11.0
Motorola	MotoG7plus	Android version 10.0

Tab. 1: **Mobile Access tested smartphones**

Note: Performances may vary with different phone types. The list only gives an overview of compatible phones that have been tested. Other phone types may work well in addition. Please review the section smartphone requirements for additional information.

Smartphone requirements

Mobile Access application requires:

- Stable internet connection to receive the mobile credential in your mobile application (Bosch Mobile Access). After registration, no internet connection is needed in order to establish communication between the phone and the reader.
- Bluetooth: 4.2 or higher to scan, detect and communicate with the reader.
- Operating System: last major releases of Apple iOS or Android.

Hardware requirements

Mobile Access supports the following products:

- LECTUS select reader with and without keypad with BLE module
- AMC2-4R4CF controller

Software requirements

Mobile Access 5.2 supports the following software systems:

- AMS version 5.2 and later
- Visitor Management 5.2 and later
- BIS version 5.0.1 and later

Recommended servers

The recommended servers for the specific software, client and hardware are:

- Win Server 2019 for the AMS Server
- Win 10 Pro / Enterprise for the AMS Client
- Win 10 Pro / Enterprise for the MAC, working as network operating hardware locally in the control cabinet.

Note: The default database delivered with this system is SQL Server 2017 Express edition with advanced settings.

Technical specifications

Technical specifications and requirements for AMS and BIS-ACE can be found in the AMS and BIS-ACE datasheets available in Bosch online catalog.

Ordering information

AMS-FMOBLIT License Mobile Access Lite
License Mobile Access LITE includes 10 mobile credentials and Credential Management
Order number **AMS-FMOBLIT | F.01U.412.685**

AMS-X50MOBLIT License 50 Mobile Credentials Lite
License 50 Mobile Credentials LITE
Order number **AMS-X50MOBLIT | F.01U.412.687**

AMS-X100MOBLIT License 100 Mobile Credentials Lite
License 100 Mobile Credentials LITE
Order number **AMS-X100MOBLIT | F.01U.412.688**

AMS-X1KMOBLIT License 1000 Mobile Credentials Lite
License 1000 Mobile Credentials LITE
Order number **AMS-X1KMOBLIT | F.01U.412.689**

AMS-X5KMOBLIT License 5000 Mobile Cedentials Lite
License 5000 Mobile Credentials LITE
Order number **AMS-X5KMOBLIT | F.01U.412.690**

AMS-FMOBPLU License Mobile Access Plus
License Mobile Access PLUS includes 50 mobile credentials and Credential Management
Order number **AMS-FMOBPLU | F.01U.412.679**

AMS-X50MOBPLU License 50 Mobile Credentials Plus
License 50 Mobile Credentials PLUS
Order number **AMS-X50MOBPLU | F.01U.412.681**

AMS-X100MOBPLU License 100 Mobile Credentials Plus
License 100 Mobile Credentials PLUS
Order number **AMS-X100MOBPLU | F.01U.412.682**

AMS-X1KMOBPLU License 1000 Mobile Credentials Plus
License 1000 Mobile Credentials PLUS
Order number **AMS-X1KMOBPLU | F.01U.412.683**

AMS-X5KMOBPLU License 5000 Mobile Credentials Plus
License 5000 Mobile Credentials PLUS
Order number **AMS-X5KMOBPLU | F.01U.412.684**

AMS-FMOBPRO License Mobile Access Pro
License Mobile Access PRO includes 100 mobile credentials and Credential Management
Order number **AMS-FMOBPRO | F.01U.412.674**

AMS-X50MOBPRO License 50 Mobile Credentials Pro
License 50 Mobile Credentials PRO
Order number **AMS-X50MOBPRO | F.01U.412.702**

AMS-X100MOBPRO License 100 Mobile Credentials Pro
License 100 Mobile Credentials PRO
Order number **AMS-X100MOBPRO | F.01U.412.676**

AMS-X1KMOBPRO License 1000 Mobile Credentials Pro
License 1000 Mobile Credentials PRO
Order number **AMS-X1KMOBPRO | F.01U.412.677**

AMS-X5KMOBPRO License 5000 Mobile Credentials Pro
License 5000 Mobile Credentials PRO
Order number **AMS-X5KMOBPRO | F.01U.412.678**

AMS-BMOBLIT License bundle Mobile Access Lite
License bundle Mobile Access LITE includes AMS Lite, 10 mobile credentials, Visitor Management and Credential Management
Order number **AMS-BMOBLIT | F.01U.413.832**

AMS-BMOBPLU License bundle Mobile Access Plus
License bundle Mobile Access PLUS includes AMS Lite, 50 mobile credentials, Visitor Management and Credential Management
Order number **AMS-BMOBPLU | F.01U.413.831**

AMS-BMOBPRO License bundle Mobile Access Pro
License bundle Mobile Access PRO includes AMS Pro, 100 mobile credentials, Visitor Management and Credential Management
Order number **AMS-BMOBPRO | F.01U.413.830**

AMS-SMA-BMOBLIT SMA bundle Mobile Access Lite
1-year Service and Maintenance Agreement (SMA) for AMS-BMOBLIT
Order number **AMS-SMA-BMOBLIT | F.01U.413.835**

AMS-SMA-BMOBPLU SMA bundle Mobile Access Plus
1-year Service and Maintenance Agreement (SMA) for AMS-BMOBPLU
Order number **AMS-SMA-BMOBPLU | F.01U.413.834**

AMS-SMA-BMOBPRO SMA bunde Mobile Access Pro
1-year Service and Maintenance Agreement (SMA) for AMS-BMOBPRO
Order number **AMS-SMA-BMOBPRO | F.01U.413.833**

AMS-SMA-FMOB SMA Mobile Access
1-year Service and Maintenance Agreement (SMA) for AMS-FMOBPRO, AMS-FMOBPLU, AMS-FMOBLIT
Order number **AMS-SMA-FMOB | F.01U.413.836**

AMS-SMA-X100MOB SMA 100 Mobile Credentials
1-year Service and Maintenance Agreement (SMA) for AMS-X100MOBPRO, AMS-X100MOBPLU, AMS-X100MOBLIT
Order number **AMS-SMA-X100MOB | F.01U.413.838**

AMS-SMA-X1KMOB SMA 1000 Mobile Credentials
1-year Service and Maintenance Agreement (SMA) for AMS-X1KMOBPRO, AMS-X1KMOBPLU, AMS-X1KMOBLIT
Order number **AMS-SMA-X1KMOB | F.01U.413.839**

AMS-SMA-X50MOB SMA 50 Mobile Credentials
1-year Service and Maintenance Agreement (SMA) for AMS-X50MOBPRO, AMS-X50MOBPLU, AMS-X50MOBLIT
Order number **AMS-SMA-X50MOB | F.01U.413.837**

AMS-SMA-X5KMOB SMA 5000 Mobile Credentials
1-year Service and Maintenance Agreement (SMA) for AMS-X5KMOBPRO, AMS-X5KMOBPLU, AMS-X5KMOBLIT
Order number **AMS-SMA-X5KMOB | F.01U.413.840**