Enterprise Access Control System
Avigilon Access Control Manager (ACM) Systems

The Access Control Manager (ACM) system is an IT-friendly Physical Access Control System (PACS) from Avigilon for enterprise-class installations. It's a complete system that is designed to keep your focus on securing your people, property and assets, and maximizing your time by helping you respond immediately to alerts wherever you are. The ACM™ system is a browser-based solution that can integrate with existing IT/HR systems, minimizing the need for duplicate data entry. It comes with a full set of standard features that not only help to maximize your time, but will reliably safeguard your information.

**Five reasons to deploy an ACM enterprise system**

1. No server or client software to install. No costly client licensing, annual software licensing or software and support agreements to renew.
2. Manage enterprise access and events on your terms and with the devices you use every day.
3. Capitalize on company investment of existing hardware or choose to move from proprietary or unsupported hardware to the ACM system.
4. Integrate with identity management systems to connect IT and physical security systems together.
5. Map enterprise roles to physical access to enforce policy restrictions.

**Secure, Linux operating system**

The ACM system helps companies stay ahead of network security issues by deploying an access system that provides exceptional protection at every turn. Using an open-source Linux platform provides an extra layer of security against network vulnerabilities. This can decrease system maintenance and eliminate the cost of operating system licenses and upgrade fees.

**Physical and logical security convergence**

The ACM system approaches identity management in a unique way. Our system synchronizes core security information across peer-to-peer networks in real time, ensuring all operators see the most up-to-date information. This core technology, along with automatic redundant failover solutions, increases system uptime and protects valuable data, allowing IT departments more time to focus on other operational tasks.

**Performance-Driven Features**

- 100% browser-based PACS
- Access, video and intrusion event and alarm management
- Open architecture (Open LDAP and Open-field hardware)
- Hot standby-auto failover (System failover redundancy)
- Global anti-passback
- Global linkages and actions
- Global synchronization of access information
- Role-based authorizations and policy enforcement
- Collaborations (Data exchange between the ACM system and other databases)
- Graphical maps and floor plans
- Video interface and verification
- Wireless lock integration
- Intrusion panel integration
- Mustering (emergency tracking and reporting)
All the PACS, Without the Pain

Accessible from anywhere
Our 100% browser-based ACM solution is accessible from any location (via the internet) using any device with a browser, anytime, and allows the system to be managed by multiple operators simultaneously. Whether using ACM Enterprise or Virtual system, all changes are automatically synchronized across the entire access system, displaying only the most up-to-date information.

Powerful features that are included
The ACM system includes powerful features that are typically only offered as licensable options by other manufacturers.
- 50 concurrent client connections
- Mustering (occupancy/emergency tracker and locator)
- Video integration to ACC™ software

Integrations
Avigilon provides all-in-one solutions to support your most critical business activities. By combining video management, wireless locking and visitor management into a powerful access management solution, security teams can assess and respond with optimum situational awareness, keeping your facility running efficiently and with a higher level of security.

Event correlation and alarm monitoring
Connecting access events with ACC software and other compatible 3rd party video management systems so security teams can visually act and respond to critical alarm events. This provides a visual verification of unauthorized activities in and around your facility.

Avigilon key to open access control
The ACM system integrates with open-field hardware from Mercury Security for businesses that need to move from proprietary and, in some situations, unsupported hardware to a supported access control system. Replace your existing system with a supported platform that preserves a large portion of the existing system investment. ACM provides enterprise-class capability without the enterprise overhead.

A changeover that’s simple to deploy
Preserve the original cabling, enclosure and connectors. Migrate to the latest Mercury Bridge solutions from Avigilon:
- Mercury MS Bridge solution to ACM system
- Mercury M5 Bridge solution to ACM system
A successful enterprise access control solution should allow you to focus on securing your people, property and assets without consuming your time with system management. Every aspect of the ACM system is designed to keep you focused externally, freeing up more operational time by providing the information you need to improve safety and resolve incidents. The ACM system interface keeps most system operations at your fingertips. Its user-friendly navigation allows you to manage and effectively report and act on critical security events.

