



# PIV-Enabled

Access Control Solutions  
for Government Facilities

The global leader in  
door opening solutions

**ASSA ABLOY**

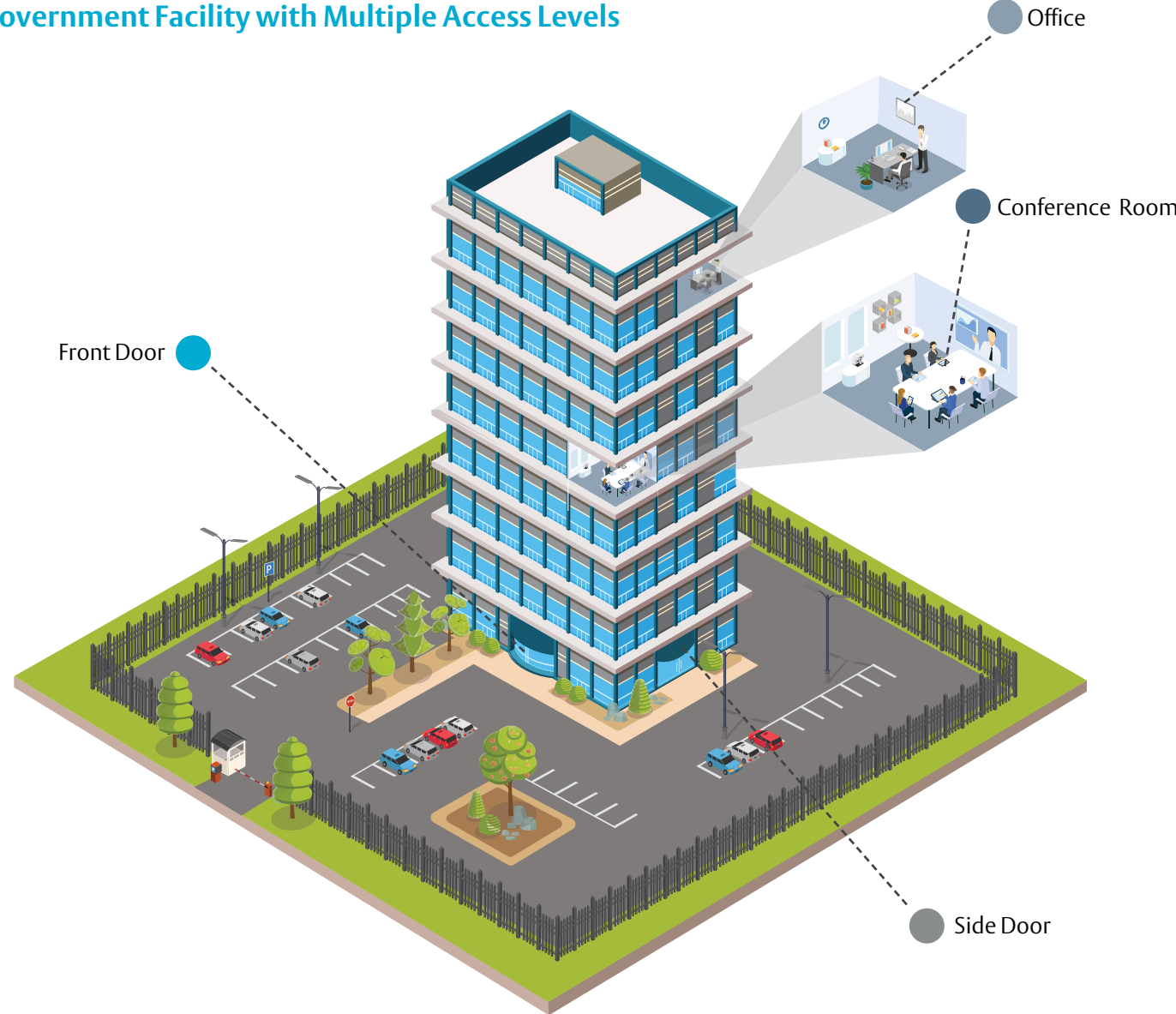
# Over five million PIV credentials are used in federal facilities.

