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 changed 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 request-to-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 one of our Software Alliance Members for details on the integration of specific features.

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 deadbolt and exit trim
- Compatible with major brands of master key systems
- A wide selection of credential readers and networking options to choose from
- Allows use of current aptiQ (Schlage) mobile credential utilizing NFC technology[1]
- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10C, FCC Part 15, ADA, RoHS, Industry Canada (IC), FL12400[2], FL1591[2], FL13013[2] and FL14482[2]

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[1]   Refer to the Schlage/aptiQ mobile credential compatibility chart for a list of certified devices.
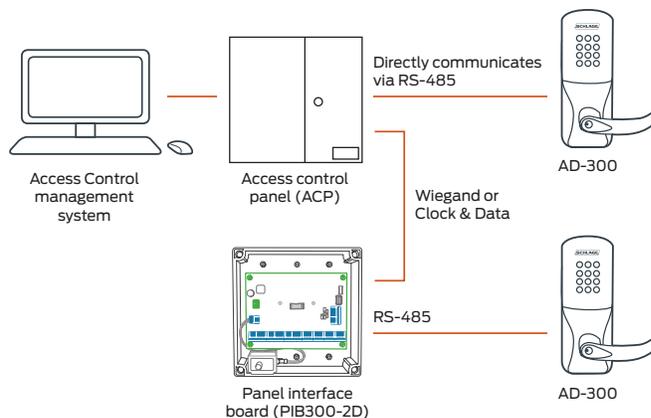[2]   Applies to cylindrical and mortise chassis only

AD-300 electronic lock specifications

Credential verification time	< 1 second[1]
Data rate	RS-485 : 9.6 kbps
Visual/audible communications	Tri-colored LED's and audible indicators (field configurable)
System interface	Wiegand or Clock & Data via PIB300 or RS-485 directly
Power supply	12 VDC or 24 VDC
Voltage range	4 VDC to 26 VDC
Max current requirement	Up to 250 mA
Cable specifications for power	18AWG, 2 conductor (Belden 8760 or equivalent)
Cable distance for power	AD-300 to power supply: up to 1000 ft (303 m)
Cable specifications for data	24AWG, 2 or 4 conductor shielded (Belden 9841, 9842 or equivalent)
Cabling distance for data	AD-300 to PIB300 or ACP, RS-485: up to 4000 ft (1219 m)
Operating temperature	-31º to 151ºF (-35º to 66ºC)
Operating humidity	0 - 100% non-condensing
Certifications	ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL10 C, FCC Part 15, ADA, RoHS
Accessories	Panel Interface Board (PIB300), Handheld Device (HHD), Dry Contact Relay Board (RLBD) may be required for supervised inputs (Wiegand systems)

PIB300-2D specifications

Communication range	PIB300 to lock, RS-485: up to 4000 ft (1219 m) PIB300 to ACP, Wiegand or Clock & Data: up to 500 ft (152 m)
Visual/audible	13 LEDs for status indicators
System interface	Wiegand or Clock & Data
Power supply	12 VDC or 24 VDC
Voltage range	9.5 VDC to 26 VDC
Max current requirement	Up to 250 mA
Operating temperature	-31º to 151ºF (-35º to 66ºC)
Dimensions (H x W x D)	7.1" x 7.1" x 3.0" (18.0 cm x 18.0 cm x 7.6 cm)
Weight	1.25 lb (.57 kg)
Cable specifications (PIB300 to ACP)	22AWG, 8 conductor shielded (Alpha 1298C or equivalent)
Certifications	NEMA 1, 4, 4X, 6; UL 294; FCC Part 15; RoHS

Functions
- Classroom/storeroom[2]
- Office[2, 3, 4]
- Privacy[3, 4]
- Apartment[3, 4]

Available status signals
- Lock/unlock status[5]
- Request-to-exit
- Door position
- Mechanical key override [3]
- Deadbolt position [3]
- Interior cover tamper guard[3]
- Communication status[3]
- Interior push button[3]
- Request-to-enter[3]

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.

