Panel interface module for AD-400 series wireless devices with integrated assembly for Mercury EP1501 controller

Avigilon™ Access Control Manager (ACM) utilizes the Schlage panel interface module (AC-ALL-SCH-PIM400-1501-LC) from Allegion as part of our wireless lock solution for Schlage AD-400 series devices. This module is designed to be combined with a Mercury EP1501 controller (AC-MER-CONT-1DR), which is sold separately, to provide a cost-effective IP-addressable access control solution for up to 16 wireless AD-400 Series devices per controller.

Avigilon combines the strength of AD-400 Series locks and the Schlage panel interface module (PIM) with the customized functionality of the EP1501 controller from Mercury. The combined intelligent controller and PIM provides a compact solution that simplifies installation and the cost of implementation.

The intelligent controller solution can extend a facility’s access control to remote locations and can be centrally managed by an IP network connection. With an IP connection you can easily interface with the existing network without the need for additional wiring requirements such as RS232 or RS485 cables. By leveraging the full portfolio of AD-400 locksets, you gain the ability to support a broad range of applications including traditional openings that may require electric strikes or wall-mounted readers.

The Schlage 16-door PIM is prewired with external RJ-45 and USB connections. To further simplify installation, the device is Power over Ethernet (PoE) compliant and can receive a 12VDC power supply.

Once configured, the Schlage 16-door PIM functions independently of the host in the event that network connectivity is lost. Thus, it can continue to manage access control to up to 16 wireless devices even when the network is disconnected. The intelligence of the controller extends beyond just its capacity for 145,000 cardholders and 50,000 audit events to include the ability to manage interdependencies among the devices.

**KEY FEATURES - PIM AND INTELLIGENT CONTROLLER**

- Integration with standard IP-addressable intelligent controller for up to 16 AD-400 Series wireless devices
- Decentralized system intelligence capable of managing up to 145,000 cardholders and 50,000 transactions in memory if temporarily disconnected from network
- PoE compliant to IEEE 802.3af
- Optional 12VDC external power supply to achieve UL294 listing
- 900 MHz communication between PIM and AD-400 Series wireless devices for secure, AES 128-bit encrypted transmission
- Patent-pending wireless lockdown/unlock feature (10 seconds or less) to preserve up to two year battery life in wireless device
- External RJ-45 and USB connectors for simplified installation and use
- Manages AD-400 series wireless locks
## TECHNICAL SPECIFICATIONS

### - PIM AND INTELLIGENT CONTROLLER

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modulation / encryption</td>
<td>900 MHz spread spectrum, direct sequence, 10 channels, AES 128-bit key</td>
</tr>
<tr>
<td>Frequency range</td>
<td>902–928 MHz</td>
</tr>
<tr>
<td>Credential verification time</td>
<td>&lt; One second (lock requires less than 100 msec; response time does not include latency time of the access control panel)</td>
</tr>
</tbody>
</table>
| Communication range                  | • Up to 200 feet (61 m) indoor range, with normal building obstructions  
  • Up to 1,000 feet (305 m) clear line of sight  
  • Up to 2,000 feet (609 m) line of sight with high gain antenna on PIM |
| RF interference avoidance            | Configurable dynamic channel switching |
| Operating temperature                | 32° F to 151° F, 0° C to 66° C |
| Humidity                             | 10% to 95% relative humidity non-condensing |
| Power input                          | • PoE, 12.95W compliant to IEEE 802.3af or 12VDC +/- 10%  
  • 400mA max power supply |
| Communication to host                | 10 Base-T / 100Base-TX |
| Intelligent controller memory        | • 145,000 cardholders, 50,000 transaction buffer  
  • 16 access levels per cardholder  
  • Activation/deactivation dates |
| Dimensions                           | 10.43” X 7.28” X 3.79” (26.49 cm X 18.49 cm X 9.63 cm) |
| Weight                               | 2.8 lbs |
| Certifications                       | • FCC Part 15, Industry Canada (IC), RoHS  
  • UL294 listed when connected to UL294 power supply |

### ORDERING INFORMATION

- **AC-ALL-SCH-PIM400-1501-LC** Panel interface module only - configured for the addition of a AC-MER-CONT-1DR Mercury EP1501 Controller.
- **AC-MER-CONT-1DR** Mercury EP1501 Controller only - purchased separately from the AC-ALL-SCH-PIM400-1501-LC panel interface module.

### ACCESSORIES

- **AC-ALL-SCH-HHD-KIT-USB** HHD kit - Handheld device with Schlage Utility Software installed and HH-USB cable
- **S8** 8-port gigabit PoE switch 124W
- **S24** 24-port gigabit PoE switch 180W

---

Access Control Manager (ACM)  
physical or virtual appliance  
PoE network switch  
AC-ALL-SCH-PIM400-1501-LC panel interface module  
AD-400 wireless devices (up to 16 devices)