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## Access Professional Edition

### Selection Guide

The flexible access control system that grows with your business

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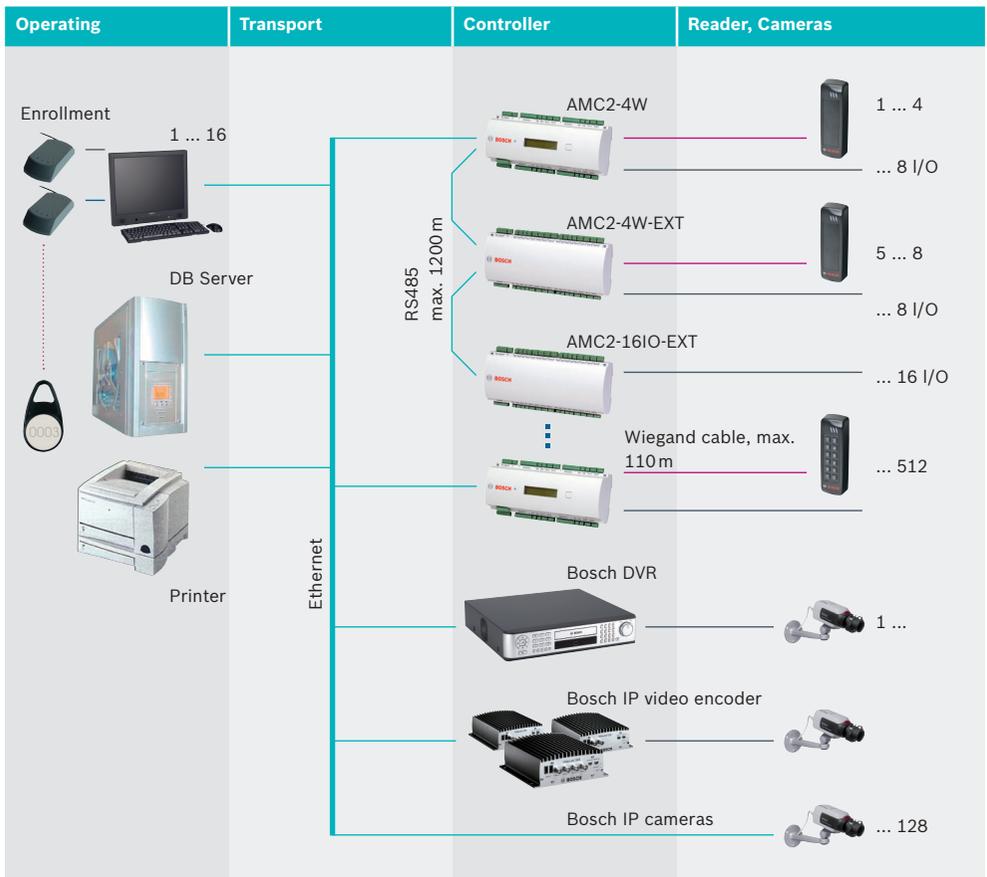
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# System overview

The Access Professional Edition is a powerful and scalable access control application designed for small to medium scale installations like hospitals and office buildings. The server-client software combines advanced Bosch access control hardware to the respected family of Bosch video devices in one platform. Multiple aspects of facility access control can be managed by the operator.

