



# Integrated security solution

with AD-400/401 wireless and AD-300/301 hardwired locks and DNA Fusion™ by Open Options



## Overview

The AD Series electronic locking platform is designed to be open and flexible. With its open architecture, the AD Series can be seamlessly integrated into the Open Options access control system, DNA Fusion.™

Schlage AD Series electronic locks combine the components typically found around the door; such as the reader, door position switch and the request-to-exit switch into one device; which simplifies installation and saves money.

Schlage AD Series electronic locks are available in hardwired and wireless configurations. For new construction, the AD-300/301 hardwired locks provide all of the benefits of a traditional access control solution. For existing facilities, the AD-400/401 wireless locks provide real time access control with DNA Fusion™ without having to run wires direct to each opening.

The AD Series can be customized with seven (7) different credential reader options including keypad, magnetic stripe, and multi-technology which can read both proximity and smart credentials. All card readers are available with keypad for multifactor authentication, and all credential options are supported in the DNA Fusion™ software. Designed to be modular, readers can easily be upgraded in the future to meet your changing credential needs.

AD-301 and AD-401 FIPS 201-1 compliant solution available using FMK reader. Existing AD-300 and AD-400 locks can be upgraded to FIPS Compliant solutions by replacing existing reader with new FMK reader. Please contact Open Options to confirm they will be available to support your FIPS 201 credential format.

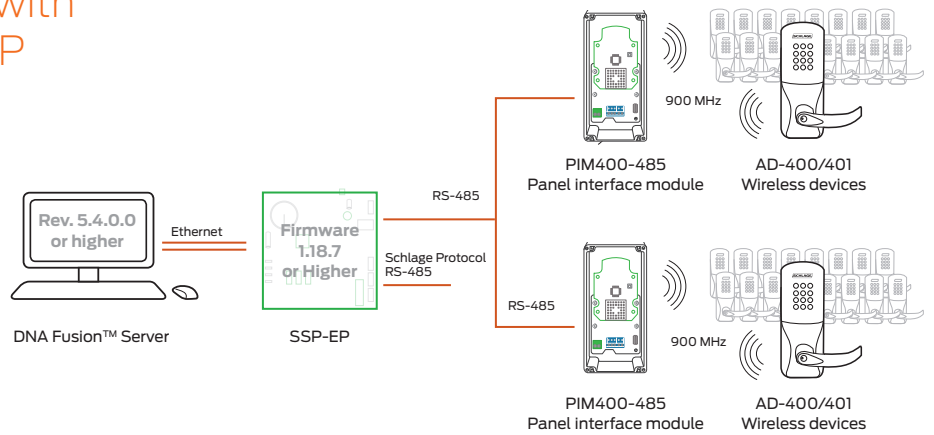
## System Capabilities Summary

- DNA Fusion™ system capabilities :
  - Open platform access control system
  - Non-proprietary Mercury Security panels
  - Network Centric architecture - All controller panels are native IP
- AD-400 wireless applications:
  - SSP-EP Controller supports up to 16 PIM400-485s, 8 per port, and a maximum of 64 AD-400 locks
  - IP Addressable PoE PIM400-1501 supports up to 16 AD-400 devices
  - 900 MHz communication between AD-400 and PIM400 for secure, AES-128 bit encrypted transmission
  - Patent-pending Wireless lockdown feature (10 seconds or less), preserves up to 2 year battery life
- AD-300 hardwired applications:
  - SSP-EP Controller supports up to 16 AD-300 locks, 8 per port
  - Field configurable fail safe/fail secure
- AD-400 and AD-300 devices can be installed in the same system, and even on the same port
- Additional details on readers supported and chassis types available on page 3 and 4
- Wireless accessories available for remote, gate, elevator, and portable (mustering) applications.
- AD Series meets ANSI/BHMA A156.25, ANSI/BHMA Grade 1 requirements and is UL10C & UL294 Listed

## AD-400/401 via RS-485 with DNA Fusion™ and SSP-EP

- SSP-EP supports a maximum of 16 PIM400-485s (limit 8 per port on SSP-EP)
- SSP-EP will support a maximum of 64 doors spread across a maximum of 16 PIM400-485s
- Wireless range up to 200' in typical building construction or up to 1000' line of sight

