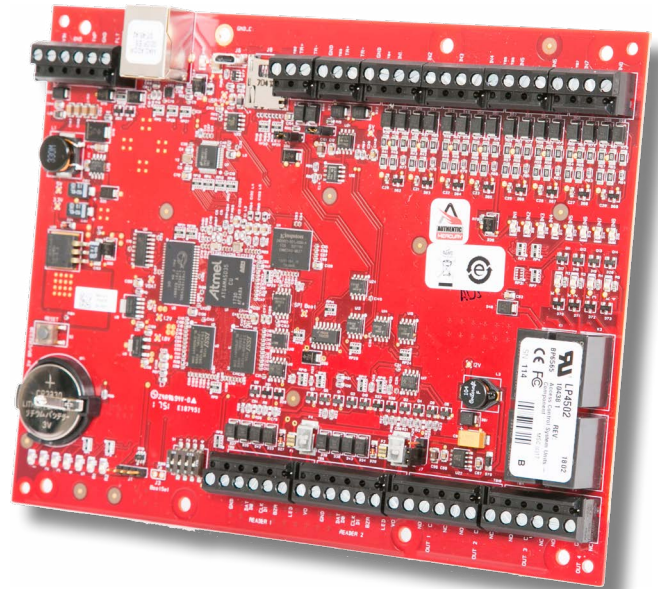


# LP Series - AC-MER-CONT-LP4502 High Performance Intelligent Controller

The Avigilon Access Control Manager (ACM) system supports open field hardware from Mercury Security allowing organizations to leverage investments in non-proprietary field hardware, with retrofit programs available for industry standard multi-device interface panels, power and communication controller boards, and intelligent controllers. The new Authentic Mercury LP Series Intelligent Controllers are Mercury Security's enhanced platform that offers an improved processor and increased memory, plus feature an embedded crypto memory chip that provides a secured layer of encryption to onboard sensitive data.

The AC-MER-CONT-LP4502 supports a variety of extended features including High Assurance Credential Authentication and complies with the BACnet IP communication protocol. A USB-to-Ethernet IP adapter provides a redundant host IP connection. It has direct hardware support for 2 openings and can scale to 64 access points. Built on proven Authentic Mercury hardware, this high-performance intelligent controller embeds elevator destination dispatch and provides integrated power management analytics to proactively detect failure before it occurs.