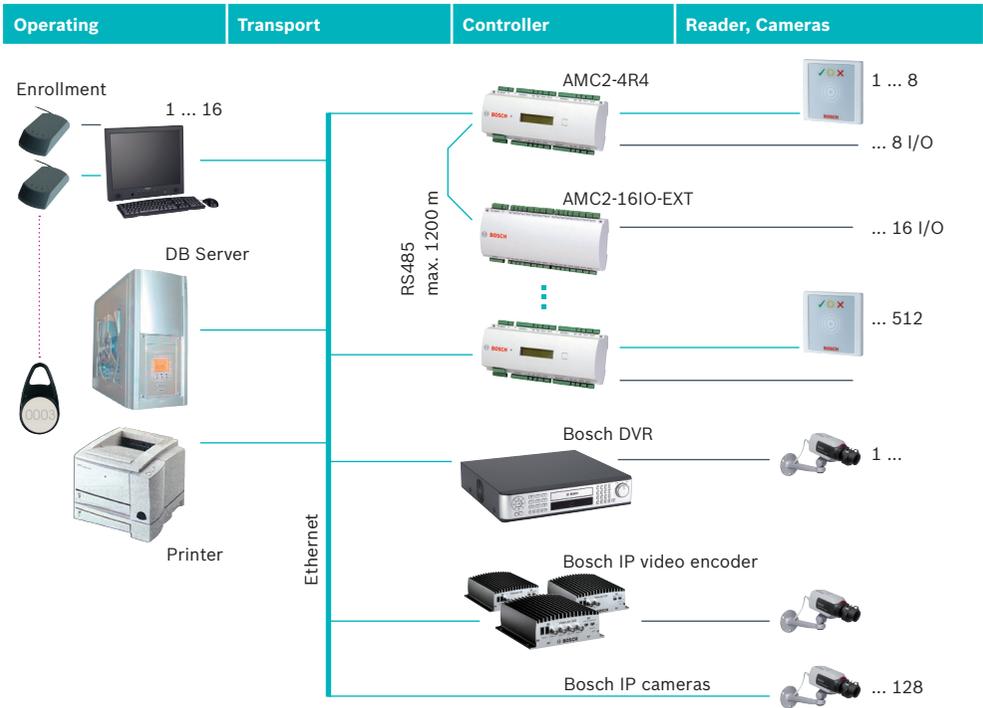
## Wiegand based Bosch hardware

In combination with the AMC2-4W controller series, the Access Professional Edition supports all Bosch Wiegand readers with 125 kHz or 13.56 MHz carrier frequency and a comprehensive range of card technologies. The Bosch credential portfolio includes a wide variety of cards and keyfobs and meets the latest security standards.



## RS485 Bus reader

In combination with the AMC2-4R4 controller series, the Access Professional Edition supports a wide range of bi-directional communication RS485 bus readers. The readers can be connected to the controller at a distance of up to 1200 meters, making it suitable for applications with large distances between controllers and readers. Moreover, RS485 bus reader connections are used in installations with high security requirements in which the status of the readers need to be monitored. The Access Professional Edition supports the standard RS485 readers coming with 125 kHz or 13.56 MHz carrier frequency and a comprehensive range of card technologies.



# Selection Guide – The Seven Steps to your Access System

<b>Step 1</b>	<b>Choose Base Software License</b>
	According to basic requirements such as number of cardholders, operators, readers, etc.
<b>Step 2 (optional)</b>	<b>Add Size-Related Extensions</b>
	Extend the selected starter kit with cardholders, readers, and / or operator licenses.
<b>Step 3 (optional)</b>	<b>Add Video Functionality</b>
	Activate the core video functionality inside Access Professional Edition that provides image display and retrieval from archives. Add video channels as needed.
<b>Step 4</b>	<b>Select Type of Credentials and Readers</b>
	Select the type of reader based on the credential type or reader already in use.
<b>Step 5</b>	<b>Select Controller Type</b>
	Select the controller to use in the access system based on the bus type and reader/card formats desired in the installation.
<b>Step 6 (optional)</b>	<b>Choose Video Devices</b>
	Choose from many Bosch video devices.
<b>Step 7 (optional)</b>	<b>Enable third party integration</b>
	Activate the application programming interface with development support tools.

## Step 1: Choose Base Software License

	Access Professional Edition Basic Package	Access Professional Edition Extended Package
No. of cardholders	0 ... 2000	0 ... 10000
No. of readers	1 ... 16	1 ... 64
No. of simultaneous operators	1	2
Part number	ASL-APE3P-BASE	ASL-APE3P-BEXT

## Step 2 (optional): Add Size-Related Extensions

You need ...	... then you order N times part number	... and you get
... more than the basic 16 or 64 readers	ASL-APE3P-RDR	extension in steps of 16 up to the maximum of 128
... more than 128 readers	ASL-APE3P-RDRL	extension up to the maximum of 512 readers in a single step, regardless of the current number of reader licenses
... more than the basic 1 or 2 simultaneous operators	ASL-APE3P-CLI	extension in steps of one up to the maximum of 16

## Step 3 (optional): Add Video Functionality

You want to add ...	... then you order part number	... and you get
... video verification, video live display, access to video archives, etc.	ASL-APE3P-VIDB	core video function activated and 16 video channel <sup>1</sup> license included
... additional video channels to your access system	ASL-APE3P-VIDE	extension in steps 16 additional video channels up to a maximum of 128 <sup>1</sup>
... integration of access control functionalities into a full video management system	ASL-APE3P-XPRO	integration into Milestone XProtect (Video Management Software) Note: Milestone XProtect Software must be purchased independently

<sup>1</sup> A video channel is an IP camera with live image, a video input via an encoder, a DVR live image channel, a DVR/NVR archive channel, or an iSCSI/USB archive.