**Powerful Enterprise Solution**

**Personnel locator and occupancy tracker:**
Enhance the safety of key personnel

**Intrusion event monitoring and control:**
Correlate alarms with system actions

**Custom reporting:**
Track and record relevant activities
Avigilon Access Control Manager (ACM) Systems

**ACM Professional**
16 – 32 reader licenses

The Avigilon ACM Professional system is a browser-based PACS appliance that provides smaller businesses with powerful features at a lower cost of ownership. This system is a great choice for businesses looking to start small and expand as their needs change.

- Installs in tight spaces with a small footprint
- Eliminate the cost and complexity of legacy security systems
- Can be set up in minutes with an intuitive and easy-to-use interface
- Simplify security with a cost-effective all-in-one desktop machine

**ACM Enterprise**
16 – 2,048 reader licenses

The Avigilon ACM Enterprise system is a browser-based PACS appliance that provides enterprise-class capability without the enterprise overhead. This system requires 1U of rack space, includes essential features for enterprise businesses and is purpose-built to be deployed in an IT environment.

- Upgrade to a highly resilient, scalable software platform
- Enable simple integration with IT
- Increase uptime with a redundant appliance solution
- Able to synchronize critical data across all network appliances

**ACM Virtual**
16 – 2,048 reader licenses

Avigilon ACM Virtual is a physical access control system (PACS) that is Certified VMware Ready for deployment on a virtual server. The ACM Virtual system is purpose-built for organizations that have migrated their IT infrastructure to a secure, private cloud environment.

- Eliminate the cost of standalone servers and software
- Increase the efficiency and use of computer room resources
- Highly scalable design with decreased deployment time
- Helps to reduce both capital and operational expenditures
Wireless Lock Integration from Avigilon

The Avigilon Access Control Manager (ACM) system introduces wireless lock integration that takes one of the most simplified access platforms in the industry to a new realm of all-in-one solutions that scale to meet the needs of most global applications. Derived from a 100 percent browser-based Linux platform that can be managed from virtually any location and device with a browser and internet connection, the ACM system sets the stage by providing the benefits of a wired installation – without the complexity and cost that traditional wired locks present.

Wireless lock integration is an excellent solution for educational facilities, healthcare offices and hospitals, commercial businesses, or any application that wants to combine all of the components typically found around the door into a simplified all-in-one system that saves you time.
### KEY FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced hardware costs</td>
<td>Reduce the cost and complexity of added hardware by connecting the Mercury controller directly to the panel interface module, gateway or communications hub for a secure wireless path to the lock.</td>
</tr>
<tr>
<td>Modular design</td>
<td>Flexibility to customize the lock to meet the needs of the application now, and purpose-built to allow for customizing the lock rather than replacing it in the future, with little to no operational disruption.</td>
</tr>
<tr>
<td>Increased security</td>
<td>Turn any keyed door or sensitive area into a monitored access door to improve security in and around facilities.</td>
</tr>
<tr>
<td>Flexible lock configurations</td>
<td>Ability to customize the reader type, chassis type, locking functions, power options, lever styles, finishes and more according to the needs of the application.</td>
</tr>
<tr>
<td>No integration license fee</td>
<td>Ability to add wireless locks to new and existing projects without additional licensing fees.</td>
</tr>
</tbody>
</table>

**Related Products:**
- ACM Enterprise Appliance
- Schlage® Panel Interface Module
- Networked controllers
- Aperio Hub
- 2.4 GHz BLE 4.0
- 900 MHz
- ENGAGE™ RS485 Gateway
- Aperio™ wireless locks
- NDE Series wireless locks
## Wireless Lock Solutions

