



# AD-300

## Networked Hardwired Electronic Lock

### Overview

AD-Series electronic locks from Schlage are designed to be modular and provide more options to choose from, more functionality in the lock and more compatibility with existing systems. Its patent-pending modular design allows the lock to be customized to fit the needs of an application now, and can change to meet future needs without removing it from the door.

Factory orderable options include choices of credential readers, chassis type, network configurations, locking functions, lever styles and finishes. It also offers a wide selection of features that can be configured in the field to customize your openings.

To simplify installation, the AD-Series combines all the hardware components required at the door for a complete access control system into one integrated design that includes the electrified lock, credential reader, request-to-exit and -enter sensors, door position switch, tamper switch and more.

The AD-300 has a number of features built in that are configurable in the field and a long list of items that can be monitored by access control software. Please consult your access control software partner for details on the integration of specific features.



Networked Locking Solutions  
AD-300 Hardwired

### Features and Benefits

- Open Architecture platform
- Panel interface options ensure seamless communication with your system
- Real-time communication between access control system and lock
- Field configurable Fail Safe/Fail Secure and other capabilities per code
- Available in cylindrical, mortise, mortise with deadbolt and exit trim
- Compatible with major brands of master key systems
- A wide selection of credential readers and networking options to choose from
- AD-Series with multi-technology readers are NFC compatible
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS

AD-300 Electronic Lock Specifications	
<b>Credential Verification Time</b>	< 1 second
<b>Data Rate</b>	RS-485 : 9.6 kbps
<b>Visual/Audible Communications</b>	Tri-colored LED's & audible indicators (field configurable)
<b>System Interface</b>	Wiegand or Clock & Data via PIB300, or RS-485 directly
<b>Power Supply</b>	12 VDC or 24 VDC
<b>Voltage Range</b>	4 VDC to 26 VDC
<b>Max Current Requirement</b>	Up to 250 mA
<b>Cable Specifications for Power</b>	18AWG, 2 Conductor (Belden 8760 or equivalent)
<b>Cable Distance for Power</b>	AD-300 to Power Supply: up to 1000 ft (303 m)
<b>Cable Specifications for Data</b>	24AWG, 2 or 4 Conductor Shielded (Belden 9841, 9842 or equivalent)
<b>Cabling Distance for Data</b>	AD-300 to PIB300 or ACP, RS-485: up to 4000 ft (1219 m)
<b>Operating Temperature</b>	-31° to 151°F (-35° to 66°C)
<b>Operating Humidity</b>	0 - 100% non-condensing
<b>Certifications</b>	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS
<b>Accessories</b>	Panel Interface Board (PIB300), Handheld Device (HHD), Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

† Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch positions unless monitored on RS-485\* connection

## Functions

- ▶ Classroom/Storeroom
- ▶ Office\*
- ▶ Privacy\*
- ▶ Apartment\*

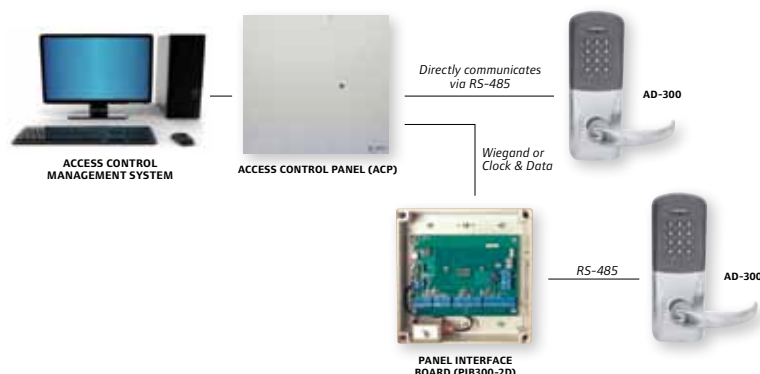
**Note:** BHMA/ANSI functions such as these can be implemented by the Software when Door Position, Deadbolt Position and/or Interior Push button are monitored. Consult Software provider for specific capabilities. Classroom/Storeroom and Office function not available with Mortise Deadbolt option.