### Step 4: Select Type of Credentials and Readers

The card format influences the type of reader to be used in the system. For new installations, the card format can be freely chosen depending on a variety of factors. Contact your local Bosch representative to discuss the available options. In existing installations where only part of the system is changed, selecting a card format which is already in use can be beneficial to save money and time.

Bus type	Recommended Bosch Readers	Card format					
		Mifare DESFire EV1 (Bosch code)	Mifare classic (Bosch code)	iClass, iClass SE, Seos	ISO 14443-A CSN (32bit)	EM card	HID Prox
		13.56 MHz				125kHz	
RS485	LECTUS secure 1000 RO						
	LECTUS secure 2000 RO						
	LECTUS secure 4000 RO	●	●	●	●		
	LECTUS secure 5000 RO						
	LECTUS duo 3000 C		●		●		
	LECTUS duo 3000 CK						
	LECTUS Duo 3000 E						
	LECTUS Duo 3000 EK	●	●		●		
Wiegand	LECTUS secure 1000 WI						
	LECTUS secure 4000 WI						
	LECTUS secure 5000 WI			●	●		
	LECTUS secure 9000 WI						
	ARD-AYK12						
	ARD-AYQ12						
	ARD-AYJ12						
	ARD-AYH12					●	
	ARD-AYCE65B						
	ARD-AYCF64						
	ARD-AYZ12						
	ARD Proxpointplus						
	ARD Miniprox						●
	ARD Entrypox						

## Step 5: Select Controller Type

Depending on the needed security level and functionality, two different interfaces – RS485 and Wiegand – are available with our controllers. The total number of controllers needed in a project depends on the design of the installation. Additionally, factors such as cable length between controller and reader, number of doors per controller, or desired security level should be taken into consideration during the on-site analysis.



Type	AMC2-4W	AMC2-4R4
Reader bus	Wiegand	RS485
Card formats	Prox, iClass, Mifare, EM	Mifare iClass, Legic, Hitag
Max. reader bus cable length	110m (per reader port)	1200m (total length <sup>2</sup> )
No. of readers	4 (+4 with Wiegand extension)	8
Monitoring of reader status	No	Yes
No. of inputs/outputs	8 I/Os per controller 8 I/Os per Wiegand extension 8 or 16 I/Os per I/O extension	8 I/Os per controller 8 or 16 I/Os per I/O extension
Supervised inputs	Yes	Yes
Possible extensions	1x Wiegand extension, up to 3 I/O extensions	3x I/O extensions

Necessary accessories, such as enclosures, power supply or batteries, can be selected from the Bosch Access Control Product Catalogue with the assistance of your local Bosch representative.

<sup>2</sup> The AMC2-4R4 provides two physical RS485 reader ports. The total length of 1200m can be used completely on one port or it can be split (asymmetrically) between the 2 ports.

### Step 6 (optional): Choose Video Devices

Basic Video Functionality	Application Desired	Recommended Bosch Products
Live video	ID camera for video verification	Supported video cameras listed under: <a href="https://ipp.boschsecurity.com/en/tools/video-tools/firmware-overview/hardware-to-firmware/hardware-to-firmware-2">https://ipp.boschsecurity.com/en/tools/video-tools/firmware-overview/hardware-to-firmware/hardware-to-firmware-2</a>
	One or more surveillance cameras for use with video and/or alarm verification	
Archiving <sup>3</sup>	Video storage to archive images over a defined period of time or previous alarm verification	Divar IP 2000 *
	Retrieve video archives associated with an event on the log of the Access Professional Edition	

\* playback not managed by VRM. Reconfiguration to iSCSI target mode required, to have the cameras directly record on Divar IP 2000

Image frame rate (quality) and system storage capacity will vary according to the products chosen. For details and recommendations on video devices, please contact your local Bosch Security representative.

<sup>3</sup> Archiving and live video display can be mixed individually within the same system. The identifier just recommends what video devices are necessary for what feature.

## Step 7 (optional): Third party integration

You want to ...	... you order part number	... you get
... integrate access control functionalities into customer applications	ASL-APE3P-API	application programming interface with development support tools for enabling
... have personal and log data available for use in third party applications, e.g. for use in time & attendance, parking systems, etc.		
... use personal data provided by third party applications, e.g. centrally managed HR system in your access system		

# Application example: Office Buildings

## Challenge

Small to mid size office buildings without a 24/7 monitoring station or reception need a standard access solution at normal working hours and specific security features in conjunction with intrusion detection systems during night time. Laptop computers, sensible corporate data or vital building functions are always a target for burglars, vandals or other criminal parties.