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>ALLEGION™ AD-400 SOLUTION</th>
<th>ALLEGION NDE SOLUTION</th>
<th>ASSA ABLOY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lock support</td>
<td>16 Schlage AD-400 locks per PIM</td>
<td>10 NDE series locks per ENGAGE gateway</td>
<td>8 Aperio locks per hub</td>
</tr>
<tr>
<td>Number of supported locks</td>
<td>Standard Mercury licensing applies to the number of doors that can be connected to the ACM system (e.g., a 256-door Enterprise license supports 256 wireless locks).</td>
<td>Standard Mercury licensing applies to the number of doors that can be connected to the ACM system (e.g., a 256-door Enterprise license supports 256 wireless locks).</td>
<td>Standard Mercury licensing applies to the number of doors that can be connected to the ACM system (e.g., a 256-door Enterprise license supports 256 wireless locks).</td>
</tr>
<tr>
<td>Frequency</td>
<td>900 MHz – 902-928 MHz</td>
<td>2.4 GHz Bluetooth Low Energy 4.0 between lock and gateway or 2.4* GHz Wi-Fi between lock and IP Host</td>
<td>2.4 GHz – IEEE 802.15.4 (16 channels, 11–26)</td>
</tr>
<tr>
<td>Certifications/approvals</td>
<td>IC (Industry Canada), FCC, NEMA</td>
<td>UL294, FCC Part 15, Industry Canada (IC), RoHS</td>
<td>CE (European), C-Tick (Australia-New Zealand), IC, FCC, ETL</td>
</tr>
<tr>
<td>Encryption</td>
<td>AES 128-bit</td>
<td>AES 256-bit between the gateway and enabled wireless lock and TLS 1.2 between the enabled wireless lock and the IP host.</td>
<td>AES 128-bit</td>
</tr>
<tr>
<td>Compatible hardware</td>
<td>Mercury AC-MER-CONT-1DR AC-MER-CONT-64DR</td>
<td>Mercury AC-MER-CONT-1DR AC-MER-CONT-64DR</td>
<td>Mercury AC-MER-CONT-1DR AC-MER-CONT-2DR AC-MER-CONT-64DR</td>
</tr>
<tr>
<td>System interface</td>
<td>RS-485 from PIM to Mercury controller</td>
<td>RS-485 from ENGAGE gateway to Mercury controller</td>
<td>RS-485 from Aperio hub to Mercury controller</td>
</tr>
<tr>
<td>PoE compliant</td>
<td>IEEE 802.3af (PIM400-1501-LC)</td>
<td>Yes (IEEE 802.3af/at)</td>
<td>No</td>
</tr>
</tbody>
</table>

*ACM software only supports RS485 from each gateway to Mercury panel for real-time communication
Allegion AD-400 Solution
Schlage wireless locks communicate over a secured 900 MHz band to a panel interface module that acts as the gateway between the Mercury hardware and the wireless lock. Each Panel Interface Module (PIM) allows a wireless connection of up to 16 AD-400 wireless locks. This solution uses two variants of Mercury hardware controllers that connect over RS-485 to the Schlage PIM.

Key features
• Automatic linking to remote wireless access points with 10 channel frequencies
• Five visual indicators to quickly pinpoint and display status
• Commission the AD-400 solution using a handheld programmer
• Support for 125 kHz proximity and 13.56 MHz smart cards
• AD-400 series locks receive power from standard alkaline batteries

Allegion NDE Solution
Schlage NDE wireless locks communicate over a secured 2.4 GHz Bluetooth 4.0 connection to the ENGAGE gateway. Each gateway supports up to ten NDE series wireless locks. The ENGAGE gateway provides real-time communication to the ACM software to monitor the condition of each wireless access door. Each gateway communicates over RS-485 to the Mercury controller.

Key features
• Provides real-time communication to the ACM software
• Easy installation for existing doors
• Simple to commission using the ENGAGE mobile app
• Compatible with Allegion aptiQ™ multi-technology, smartcard and proximity credentials from Avigilon
• NDE series locks receive battery power from standard alkaline batteries

ASSA ABLOY Aperio Solution
Aperio wireless locks communicate over a secured 2.4 GHz band to an Aperio communications hub. Each hub allows a wireless connection of up to eight Aperio wireless locks. This solution uses three variants of Mercury hardware controllers that connect over RS-485 to the Aperio hub.

Key features
• Integrated antenna with the option to mount an external antenna
• Visual status indicator
• Commission the Aperio solution using a PC or laptop
• Support for HID 125 kHz proximity and 13.56 MHz iClass® contactless credentials
• Aperio series locks receive power from alkaline or lithium batteries

AVIGILON ACCESS CONTROL MANAGER
## Allegion Ordering Information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-ALL-SCH-PIM400-485-RSI*</td>
<td>900 MHz PIM for use with the Mercury EP2500 intelligent controller - North America</td>
<td></td>
</tr>
<tr>
<td>AC-ALL-SCH-PIM400-1501-LC*</td>
<td>900 MHz PIM for use with the Mercury EP1501 PoE intelligent controller - North America</td>
<td></td>
</tr>
<tr>
<td>AC-ALL-SCH-HHD-KIT-USB</td>
<td>Handheld device kit to program the Schlage locks and PIM devices - North America</td>
<td></td>
</tr>
<tr>
<td><strong>AD-400 Series locks</strong></td>
<td>Custom lock options available - North America</td>
<td></td>
</tr>
</tbody>
</table>