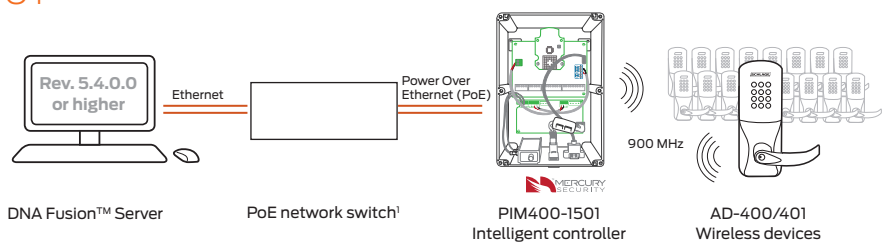
NOTE: Although not specifically shown, the SSP-EP can support both AD-300/301's and AD-400/401's in the same system and on a common port.



## AD-400/401 via PIM400-1501 with DNA Fusion™

- PIM400-1501 supports up to 16 AD-400s
- Wireless range up to 200' in typical building construction, up to 1000' line of sight

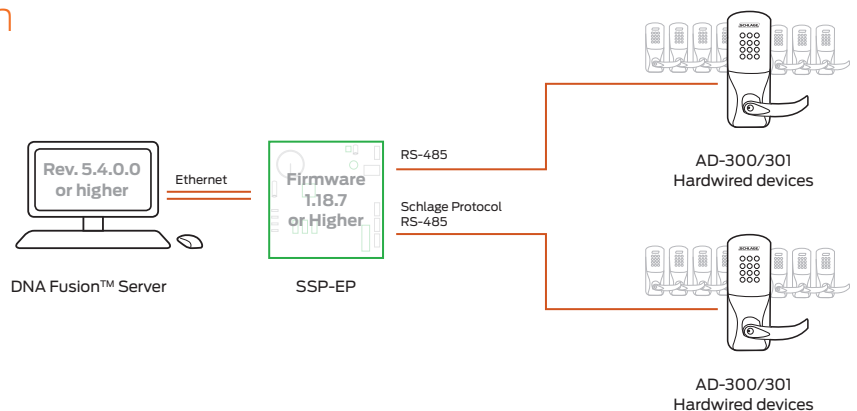
1 In order to have a UL Listed configuration a UL294 12VDC power supply must be used instead of PoE



## AD-300/301 via RS-485 with DNA Fusion™ and SSP-EP

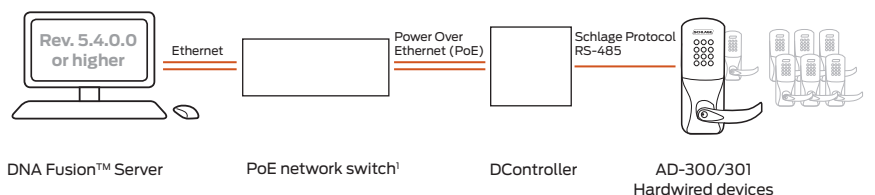
- SSP-EP supports a maximum of 16 AD-300/301 locks (8 per port of SSP-EP)
- SSP-EP with OptoHub, an 8 port Optically Isolated Multiplexer, provides a Star configuration for communications.

NOTE: DNA Fusion™ also supports the PIM400-TD2 for AD-400/401 wireless applications and the PIB300-2D for AD-300/301 hardwired applications. Both the PIM400-TD2 and the PIB300-2D are limited to two locks each. FIPS201 compliant Wiegand options are available with specific required components.



## AD-300/301 via RS485 with DNA Fusion™ and DController

- DController can control a total of 8 AD-300/301 on a common RS-485 data line. Mercury limits RS485 data line length to 1000' for DController
- DController can PoE (Power Over Ethernet) 2 AD-300/301
- Remaining 6 AD-300/301 will be powered from an external 12/24VDC power supply.



Note:

Please refer to AD-300, AD-301, PIB300-2D, AD-400, AD-401, PIM400-485, PIM400-1501 and PIM400-TD2 data sheets for complete AD Series specifications.

