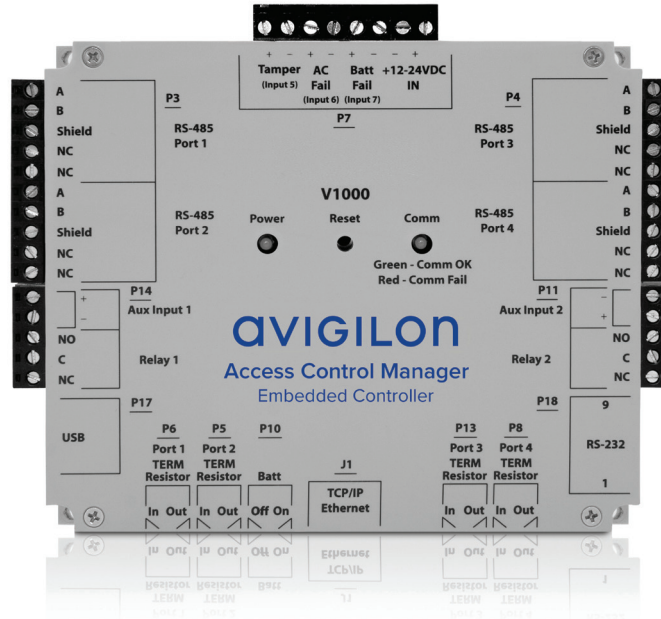# Avigilon™ Access Control Manager Embedded Controller™

The Access Control Manager (ACM) Embedded Controller from Avigilon is an all-in-one security management application and controller.

The ACM Embedded Controller eliminates the need for a traditional server. It provides a complete and fully functional hardware/firmware infrastructure that supports the factory installed software running on the ACM Embedded Controller environment.

The ACM Embedded Controller makes all online door decisions, input monitoring and output control for all connected interface modules. It is designed to work with up to eight HID VertX V100 Reader Interfaces as part of the overall ACM Embedded Controller access control solution for up to 16 doors. This is offered in 4, 8 and 16-Door kits, each with a single part number.

The ACM Embedded Controller has two on-board inputs and outputs for local input monitoring and auxiliary output control. In addition there are three other inputs for tamper, AC fail and battery fail. The controller is powered by a local power supply (12 or 24 VDC).

The ACM Embedded Controller is IP enabled. It enhances web connections by allowing a custom IP address or host name to be defined, and is DHCP enabled.

Programming the ACM Embedded Controller has been simplified with the ability to configure access doors, inputs and outputs after each interface panel is created. This allows faster deployment of the access control system.

Offline mode provides the option of valid access to a door even when the reader module is not communicating to the controller (or alternatively moving into lockdown mode). When offline the V100 provides offline operation and performs all access decisions.

KEY FEATURES

100% browser based application factory installed by Avigilon

Simplified programming and navigation

IP enabled controller

Supports offline mode

Removable terminal blocks for easy installation

Plastic enclosure protects vital components

HID VertX V200 input control interface and V300 output control interface supported

Specifications

SYSTEM		
Card holders	Up to 2000	
Operators	Up to 10, two concurrent client connections	
Card formats	Configurable - four defaults	
Subpanels	Up to eight	
Doors supported	Up to 16	
Transactions	Up to 25,000	
Schedules	Configurable - two defaults	

CONTROLLER		
Audio / Visual indicators	Power LED and RS-485 Communications LED	
Communication Ports	Ethernet (10/100), RS-485 (half duplex)	
Warranty	Warrantied against defects in materials and workmanship for 18 months	

MECHANICAL		
Dimensions (WxHxD)	147.32 mm x 122.55 mm x 32.38 mm; 5.8" x 4.825" x 1.275"	
Weight	0.35 kg; 12.4 oz	
Housing Material	UL94 polycarbonate	
Mounting	Mount to any wall surface, using four screws. For UL compliance, one or more gateways can be mounted inside a locking customer supplied NEMA-4 rated enclosure	

CABLE SPECIFICATION		
Ethernet	• 300ft (100m), CAT-5 • ALPHA 9504C, ALPHA 9405F	
RS-485 (for Vx00 connection)	• 4000ft (1219m), 2-twisted pair shielded cable (two independent RS-485 networks) • 22AWG Belden 3105A	
Input Circuits	• 500ft (150m), 2-conductor shielded • 22AWG ALPHA 1292C • 18AWG ALPHA 2421C	
Output Circuits	• 500ft (150m), 2-conductor shielded • 22AWG ALPHA 1172C • 18AWG ALPHA 1897C	

ELECTRICAL		
Operating Current (MAX) @ 12-24VDC	1000mA	
Operating Current (AVG) @ 12VDC	210mA	
Supervised Inputs Power (MAX)	0.025W (5mA sink, 5V nominal) 0 to +5VDC Ref	

RELAY RATING		
Relay Contact Rating (Dry Output)	2A @ 30VDC (MAX Amperage that is UL Certified) 5A @ 30VDC	

ENVIRONMENTAL		
Operating Temperature	0° C to 50° C (32° F to 122° F)	
Humidity	5 - 95% Relative humidity (non-condensing)	

CERTIFICATIONS				
US and Canada	UL294 (US) Listed Component	FCC Class A (US)	CSA 205 (Canada)	ICES-003 Class A (Canada)
Europe	CE Mark EN 301 489-3 EN 55022 EN 50130-4 (EU)			
Asia/Australasia	C-Tick AS/NZS CISPR 22 (Australia,New Zealand) & Korea (KCC)			

ORDERING INFORMATION		
AC-HID-LSP-ACMEC-KIT4	Four Door Reader Kit includes: • One AC-LSP-4DR-HID-LCK LifeSafety Power four door HID dual voltage integrated power system • One Avigilon AC-HID-ACMEC V1000 ACM Embedded Controller • Two AC-HID-VERTX-V100 HID VertX V100 reader interface modules	• Four AC-HID-READ-ICLASS-SE-R10-AVG HID iCLASS SE R10 card readers • 100 AC-HID-CARD-ICLASS-SE-3000-AVG iCLASS SE contactless smart card, 2k bit with two application areas
AC-HID-LSP-ACMEC-KIT8	Eight Door Reader Kit includes: • One AC-LSP-8DR-HID-LCK LifeSafety Power eight door HID dual voltage integrated power system • One Avigilon AC-HID-ACMEC V1000 ACM Embedded Controller • Four AC-HID-VERTX-V100 HID VertX V100 reader interface modules	• Eight AC-HID-READ-ICLASS-SE-R10-AVG HID iCLASS SE R10 card readers • 100 AC-HID-CARD-ICLASS-SE-3000-AVG iCLASS SE contactless smart card, 2k bit with two application areas
AC-HID-LSP-ACMEC-KIT16	16 Door Reader Kit includes: • One AC-LSP-16DR-HID-LCK LifeSafety Power 16 door HID dual voltage integrated power system • One Avigilon AC-HID-ACMEC V1000 ACM Embedded Controller • Eight AC-HID-VERTX-V100 HID VertX V100 reader interface modules	• 16 AC-HID-READ-ICLASS-SE-R10-AVG HID iCLASS SE R10 card readers • 100 AC-HID-CARD-ICLASS-SE-3000-AVG iCLASS SE contactless smart card, 2k bit with two application areas
AC-HID-ACMEC	Avigilon Access Control Manager Embedded Controller (with plastic enclosure back plate & cover), browser-based ACM Controller, 16 doors, 2000 cardholders, 10 operators, 25,000 transactions, 8 subpanel support, schedules, holidays, access groups	