Prompted by security challenges in today's environment, the U.S. Federal Government implemented an identification standard that impacts the Physical Access Control Systems (PACS) that secure its facilities.

Originally set forth by Homeland Security Presidential Directive 12 (HSPD-12), the standard's goals were to increase the security of federally-controlled government facilities using a consistent and interoperable identification card. Related directives to this program further specified the architecture and technical requirements for both the common identification standard, known as the Personal Identity Verification (PIV) credential and the PACS platforms that are utilized.

ASSA ABLOY can help navigate the complexities of FIPS 201-2 and its impact on the security of the government facilities, and help identify the correct solutions for these applications.

## Government Facility with Multiple Access Levels



### Federal Government access control requirements typically fall under two categories:

- FIPS 201-2 mandated openings which require strong authentication protocol
- Uncontrolled openings within the facility that simply need to read the PIV credential

ASSA ABLOY has solutions that can secure both of these opening types, integrating PIV credentials deeper into the facility.



Varying assurance levels in federal government facilities fall into one of 4 categories:



For each assurance level, specific authentication modes are needed, each requiring one or more physical access control components:

AUTHENTICATION MODES	AUTHENTICATION FACTORS	SP 800-116 SECURITY AREA
Legacy and FASCN Readers	None	Uncontrolled
CHUID + VIS	1	Controlled
CAK	1	Controlled
PIV + PIN	2	Limited
PIV + PIN + BIO	3	Exclusion

BIO: Biometric; CAK: Card Authentication Key; CHUID: Cardholder Unique Identifier; FASC-N: Federal Agency Smart Credential Number; PIN: Personal Identification Number; PIV: PIV Authentication Key; VIS: Visual Inspection

# FIPS 201-2 Compliant Access Control Solutions



HID Global's pivCLASS® Solutions enable government facilities to upgrade their existing physical access control systems (PACS) to achieve FIPS 201 compliance.



Access points into Federal buildings must comply with FIPS 201-2 standards. These door openings, typically on the building perimeter, require strong authentication protocols to validate the certificate data on PIV credentials.

Because these enhanced credentials require the exchange of significant amounts of data, locks and access control hardware that deliver full FIPS 201-2 compliance typically must be hardwired directly to the PACS.

## “Controlled” Areas

pivCLASS Contactless Readers (R10 and R40) work in conjunction with the pivCLASS Authentication Module (PAM) or OSDP-compliant strong authentication controller infrastructure to provide strong authentication, ensuring that the card being presented is genuine, the data on the card has not been changed or manipulated, and the card is not a copy or clone of another card.

- Meets NIST’s “Controlled” assurance-level requirements with single-factor authentication (CHUID + VIS or CAK)
- Supports and reads any PIV-based card with an ISO14443 contactless interface and containing a Card Authentication Key (CAK) certificate

## “Limited” Areas

pivCLASS Keypad Readers (RKCL40 and RPKCL40) work with the pivCLASS Authentication Module (PAM) or OSDP-compliant strong authentication controller infrastructure to perform two authentication checks: PIV + PIN.

- Meets NIST’s “Limited” security area assurance-level requirements with two-factor authentication (PIV + PIN)
- Supports multiple card types – PIV, PIV-I, CAC, CIV (a.k.a. PIV-C), TWIC, and FRAC, as well as iCLASS® and HID Prox cards for easy, phased transitions from legacy technology to new PKI-enabled smart cards

## “Exclusion” Areas

The pivCLASS Biometric Reader (RKCLB40) works with the pivCLASS Authentication Module (PAM) or OSDP-compliant strong authentication controller infrastructure to perform three authentication checks: PIV + PIN + BIO.

