SCHLAGE

Integrated security solution

with AD-300 hardwired,
AD-400 wireless devices and
Johnson Controls P2000

Overview

Schlage AD Series locks seamlessly integrate with Johnson Controls P2000 to provide a cost effective and scalable access control solution to meet your security needs.

The P2000 security management system from Johnson Controls is an innovative integration platform that's adaptable to small and large applications. Installed in thousands of facilities around the globe, it's helping to lower operational costs and create more comfortable, safer and sustainable business environments.

Schlage AD Series locks combine the components typically found around the door, such as the door position switch and the request to exit switch, into one unit which simplifies installation and saves money. And since they are designed to be modular, Schlage AD Series locks can easily be upgraded in the future to meet your changing security and technology requirements.

The AD Series is available in both hardwired and wireless configurations to suit the requirements of the facility. AD Series wireless locks provide many of the key benefits of a hardwired system including real-time monitoring, audit trails, centralized lockdown and instant access control management. In retrofit applications the Schlage AD Series wireless locks and devices, which eliminate the need to run wires direct to each opening, can help you extend the reach of your access control system.
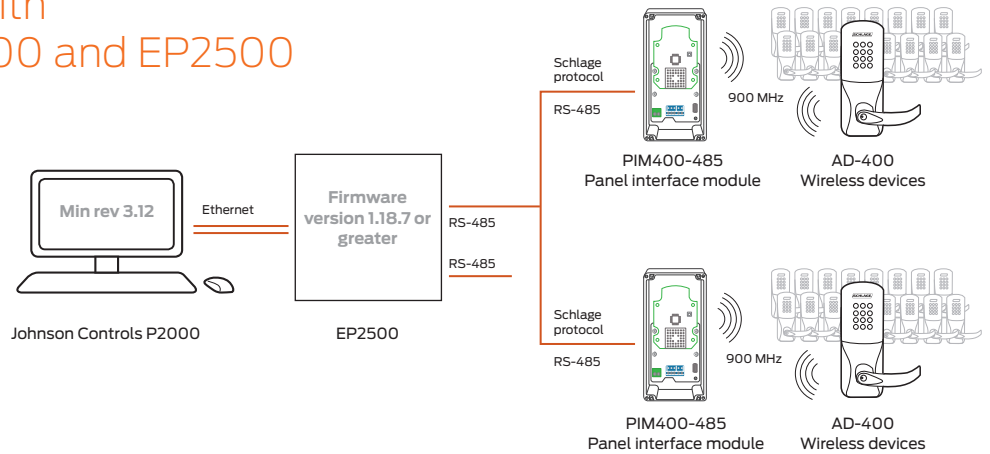
System Capabilities
Summary

- AD-300 hardwired:
  - Field configurable fail safe/fail secure

- AD-400 wireless:
  - Secure 900 MHz wireless communication, AES-128 bit encrypted
  - Real time access control and monitoring
  - Powered by four (4) standard off-the-shelf AA batteries
  - Patent pending wireless lockdown/unlock feature via PIM400 (10 seconds or less) preserves up to 2 year battery life

- Additional details on readers supported and chassis types available on page 3 and 4

- Weather resistant, exterior operating temperature: -31º to 151ºF (-35º to 66ºC)

- Additional wireless products also available
  - Wireless Portable Reader (WPR400) for muster stations, buses, etc.

- ANSI/BHMA A156.25, ANSI/BHMA Grade 1, UL 294, UL 10C

AD-400 via RS-485 with Johnson Controls P2000 and EP2500

- EP2500 supports up to 64 total locks

- EP2500 supports a maximum of 8 PIM400-485 per RS-485 port. There are 2 RS-485 ports on each EP2500.