*Does not include Mercury hardware from Avigilon
### Allegion Ordering Information

<table>
<thead>
<tr>
<th>AC-SCH-NDE-GWY*</th>
<th>ENGAGE gateway - North America and EMEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDE Series locks</td>
<td>Custom lock options available - North America and EMEA</td>
</tr>
</tbody>
</table>

*Does not include Mercury hardware from Avigilon

---

**ENGAGE RS485 gateway**

**NDE Series locks from Avigilon**

**Allegation app for simplified setup**
### Mercury Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-MER-CONT-1DR</td>
<td>Single-door PoE networked controller for use with Allegion and ASSA ABLOY Aperio</td>
</tr>
<tr>
<td>AC-MER-CONT-2DR</td>
<td>Two-door networked controller for use with only ASSA ABLOY Aperio</td>
</tr>
<tr>
<td>AC-MER-CONT-64DR</td>
<td>Intelligent 64-door networked controller for use with Allegion and ASSA ABLOY Aperio</td>
</tr>
</tbody>
</table>

![Single-door PoE controller (AC-MER-CONT-1DR)](image1)

![Two-door controller (AC-MER-CONT-2DR)](image2)

![64-door controller (AC-MER-CONT-64DR)](image3)
# ASSA ABLOY Ordering Information

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-MER-AH30RN1-RC*</td>
<td>Aperio RS485 hub 1:8 with RC enablement SW - North America</td>
</tr>
<tr>
<td>AC-AA-SAR-AP500*</td>
<td>Aperio RS485 hub 1:8 with RC enablement - Europe, the Middle East and Africa (EMEA)</td>
</tr>
<tr>
<td>AC-MER-APD-10-USB</td>
<td>Aperio USB radio dongle - North America</td>
</tr>
<tr>
<td>AC-AA-SAR-AP500ZB-RD-USB-00</td>
<td>Aperio USB radio dongle - Europe, the Middle East and Africa (EMEA)</td>
</tr>
<tr>
<td>Aperio Series locks</td>
<td>Custom lock options available</td>
</tr>
</tbody>
</table>

*Does not include Mercury hardware from Avigilon
Engineered Solutions for Enterprise Class Businesses

Avigilon solutions are engineered from the ground up with exceptional IT standards that easily integrate with an organization’s existing physical or virtual IT environment. Avigilon is committed to providing the ease-of-use demanded by facility managers and the flexibility required by IT departments.

**Supported Access Control Solutions**
- Mercury Security
- HID Global
- ASSA ABLOY
- Allegion
- Farpointe Data®
- EasyLobby® by HID
- LifeSafety Power

**Supported IT Platforms**
- Linux
- OpenLDAP™
- Certified VMware Ready
- Firefox®
- Google Chrome
- Apple Safari
- Internet Explorer
- Microsoft EDGE

**Supported 3rd Party Databases**
- LDAP
- Active Directory
- SQL Server
- Oracle® RDBMS
- Comma Separated Value (CSV)
- XML (Event push)

**Supported Access Control Solutions**
- Mercury Security
- HID Global
- ASSA ABLOY
- Allegion
- Farpointe Data®
- EasyLobby® by HID
- LifeSafety Power

**Supported Video Integration Solutions**
- Avigilon Control Center™
- Milestone Systems
- Salient Systems
- Exacq Technologies by Tyco Security
- Dedicated Micros
Avigilon Value

Commitment and quality
- More than a decade of experience in the business
- Quality products, manufacturing and operations
- Continuous investment in new technologies

Fast time to value
- Easy installation
- Complimentary 24/7 support

Low total cost of ownership
- No recurring software licensing fees
- No maintenance fees
- Complimentary training
Avigilon enterprise-class access control solutions provide a 100% browser-based Linux platform that delivers exceptional value, allowing customers to achieve full capability at a lower cost of ownership.

To learn more, visit avigilon.com/acm