- Meets NIST’s “Exclusion” assurance-level requirements with three-factor authentication (PIV + PIN + BIO)
- Supports multiple card types – PIV, PIV-I, CAC, CIV (a.k.a. PIV-C), TWIC, and FRAC, as well as iCLASS and HID Prox cards for easy, phased transitions from legacy technology to new PKI-enabled smart cards

## pivCLASS Authentication Module (PAM)

HID Global’s pivCLASS Authentication Module (M2000) is an embedded computer packaged in a small form factor with pre-installed, updatable firmware. It is installed between a supported reader and an existing access control panel, and provides configurable Wiegand output to the controller.

- Allows PACS to be upgraded to support PIV cards without having to replace existing access control panels
- Each PAM can support up to two readers
- Readers pass card information to the PAM to perform the required authentication to validate (or invalidate) the cardholder’s credentials



pivCLASS R10 and R40 Contactless Readers



pivCLASS RKCL40 Keypad Reader



pivCLASS RKCLB40 Biometric Reader



pivCLASS M2000 Authentication Module

To complete your installations, ASSA ABLOY Group brands offer a broad range of access control components, including the pivCLASS® compliant card readers, locking hardware and low-voltage power supplies:

## HES Strikes

- HES 1500 and HES 1600 Series Electric Strikes for Cylindrical and Mortise Locks

Offering unmatched flexibility, the HES 1500 and HES 1600 Series electric strikes offer dynamic integrated adjustability and field configurable options compatible with any cylindrical or mortise lock. This heavy duty, low profile solution provides integrated monitoring of latch bolt and/or door position switch.

- HES 9600 Series Surface Mounted Electric Strike for Exit Devices

Windstorm rated, the HES 9600 is designed for greater strength and durability. This surface mounted strike is for use with ¾” rim exit devices and offers easy installation and adjustment.



HES Strikes

ASSA ABLOY also offers a full range of electromagnetic locks to complete any installation. For more information, visit [www.assaabloydss.com](http://www.assaabloydss.com).



## Securtron Power Supplies

Securtron offers a full line of switching, linear and even eco-friendly power supplies, providing the flexibility needed for any situation. Securtron power supplies are ideal for use with a wide range of access control devices, including electrified locks, door closers, electric strikes, magnetic locks, card readers and more. These products support single- and multi-door configurations as well as entire building systems.



Power Supplies

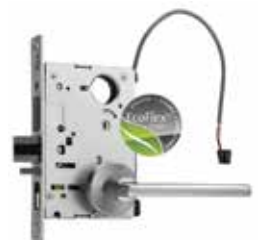
## Corbin Russwin and SARGENT Electrified Locks (cylindrical locks, mortise locks, and exit devices)

Based on our industry-leading mechanical platforms, our electrified cylindrical locks, mortise locks, and exit devices offer the same strength and quality as their non-electrified counterparts, but with added features to increase security and convenience.



## FEATURED: ECOFLEX® ELECTRIFIED MORTISE LOCKS

- Reduces energy consumption up to 96%, as certified by GreenCircle
- Field configurable to fail safe or fail secure
- Operates from 12-24VDC, offering greater flexibility in system design
- Innovative actuator design provides superior reliability
- Available with standard and high security monitoring options



# PIV Compatible Access Control Solutions

## Lower Cost PIV Compatible Access Control Solutions

Federal facilities can now extend their FIPS-compliant PACS deeper into their facilities while still utilizing the same PIV credential. Installation of wireless and integrated hardwired locks can reduce installation costs and provide greater flexibility.

## Wireless Locks



IN120

### IN120 WiFi Lock

Available from ASSA ABLOY Group brands Corbin Russwin and SARGENT, the IN120 combines the ease and flexibility of an integrated WiFi lock with the ability to support PIV credential reads.