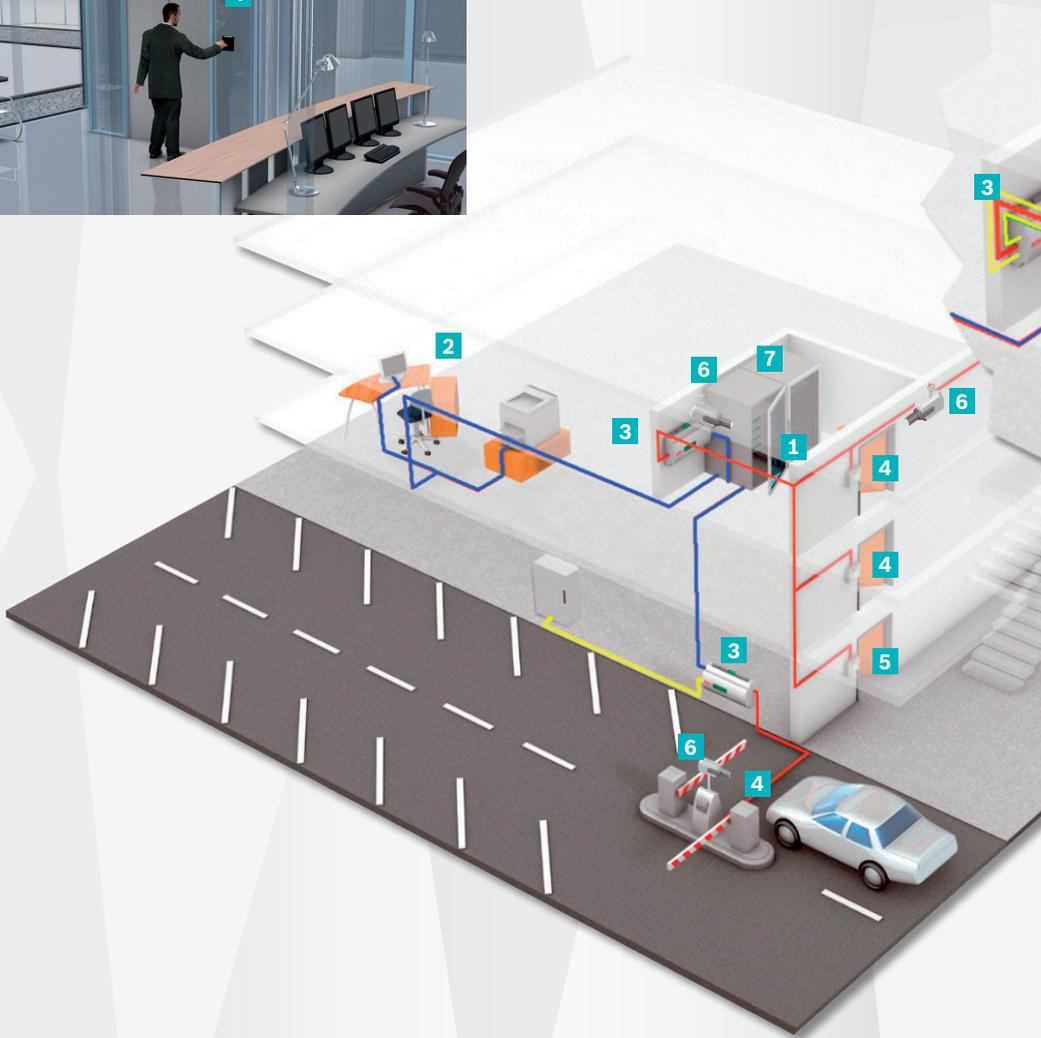
## System functionality

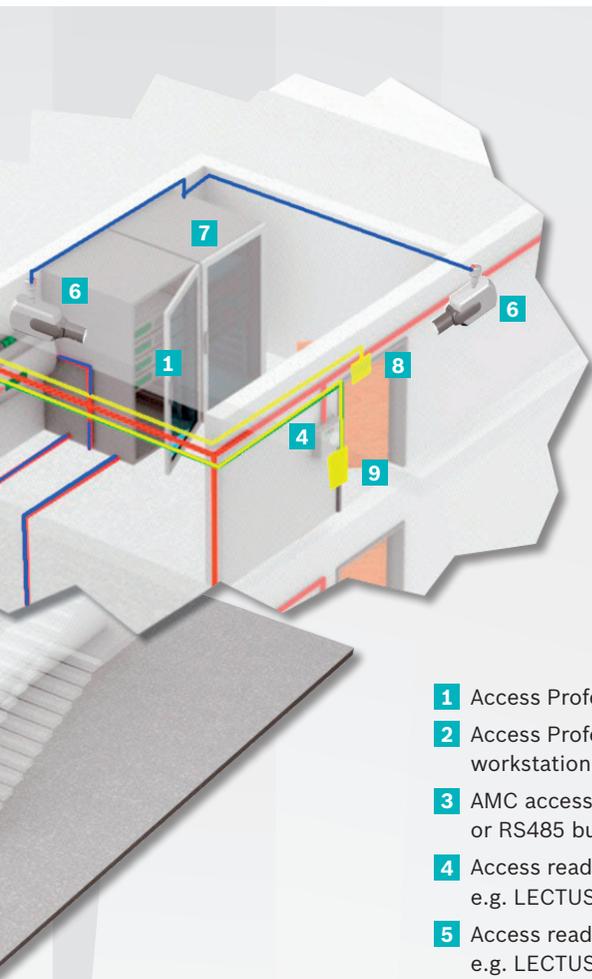
In addition to standard access management for rooms and areas with low security risks, you can upgrade your main entrances, parking lots and high-security areas with alarm management functionalities such as remote video control at night. Thanks to the possibility to integrate intrusion systems, you can secure the office against burglary attempts by arming the intrusion system over the access reader.

## Possible applications

- ▶ Access to high-secure areas, e.g. computer center with entrance and exit reader, video verification, video surveillance with storage/retrieval
- ▶ Parking lot access through reader authentication
- ▶ Barrier and traffic light control
- ▶ Video surveillance or video verification
- ▶ Arming/disarming of intrusion system via keypad reader
- ▶ Elevator control with individual floor authorizations for up to 64 floors

## Installation example





- 1** Access Professional database server
- 2** Access Professional Edition client workstation, alarm monitoring station
- 3** AMC access controller, for Wiegand or RS485 bus readers
- 4** Access reader, e.g. LECTUS duo 3000 series, LECTUS secure series
- 5** Access reader with keypad, e.g. LECTUS duo 3000 EK
- 6** IP video device, e.g. Dinion IP camera, VIP-X, Videojet X
- 7** DVR (Digital Video Recorder), e.g. Divar XF
- 8** Door contact
- 9** Door strike

Parts list - basic selection			
1	ASL-APE3P-BASE*	Access Professional database server	Central storage for cardholder master records, access profiles and event data
2	–	Access Professional Edition client workstation, monitoring station	For administration of cardholders and access permissions, generation of reports, video and alarm verification, surveillance
3	AMC2-4W-NET or AMC2-4R4-NET	AMC access controller, for Wiegand or RS485 bus readers	Access controller with flexible host connectivity (IP, RS485, RS232), offline capable
4	LECTUS Duo 3000 C	Access reader, e.g. LECTUS Duo series, LECTUS secure series	As standard entrance and/or exit reader or in combination with request to exit button, usable for elevator control