## Available Status Signals

- ▶ Lock/Unlock Status†
- ▶ Request-to-Exit
- ▶ Door Position
- ▶ Mechanical Key Override\*
- ▶ Deadbolt Position\*
- ▶ Interior Cover Tamper Guard\*
- ▶ Communication Status\*
- ▶ Interior Push Button\*
- ▶ Request-to-Enter\*

\* Consult your access control software provider for specific scope of support. Interior pushbutton, mechanical key override and deadbolt position are only available when linked via PIM400-485.

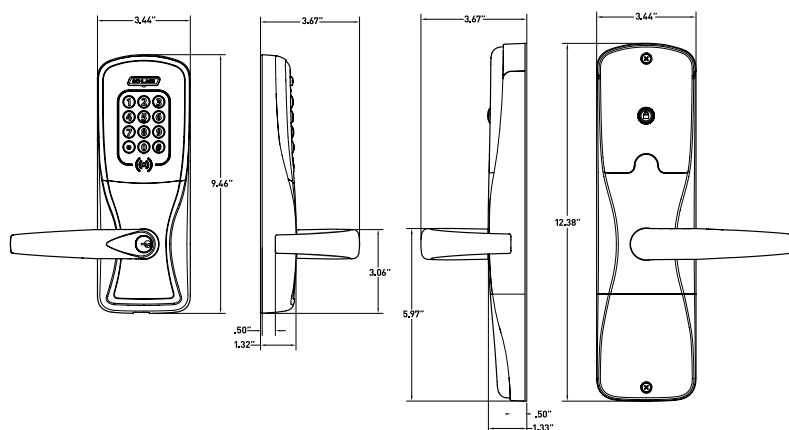
## System Configuration



## Panel Interface Board (PIB300-2D)

If the system requires Wiegand or Clock & Data protocol (rather than a direct RS-485 connection), the AD-Series open architecture platform connects up to two AD-300 locks to the Panel Interface Board (PIB300 - sold separately, if required) that seamlessly connects to an access control panel or reader interface board. All monitoring is captured at the remote monitoring station.

## Dimensions



## PIB300-2D Specifications

<b>Communication Range</b>	PIB300 to Lock, RS-485: up to 4000' PIB300 to ACP, Wiegand or Clock & Data: up to 500'
<b>Visual/Audible</b>	13 LEDs for Status Indicators
<b>System Interface</b>	Wiegand or Clock & Data
<b>Voltage Range</b>	9.5 VDC to 26 VDC
<b>Power Supply</b>	12 VDC or 24 VDC
<b>Max Current Requirements</b>	Up to 250 mA
<b>Operating Temperature</b>	-31° to 151°F (-35° to 66°C)
<b>Dimensions (HWD)</b>	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
<b>Weight</b>	1.25 lb (.57 kg)
<b>Cable Specifications (PIB300 to ACP)</b>	22AWG, 8 Conductor Shielded (Alpha 1298C or equivalent)
<b>Certifications</b>	NEMA 1, 4, 4X, 6; UL 294, FCC Part 15; RoHS

Mechanical Specifications			<b>AD-Series Exit Trim</b>  <i>AD-300 and AD-400 exit trim is exclusively compatible with Von Duprin 98/99 and 98/99XP (Rim, Mortise, and SVR. CVC and CVR on metal doors only), Von Duprin 22/22F (Rim and SVR) and Falcon 25 (Rim) exit devices made by Ingersoll Rand. The proper low current request to exit switch (RX-LC or AE) is required.</i>  <i>Part Numbers for Request to Exit Switch:</i> • Von Duprin: 050281 • Falcon: 650359
Chassis	Cylindrical (Based on Schlage ND-Series)	Mortise (Based on Schlage L-Series)	
Handing	Handed to Order, Field Reversible		
ANSI Standard	Meets or exceeds A156.25 and A156.2 Series 4000, Grade 1 strength and operational requirements	Meets or exceeds A156.25 and A156.13 Series 1000, Grade 1 operational and security	
Door Thickness	1-3/4" standard, 1-3/8" to 2-3/4" optional (available in 1/8" increments)		
Backset	2-3/4" standard, 2-3/8", 3-3/4" and 5" optional	2-3/4" only	
Latch Bolt	1/2" throw security latch standard, 3/4" throw optional	3/4" throw with anti-friction tongue standard, <b>1" throw deadbolt on Mortise Deadbolt option*</b>	
Levers	Pressure cast zinc, plated to match finish symbols	Steel, plated to match finish symbols	
Strike	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center standard, optional strikes, lip lengths and ANSI strike box available	ANSI curved lip strike 1-1/4" x 4-7/8" x 1-3/16" lip to center with dust box standard, optional strikes lip lengths available	
Cylinder & Keys	Schlage 6-pin Everest C123 keyway cylinder with two patented keys standard Additional options available including Standard, SFIC, FSIC and competitor brands		