## System capabilities:

	AD-400/401 PIM400-485	AD-400/401 PIM400-1501	AD-300/301 Direct RS485	AD300/301 via DController
<b>Features</b>				
Maximum number of readers supported by controller/PIM	64	16	16	Up to 8 <sup>2</sup>
Maximum number of readers per PIM400	16	16	N/A	N/A
Maximum number of PIM400s and/or AD-300s per RS-485 port	Up to 8	N/A	Up to 8	Up to 8
Access control decision made by host or by lock database	Host	Host	Host	Host
Remote Linking capability via Host	Yes	Yes	N/A	N/A
<b>Readers - see supported card formats below</b>				
Keypad only	Yes	Yes	Yes	Yes
Magnetic stripe card	Yes	Yes	Yes	Yes
Multi-technology - 125 kHz proximity and 13.56 MHz smart card	Yes	Yes	Yes	Yes
PIV & PIV-I card compatible <sup>1</sup>	Yes	Yes	Yes	Yes
Card + PIN	Yes	Yes	Yes	Yes
<b>Status monitors</b>				
Request to exit	Yes	Yes	Yes	Yes
Door position	Yes	Yes	Yes	Yes
Mechanical key override	Yes	Yes	Yes	Yes
Request to enter	Yes	Yes	Yes	Yes
Low battery status	Yes	Yes	N/A	N/A
Communication status: RF/RS-485	Yes/Yes	Yes/Yes	Yes	Yes
Remote lockdown/unlock	Yes (<10 sec)	Yes (<10 sec)	Yes	Yes
Deadbolt position	Yes	Yes	Yes	Yes
Interior push button	Yes	Yes	Yes	Yes
<b>Lock functions</b>				
Classroom/storeroom	Yes	Yes	Yes	Yes
Office/toggle	Yes	Yes	Yes	Yes
Privacy	Yes	Yes	Yes	Yes
Apartment	Yes	Yes	Yes	Yes

Please contact Open Options for additional details on integrated features and credentials supported.

### Supported card formats

#### Proximity cards (125 kHz):

- AWID®
- GE/CASI®
- HID®
- Schlage®
- XceedID®

#### Smart cards (13.56 MHz):

- aptiQ™ MIFARE Classic
- aptiQ™ MIFARE DESFire™ EV1
- PIV and PIV-I compatible<sup>1</sup>

#### Smart cards (13.56 MHz) - reads card serial number only:

- HID iCLASS®
- DESFire®
- MIFARE®
- MIFARE DESFire™ EV1

<sup>1</sup> FIPS-201-1 compliant option available requires FMK reader: The AD Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-1 compliance. Specific components are required, please see the AD-401 and AD-301 data sheet for complete details. Contact Open Options to confirm they are able to support your FIPS 201-1 credential format.

<sup>2</sup> D Controller capable of PoE (Power Over Ethernet) 2 AD-300/301. Remaining 6 AD-300/301 must be powered off an external 12/24VDC power supply.

## Available AD Series reader modules



### Multi-technology

- Proximity
- Smart card

### KEYPAD

FIPS 201-1 compliant option available (FMK)



### Multi-technology

- Proximity
- Smart card



### Magnetic stripe (insertion)

- KEYPAD



### Magnetic stripe (insertion)



### Magnetic stripe (swipe)

- KEYPAD



### Magnetic stripe (swipe)



### Handheld device (HHD)

Used to initialize, configure, and test AD Series Devices

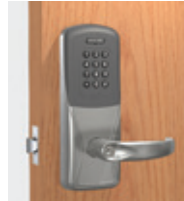
## Compatibility

AD Series electronic locks from Schlage are built from the ground up to provide more options, more functionality and more compatibility than any other solution on the market today. Designed to suite with the most popular lever styles and finishes, Schlage AD Series locks can be configured to accept most major key systems. See lever and cylinder compatibility data sheet (010432).

Mortise Lock (AD-300/400-MS)



Cylindrical Lock (AD-300/400-CY)



Exit Device Trim (AD-300/400-993)



The AD Series exit trims are exclusively compatible with exit devices made by Allegion when using the low current request to exit switch (RX-LC part # 050281 for Von Duprin 98/99 & Von Duprin 22/22F Rim/SVR devices and part number 650359 for Falcon 25 Rim devices).

## Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

## Finishes

Warm tone finishes



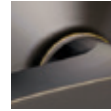
605  
Bright brass



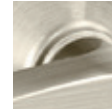
606  
Satin brass



612  
Satin bronze



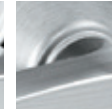
643e  
Aged bronze



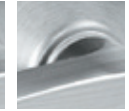
619  
Satin nickel



625  
Bright chrome



626  
Satin chrome



626AM  
Satin chrome with antimicrobial

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## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a \$2 billion company, with products sold in almost 130 countries. For more, visit [www.allegion.com](http://www.allegion.com).

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