5	LECTUS Duo 3000 EK	Access reader with keypad, e.g. LECTUS Duo series, LECTUS secure series	Keypad for identification, duress alarm code or arming/disarming of intrusion systems
6	Dinion 5000 HD**	IP video device, e.g. Dinion IP camera, VIP-X, Videojet X	For video verification or as surveillance camera when an alarm is generated, accessible via IP network, optional connection to storage system
7	DHR-1600A-050A**	Central video storage system, e.g. Divar XF	Continuous recording of strategic points, alarm archives accessible from APE event log
8	ISN-CSM35-W**	Door contact	Connected to AMC input, provides door status, is monitored and causes alarm when door is opened unauthorized or open time exceeds
9	Ask your local Bosch representative	Door strike	Connected to AMC output, unlocks the door for a defined time if an authorized ID card is presented to the corresponding reader
10	ICP-EZ2AWT-01**	Intrusion panel	Connected to AMC via defined in- and outputs, can be armed and disarmed via corresponding keypad access reader when presenting an authorized ID card and entering the correct PIN code for arming/disarming

\* Please see to page 5 of this guide „The Seven Steps to your Access System“ to correctly select software licenses for your installation.

\*\* example from Bosch video camera portfolio

## Solutions and services

As each office building has its own structure, a site analysis is recommended to identify the vulnerabilities, the necessary security level at each point of interest and the amount of devices needed for a complete solution to meet the exact requirements.

## Bosch Security and Safety Systems

Protecting lives, buildings and assets is our aim. Our product portfolio includes video security, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communications of voice, sound and music complete the range.

### **Bosch Security and Safety Systems**

To learn more about our product offering,  
please visit [www.boschsecurity.com](http://www.boschsecurity.com)

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