- Leverage IEEE 802.11 WiFi infrastructure to significantly reduce installation costs
- Intelligence built into the lock for local decision-making, allowing operation regardless of network status
- Real-time door status monitoring and real-time configurable alarm notification
- AES 128-bit encryption and support for most current WiFi network standards
- Integration with ASSA ABLOY IP-Enabled Access Control Partners offers the flexibility to mix and match IN120 WiFi locks and IN220 PoE locks

## Hard-Wired Locks



SELP10

### Access 600® RNE1 / Harmony / SELP10 Integrated Wiegand Locks

Integrated Wiegand locks from ASSA ABLOY Group brands Corbin Russwin and SARGENT combine a card reader, door position switch (DPS), and request-to-exit (REX) signalling in a sleek design backed by Grade 1 hardware.

- Open architecture platform provides compatibility with all popular access control systems
- Lockdown capable from central PACS
- Reduced installation time with fewer components and a single wire harness, as well as preterminated ElectroLynx connectors



IN220

### IN220 Power over Ethernet Lock

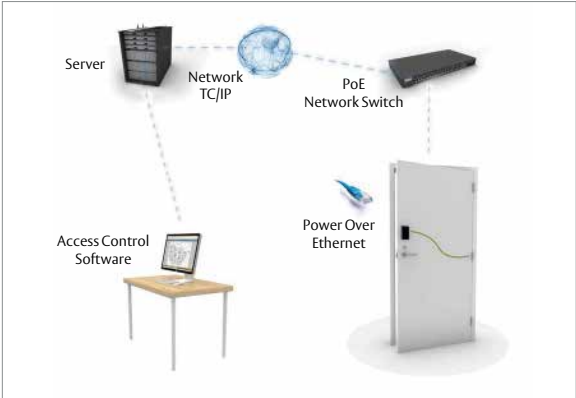
The IN220 Power over Ethernet (PoE) lock uses a single Ethernet cable for both power and data, significantly reducing installation time and costs.

- Leverage IEEE 802.3af (PoE) infrastructure to eliminate the need for additional power supplies or electrical wiring
- Provides the same real-time communication as traditional access control
- Contributes to sustainability goals, significantly reducing standby power consumption
- Real-time door status monitoring and real-time configurable alarm notification
- Integration with ASSA ABLOY IP-Enabled Access Control Partners offers the flexibility to mix and match IN120 WiFi locks and IN220 PoE locks

### Typical WiFi System Configuration



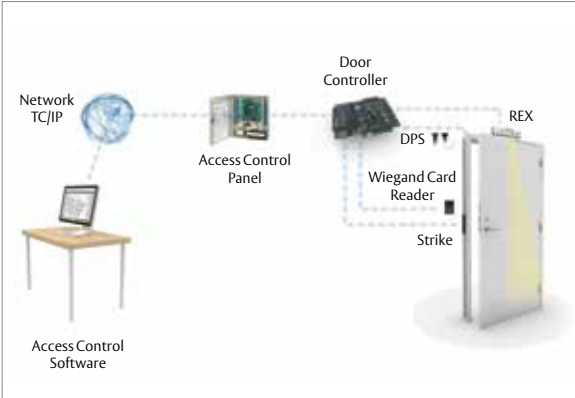
### Typical PoE System Configuration



### Typical Integrated Wiegand Configuration



### Traditional Access Control Configuration



ASSA ABLOY is the global leader in door opening solutions, dedicated to satisfying end-users needs for security, safety and convenience

**ASSA ABLOY**

## Resources

Want more information about the products, solutions and services? For expert answers and learning opportunities on- and off-site, visit us online at: [www.assaabloydss.com](http://www.assaabloydss.com).

Use these resources – and collaborate with an ASSA ABLOY consultative expert:

- Team of Government Specialists
- White Papers
- Government Business Videos
- ASSA ABLOY Academy
- Sustainable Solutions

**[www.assaabloydss.com](http://www.assaabloydss.com)**

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*Effective 2/2018*  
2500-3884