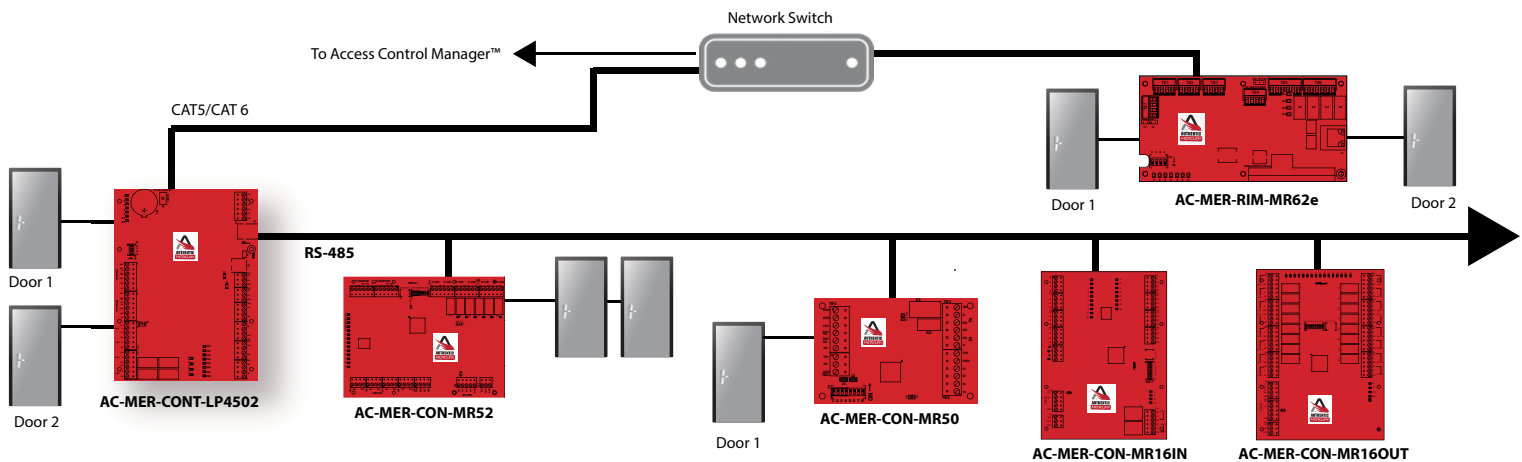


## KEY FEATURES

Device Integration: Supports a wide range of third party integrations and applications
Enhanced Security: Embedded crypto memory chip and data at rest encryption provides secured layer of protection of sensitive data
OSDP Protocol: Secure channel security for reader connectivity, and extended applications such as elevator integration, biometrics and US government (FICAM)
FICAM Strong Authentication for FIPS-201 US Government
Elevator Destination Dispatch
Power Supply Alerts and Events
Building Control using BACnet IP
Host communications protected by TLS 1.2/1.1 or AES-256/128
Controller/IO Expansion connection protected by AES
Generate and load custom peer certificates for TLS
Port based network access control using 802.1X
FIPS 140-2 user of OpenSSL
Supports multiple card formats, paired and alternate readers, elevator, turnstile and biometric devices
Anti-passback support (area, reader and time based)
Threat level and operating modes

# Specifications

<b>TECHNICAL SPECIFICATIONS</b>	Access Control	2,000,000 cardholder capacity 50,000 transaction buffer Supports up to 2 RS-485 IO protocols 255 access levels per cardholder Cardholder - 19 Digit (64 Bit) User ID with 15 digit PIN MAX Activation/Deactivation	If/Then macro capabilities Anti-passback support Nested, area, hard, soft and timed forgiveness Adjustable cardholder capacity Supports up to 1024 inputs and 1024 outputs	
	Door Control	Natively supports for up to 4 readers and 2 openings Expands to support up to 64 readers and openings		
	Primary Power	12-24 Vdc +/- 10%, 550mA maximum (reader and USB current not included)		
	Reader Ports	600mA maximum (add 600 mA to primary power current)		
	Micro USB Port	5 Vdc, 500 mA maximum (add 270 mA to primary power current)		
	Battery	Memory/ Clock Backup: 3 Volt Lithium, type BR2330 or CR2330		
	microSD Card	Format: microSD or microSDHC; 2GB to 8GB		
	Host Comm.	Ethernet: 10-BaseT/100Base-TX and Micro USB port (2.0) with optional adapter: pluggable model USB2-OTGE100		
	Serial I/O Device	Two each: 2-wire RS-485, 2,400 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit		
	Inputs	Eight unsupervised/supervised, standard EOL: 1k/1k ohm, 1%, ¼ watt. Two unsupervised dedicated for cabinet tamper and UPS fault monitoring		
	Output Relays	Four relays, Form C, NO 5 A @ 30 Vdc resistive, NC 3 A @ 30 Vdc resistive		
	<b>READER INTERFACE</b>	Reader Power	12-24 Vdc +/- 10%, 300 mA maximum for each reader	
		Data Inputs	TTL compatible inputs, F/2F or 2-wire RS-485 standards supported	
RS-485 Mode		9,600 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit. Maximum cable length: 2000 ft. (609.6 m)		
LED Output		TTL levels, high>3 V, Low<0.5 V, 5 mA source/sink maximum		
Buzzer Output		Open collector, 12 Vdc open circuit maximum, 40 mA sink maximum		
<b>CABLE REQUIREMENTS</b>	Power and Relays	1 twisted pair, 18 to 16 AWG		
	Ethernet	CAT-5, minimum		
	Reader TTL	6-conductor, 18 AWG, 500 feet (150 m) maximum		
	Reader F/2F	4-conductor, 18 AWG, 500 feet (150 m) maximum		
	Reader RS-485	1 twisted pair, shielded. 24 AWG, 120 ohm impedance, 2,000 feet (610 m) maximum		
	RS-485 I/O Devices	1 twisted pair, shield. 120 ohm impedance, 24 AWG, 4,000 ft. (1,219 m) maximum		
	Alarm Input	1 twisted pair, 30 ohms maximum, typically 22 AWG @ 1000 ft. (304.8 m)		
<b>ENVIRONMENTAL</b>	Temperature	-55 to 85 °C storage, 0 to 70 °C, operating		
	Humidity	5 to 95% RHNC		
<b>MECHANICAL</b>	Dimensions	8.0 in. (203mm) W x 6.0 in. (152mm) L x 1.0 in. (25mm) H		
	Weight	10.65oz (302 g) nominal, board only		
<b>COMPLIANCE</b>	Product Compliance	UL294 Recognized, FCC Part 15 Class A, CE Compliant, RoHS, NIST Certified Encryption		



## ORDERING INFORMATION

AC-MER-CONT-LP4502	LP Series - AC-MER-CONT- LP4502 - High Performance Intelligent Controller
--------------------	---