- Wireless range up to 200' in typical building construction, up to 1000' line of sight
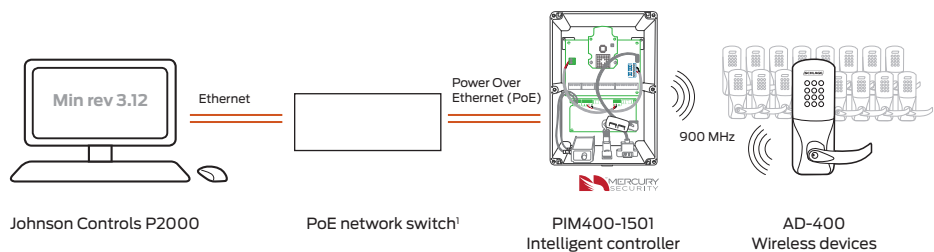
Note: Although not specifically shown, the EP2500 can support both the AD-300s and AD-400s in the same system on a common port. You are limited to 8 PIM400-485 and AD-300 combined per RS-485 port and a maximum of 64 AD locks per EP2500.

Johnson Controls P2000 — Min rev 3.12 — Ethernet

EP2500 — Firmware version 1.18.7 or greater — RS-485 — RS-485

Schlage protocol RS-485 — 900 MHz — PIM400-485 Panel interface module — AD-400 Wireless devices

Schlage protocol RS-485 — 900 MHz — PIM400-485 Panel interface module — AD-400 Wireless devices

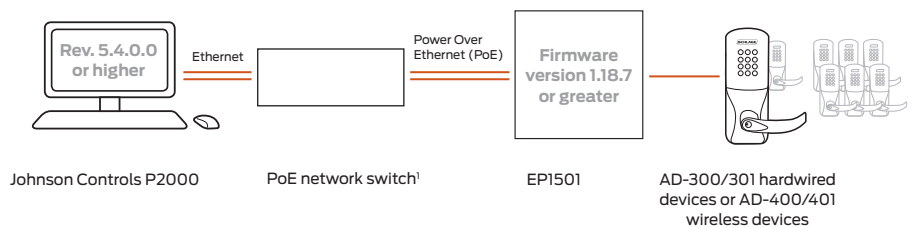## AD-400 via PIM400-1501 with Johnson Controls P2000

- 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

Johnson Controls P2000 — Min rev 3.12 — Ethernet — PoE network switch[1] — Power Over Ethernet (PoE) — PIM400-1501 Intelligent controller — 900 MHz — AD-400 Wireless devices

AD-400 and AD300 via EP1501 with Johnson Controls P2000

- EP1501 can control a total of 8 AD-300/301 or up to 16 AD-400/401 on up to 8 PIM400-485 on a common RS-485 data line

- EP1501, when powered via PoE, can supply power to a maximum of two AD300 (additional AD300 will require additional 12/24 VDC Power Supply)

- Remaining 6 AD-300/301 will be powered from an external 12/24VDC power supply.
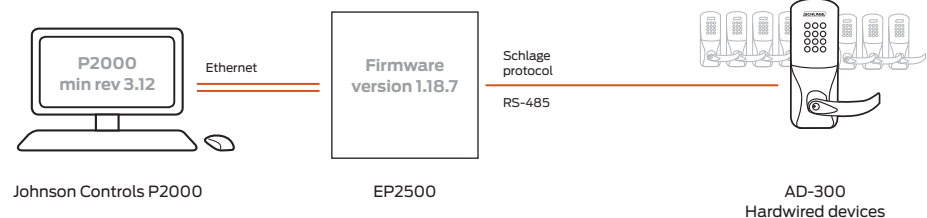

Johnson Controls P2000 — Rev. 5.4.0.0 or higher — Ethernet — PoE network switch[1] — Power Over Ethernet (PoE) — EP1501 — Firmware version 1.18.7 or greater — AD-300/301 hardwired devices or AD-400/401 wireless devices

Note: AD-400 requires PIM400-485

AD-300 via RS-485 with Johnson Controls P2000 and EP2500

- EP2500 supports a maximum of 16 AD-300 locks (8 per port)

Note: Although not specifically shown AD-300 and AD-400 can reside on the same RS-485 communication line.