Access Control management system

Access control panel (ACP)

Directly communicates via RS-485

AD-300

Wiegand or Clock & Data

RS-485

Panel interface board (PIB300-2D)

AD-300

3.44" 3.67" 9.46" 3.06" .50" 1.32" 3.67" 3.44" 12.38" 5.97" .50" 1.33"

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[1] Lock requires less than 100 msec, response time does not include latency time of ACP.
[2] Classroom/storeroom and office function not available with mortise deadbolt option.
[3] 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.
[4] Not available on exit trim.
[5] Software indicates lock/unlock status based on sequence of events, but cannot validate mechanical clutch position unless monitored on RS-485 connection.
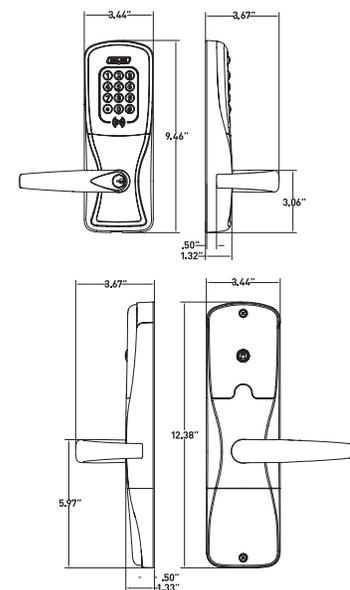
Mechanical specifications

Chassis	Cylindrical		Mortise	Exit trim
Handing	Handed to order, field reversible			
ANSI standard (Meets or exceeds)	A156.25 A156.2 Series 4000 Grade 1		A156.25 A156.13 Series 1000 Grade 1	A156.25 A156.3
Door thickness	1 3/4" standard, 1 3/8" to 2 3/4" optional (available in 1/8" increments)			
Backset	Standard: 2 3/4" Optional: 2 3/8", 3 3/4", 5"		2 3/4" only	Defined by exit device
Latch bolt	Standard: 1/2" throw Optional: 3/4" throw		Standard: 3/4" throw Optional: 1" throw on mortise deadbolt	Provided by exit device
Levers	Pressure cast zinc, plated			
Strike	Standard: 1 3/16" lip, ANSI, 1 1/4" x 4 7/8" Optional: Additional configurations available please see price book			Provided by exit device
Cylinder and keys	Schlage® 6-pin Everest 29 S123 keyway Conventional cylinder with two patented keys standard. Additional options available including SFIC, FSIC and competitor brands. See lever and cylinder compatibility data sheet (010432)			

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 proximity credential use	**Compatibility:** Schlage, XceedID®, HID®, GE/CASI ProxLite®, AWID® and LenelProx® **Schlage credential style formats:** Clamshell, ISO card, ISO card with magnetic stripe, keyfob, thin keyfob, and PVC adhesive disk
13.56 MHz smart credential use	**Secure sector compatibility:** Schlage and aptiQ® MIFARE Classic®, XceedID, Schlage MIFARE Plus®, Schlage and aptiQ MIFARE® DESFire® EV1 with PACSA, PIV and PIV-I[1,2]; aptiQ (Schlage) mobile credential utilizing NFC technology **CSN only compatibility:** DESFire, HID iClass®, Inside Contactless Pico Tag®, MIFARE, MIFARE DESFire EV1, ST Microelectronics®, Texas Instruments Tag-It®, Phillips I-Code® **Schlage credential style formats:** Clamshell, ISO card, ISO card with magnetic stripe, keyfob, thin keyfob, wearable wristband, NFC mobile, and PVC adhesive patch
Certifications/standards	FCC, Industry Canada (IC), UL 294 Listed, ISO standard 15693, and ISO standard 14443
Style/layout	Option for 12 button, 3x4 matrix backlit keypad

[1] FIPS 201-2 integration ready option available: The AD Series can be used in applications which require approval by the U.S. Federal Government under HSPD-12 for FIPS 201-2 compliance when installed as part of a tested and approved integrated solution. Please see the AD-402 data sheet or the AD-302 data sheet for complete details.

[2] 75 bit output format default. Configurable to other output formats.