\*\*Classroom/Storeroom and Office options not available with deadbolt.


\*\*Classroom/Storeroom and Office options not available with deadbolt.

Multi-Technology Reader Specification	
Frequency	125 kHz proximity and 13.56 MHz smart card
Standards	Standards ISO Standard 15693 and ISO 14443
Maximum Read Range	up to 1.25" on 125 kHz proximity, up to 0.75" on 13.56 MHz smart card
125 kHz compatibility	Schlage Proximity, XceedID™ Proximity, HID® Proximity, GE/CASI ProxLite®, AWID® Proximity, LenelProx®
13.56 MHz compatibility	Schlage MIFARE® Secure Sector, XceedID™ MIFARE® Secure Sector, aptiQ™ Smart Cards using MIFARE DESFire™ EV1 with PACSA; PIV and PIV-I**†
13.56 MHz compatibility (serial number only)	DESFire® CSN, HID iCLASS® CSN, Inside Contactless PicoTag® CSN, MIFARE®, MIFARE DESFire™ EV1, ST Microelectronics® CSN, Texas Instruments Tag-It® Serial Number, Phillips I-Code® CSN
125 kHz Compatible XceedID Credentials	125 kHz Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (7000 Series)
13.56 MHz Compatible aptiQ™ Credentials	aptiQ™ smart cards using MIFARE® in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob and PVC Patch (9000 Series); aptiQ™ smart cards using MIFARE DESFire™ EV1 in Clamshell, ISO Card, ISO Card w/ Magnetic Stripe, Keyfob, and PVC Disk (8000 Series)
Certifications/Standards	FCC, RSS210, UL 294, Listed, ISO Standard 15693, and ISO Standard 14443
Style/Layout	Option for 12 button, 3x4 matrix backlit keypad

Notes:

\*\* FIPS 201-1 Compliant Option Available: 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 data sheet or AD-301 data sheet for complete details.

† 75 bit output format default. Configurable to other output formats


**Benefits of AD-Series Multi-Technology Readers:**

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single device
- AD-Series multi-technology readers are NFC compatible
- Allows end user to migrate to more secure credentials over time and as budgets permit

**Additional Readers**

**Magnetic Stripe**

- Now available with choice of Insertion or Swipe style readers
- Triple Track Reader (1, 2 or 3), field configurable
- ABA, ISO76XX Standard
- Option for 12 button, 3x4 matrix backlit keypad

**Keypad**

- Backlit keypad
- 12 button, 3x4 matrix

Available AD-Series Reader Modules









• Multi-Technology
 

- Proximity
- Smart Card


**KEYPAD**

• Multi-Technology
 

- Proximity
- Smart Card

• Magnetic Stripe (Insertion)
 


**KEYPAD**

• Magnetic Stripe (Insertion)
 


**KEYPAD**

• Magnetic Stripe (Swipe)
 


**KEYPAD**

• Magnetic Stripe (Swipe)
 


**KEYPAD**

• Keypad

# Ordering Information

Available through one of our GSA Schedule 84 approved distributors; BAA Options Available

AD-300-CY-70-MG-SPA-626-PD-C123-RH-13-049-10-025-1-3/4												
Series	Class	Chassis	Function	Reader	Lever Style	Finish	Lever Cylinder	Keying Type	Handing	Backset & Latch	Strike	Door Thickness
1	2	3	4	5	6	7	8	9	10	11	12	13

## Selections Correspond With the Numbers Above

Standard options are indicated in bold. See price book for specific configuration options.