Johnson Controls P2000 — P2000 min rev 3.12 — Ethernet — EP2500 — Firmware version 1.18.7 — Schlage protocol RS-485 — AD-300 Hardwired devices

---

Note:

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

P2000 also supports the PIM400-TD2 for the AD-400 wireless applications and the PIB300-2D for AD-300 hardwired applications. Both the PIM400-TD2 and PIB300-2D are limited to two locks each. Please consult Johnson Controls for more information on FIPS 201-1 and Wiegand solutions.

For additional information contact Johnson Controls, Inc.: PO Box 423, Milwaukee, WI 53201 or www.johnsoncontrols.com/security

System capabilities:

	AD-400 PIM400-485	AD-400 EP-1501	AD-400 PIM400-1501	AD-300 Direct to EP2500	AD-300 Direct to EP1501
Features					
Maximum number of readers supported by controller/PIM	64	16	16	16	8
Maximum number of readers per PIM400	16	16	16	N/A	N/A
Maximum number of PIM400s and/or AD-300s per RS-485 port	Up to 8	8	N/A	Up to 8	8
Access control decision made by host or by lock database	Host	Host	Host	Host	Host
Remote Linking capability via Host	No	No	No	N/A	N/A
Readers - see supported card formats below					
Keypad only [1]	No	No	No	No	No
Magnetic stripe card	Yes	Yes	Yes	Yes	Yes
Multi-technology - 125 khz proximity and 13.56 MHz smart card	Yes	Yes	Yes	Yes	Yes
PIV & PIV-I card compatible[2]	Yes	Yes	Yes	Yes	Yes
Card + PIN	Yes	Yes	Yes	Yes	Yes
Status monitors					
Request to exit	Yes	Yes	Yes	Yes	Yes
Door position	Yes	Yes	Yes	Yes	Yes
Mechanical key override	No	No	No	No	No
Request to enter	No	No	No	No	No
Low battery status	Yes	Yes	Yes	N/A	N/A
Communication status: RF/RS4-85	Yes / Yes	Yes / Yes	Yes / Yes	Yes/Yes	Yes/Yes
Remote lockdown/unlock[3]	Yes (<10 sec)[3]	Yes (<10 sec)[3]	Yes (<10 sec)[3]	Yes	Yes
Deadbolt position	No	No	No	No	No
Interior push button	No	No	No	No	No
Lock functions					
Classroom/storeroom	Yes	Yes	Yes	Yes	Yes

Please contact Johnson Controls Inc. 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[2]

Smart cards (13.56 MHz) - reads card serial number only:
- HID iCLASS®
- DESFire®
- MIFARE®
- MIFARE DESFire™ EV1

---

1 Can operate in Cipher Mode for keypad only. Please contact Johnson Controls for additional information.

2 FIPS 201 Compliant option available: The AD-Series can be used in applications which require approval by the US Federal Government under HSPD-12 for FIPS 201 compliance. Specific components are required, please see the AD-401 and AD-301 data sheets for complete details.

3 For greater than 1 device will be <20 sec.

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)

Cylindrical Lock
(AD-300/400)

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
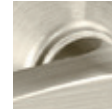
Athens

Tubular

Finishes

Warm tone finishes

605	606	612	643e
Bright brass	Satin brass	Satin bronze	Aged bronze

Cool tone finishes
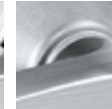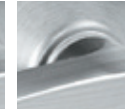
619	625	626	626AM
Satin nickel	Bright chrome	Satin chrome	Satin chrome with antimicrobial

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.**

aptiQ ▪ **LCN** ▪ SCHLAGE ▪ **STEELCRAFT** ▪ **VON DUPRIN**

ALLEGION™

For additional information contact Johnson Controls, Inc.: PO Box 423, Milwaukee, WI 53201 or www.johnsoncontrols.com/security