[3] Refer to the Schlage/aptiQ mobile credential compatibility chart for a list of certified devices.

AD Series exit trim:

AD-300 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 Allegion™. The proper low current request-to-exit switch (RX-LC or AE) is required.

Part numbers for request-to-exit switch:
- Von Duprin: 050281
- Falcon: 650359

Benefits of AD Series multi-technology readers:

- Reads multiple brands of both proximity (125 kHz) and smart (13.56 MHz) technologies with single reader
- Allows use of current aptiQ (Schlage) mobile credential utilizing NFC technology[3]
- Allows facility to migrate to more secure credential technologies over time and as budgets permit

Additional readers

Smart – iClass compatible
- Smart card reader only
- Reads secure sector of HID iClass, iClass SE, iClass SEOS, iClass Standard Key, and iClass Elite Key; Schlage MIFARE Classic, MIFARE Plus, and MIFARE EV1
- BLE mobile credential not supported

Magnetic stripe
- Available with choice of insertion or swipe style readers
- Triple track reader (1, 2 or 3), field configurable
- ABA, ISO76XX standard

Keypad
- Backlit keypad
- 12 button, 3x4 matrix

Available AD Series reader modules

Multi-technology
- Proximity
- Smart card
- NFC mobile
- [+] KEYPAD

Multi-technology
- Proximity
- Smart card
- NFC mobile

Smart – iClass compatible
- Smart card
- [+] KEYPAD

Smart – iClass compatible
- Smart card

Magnetic stripe (insertion)
- [+] KEYPAD

Magnetic stripe (insertion)

Magnetic stripe (swipe)
- [+] KEYPAD

Magnetic stripe (swipe)

Keypad

Ordering information

Available through one of our GSA schedule 84 approved distributions; BAA options available

AD-**300**-**CY**-**70**-**MG**-**SPA**-**626**-**PD**-**S123**-**RH**-**13**-**049**-**10**-**025**-**1 ³/₄**

Series	Class	Chassis	Function	Reader	Lever style	Finish	Lever cylinder	Keying type	Handing	Backset and 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/CVC/CVR
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

Lock function capabilities are determined by users access control system

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 (125kHz and 13.56 MHz)
MTK	Multi-technology + keypad (125kHz and 13.56 MHz)
FMK	FIPS 201-2 compliant multi-technology + keypad (125 kHz and 13.56 MHz)
Si	Smart – iClass compatible
SiK	Smart – iClass compatible + keypad
DT	Dummy trim

6   Lever

ATH	Athens
BRK	Boardwalk
BRW	Broadway
LAT	Latitude
LON	Longitude
RHO	Rhodes
SPA	Sparta
TLR	Tubular

Available with tactile warning options

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 Conventional key-in-lever cylinder**

See price book for other SFIC, FSIC and less cylinder options available. Compatible with Schlage®, Sargent®, Corbin Russwin, Medeco® and Yale®.

9   Keyway type

S123	**Everest 29**

See price book for other available keyway options including restricted keyways in Primus XP high security cylinders and master keying

10   Handing

RH	**Right handed**
LH	Left handed

Field reversible

11   Backset and latch or armor front

Cylindrical

13-049	**2 ³/₄" backset, deadlatch, square corner, 1 ¹/₈" x 2 ¹/₄"**

Mortise

09-663	**Armor front, 1 ¹/₄" wide, square corner**

See price book for mortise deadbolt and other backset and latch options or armor front options

12   Strike

Cylindrical

10-025	**1 ³/₁₆" lip, ANSI, no box, 1 ¹/₄" x 4 ⁷/₈"**

Mortise

10-072	**1 ³/₁₆" lip, 1 ¹/₄" x 4 ⁷/₈" square corner, box**

See price book for other available strikes

13   Door thickness

1 ³/₄"

Other thicknesses available between 1 ³/₈" and 2 ³/₄"

See price book for detail

Lever styles

Conventional cylinders shown, SFIC and FSIC also available.

Athens | Boardwalk | Broadway | Latitude

Longitude | Rhodes | Sparta | Tubular

Finishes

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

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