3 Chassis	
CY	Cylindrical
MS	Mortise
MD	Mortise Deadbolt
993R	Exit Trim – Rim/CVR/CVC
993S	Exit Trim – SVR
993M	Exit Trim – Mortise
993DT	Non-Functioning Dummy Trim for Exit
4 Function	
70	Classroom/Storeroom
50	Office
40	Privacy
60	Apartment
<i>Lock function capabilities are determined by users access control system</i>	
5 Reader	
KP	Keypad
MG	Magnetic Stripe (Insertion)
MGK	Magnetic Stripe + Keypad (Insertion)
MS	Magnetic Stripe (Swipe)
MSK	Magnetic Stripe + Keypad (Swipe)
MT	Multi-Technology (125 kHz and 13.56 MHz)
MTK	Multi-Technology + Keypad (125 kHz and 13.56 MHz)
DT	Dummy Trim

6 Lever	
SPA	Sparta
RHO	Rhodes
ATH	Athens
TLR	Tubular
<i>Available with knurled surface</i>	
7 Finish	
626	Satin Chrome
605	Bright Brass
606	Satin Brass
612	Satin Bronze
619	Satin Nickel
625	Bright Chrome
643e	Aged Bronze
626AM	Satin Chrome Antimicrobial
8 Lever Cylinder Type	
PD	Schlage 6-pin Full Cylinder
<i>See price book for other SFIC, FSIC and Less Cores options available. Compatible with Schlage, Sargent, Corbin, Medeco and Yale</i>	
9 Keyway Type	
<b>C123</b>	<b>Everest</b>
<i>See price book for other available keyway options including master keying</i>	

10 Handing	
<b>RH</b>	<b>Right Handed</b>
LH	Left Handed
<i>Field reversible</i>	
11 Backset & Latch or Armor Front	
<b>Cylindrical</b>	
<b>13-049</b>	<b>2-3/4" Backset, Deadlatch, Square Corner, 1-1/8" x 2-1/4"</b>
<b>Mortise</b>	
<b>09-663</b>	<b>Armor Front, 1-1/4" Wide, Square Corner</b>
<i>See price book for mortise deadbolt and other backset and latch options or armor front options</i>	
12 Strike	
<b>Cylindrical</b>	
<b>10-025</b>	<b>1-3/16 Lip, ANSI, No Box, 1-1/4" x 4-7/8"</b>
<b>Mortise</b>	
<b>10-072</b>	<b>1-3/16" Lip, 1-1/4" x 4-7/8" Square Corner, Box</b>
<i>See price book for other available strikes</i>	
13 Door Thickness	
<b>1-3/4"</b>	
Other thicknesses available between 1-3/8" and 2-3/4"	
<i>See price book for detail.</i>	

## Lever styles

Standard cylinders shown, SFIC and FSIC also available.



Sparta



Rhodes



Athens



Tubular

## Warm tone finishes



605  
Bright Brass



606  
Satin Brass



612  
Satin Bronze



643e  
Aged Bronze

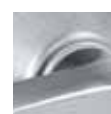
## Cool tone finishes



619  
Satin Nickel



625  
Bright Chrome



626  
Satin Chrome



626AM  
Satin Chrome with Antimicrobial

INGERSOLL RAND, the Ingersoll Rand logo, SCHLAGE, the SCHLAGE logo, XceedID, Von Duprin, Falcon and aptiQ are trademarks of Ingersoll-Rand plc, its subsidiaries and/or affiliates in the United States and other countries. Inside PicoTag is a trademark of Inside Technologies. GE, CASI and ProxLite are trademarks of General Electric Corporation. MIFARE and MIFARE DESFire EV1 are trademarks of NXP B.V. HID and iCLASS are trademarks of HID Corporation. Tag-It is a trademark of Texas Instruments. STMicroelectronics is a trademark of STMicroelectronics Inc. Infineon and my-d are trademarks of Infineon Technologies. AWID is a trademark of Applied Wireless Identifications Group. All other trademarks are the property of their respective owners.

