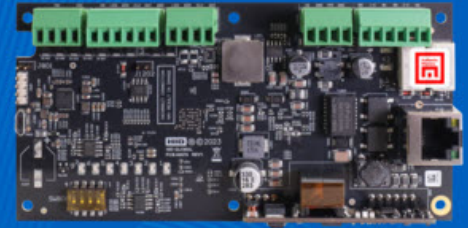


Mercury MP Series PoE+ Edge-Capable Intelligent Controller



Expandable access control for the modern workplace

The Avigilon Alta Access 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 Mercury MP Intelligent Controllers provide a bridge between today's urgent security needs and tomorrow's emerging realities. Featuring Secure world processing within a trusted execution environment and a future-ready, on-device application environment to drive advanced enterprise strategies with sophisticated programs and analytics adjacent to the door.

The AC-MER-CONT-MP1501 from Avigilon is an edge-capable intelligent controller that is expandable up to eight downstream serial input/output modules. The feature-rich MP1501 provides a small footprint, cost-effective dual-card reader panel for controlling a single opening. Easy installation with Power-over-Ethernet Plus (PoE+) makes the high performance, Ethernet-ready MP1501 a top choice for a single-door controller.

Highlights

Security and network:

- IPv4/v6
- Host communications protected by TLS 1.2/1.3 or AES-256/128
- Controller/IO Expansion connection protected by AES
- Generate and load custom device and peer certificates in support of mutual TLS (mTLS)
- Port-based network access control using 802.1X
- FIPS 140-3 user of OpenSSL (in process)
- OSDP Secure Channel

Open architecture

High performance, reliable platform enables use of hardware with the Alta Access system.

PoE+ powered

A single PoE+ network connection provides network connectivity, along with power for the controller, reader, lock, and accessories, simplifying installations and removing the cost of traditional power supplies.

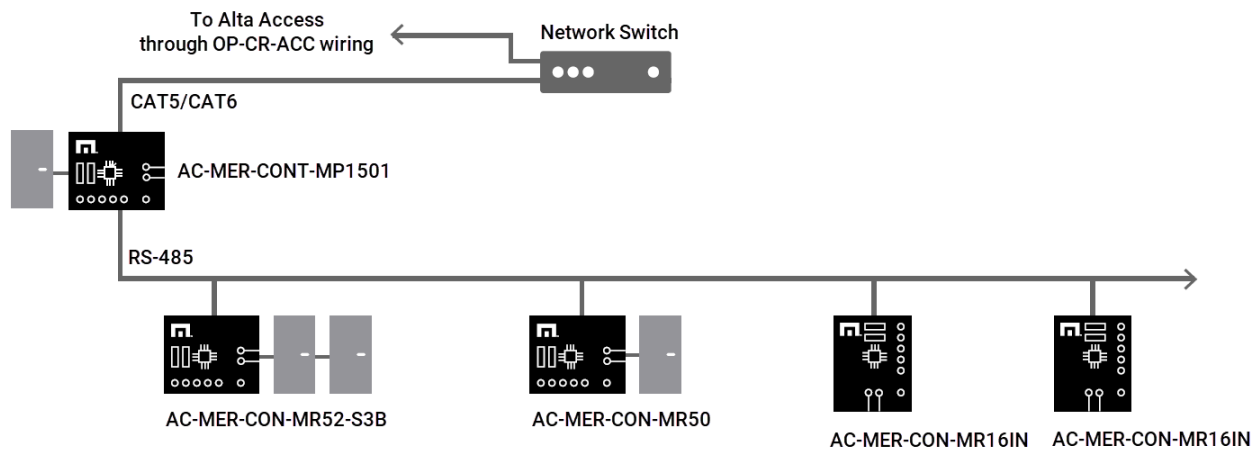
Enhanced cybersecurity

ARM TrustZone, secure boot CPU, crypto chip, and data-at-rest encryption provide a layered security approach to protect sensitive data.

Business continuity

New processor part of multi-year longevity program, dual footprint circuit designs, and the same reliable LP/EP interface and footprint.

Specifications



MERCURY MP1501 INTELLIGENT CONTROLLER

Access Control	Supports total of 1 RS-485 IO protocol Activation/deactivation If/Then rule capabilities Anti-passback support Nested, area, hard, soft, and timed forgiveness Supports up to 130 inputs and 130 outputs
Door Control	Natively supports up to 2 readers and 1 opening, and can support up to 8 additional RS-485 expansion modules for a maximum of 16 entries.

GENERAL

Power Input	PoE (12.95 W), compliant to IEEE 802.3af; or PoE+ (25 W), compliant to IEEE 802.3at; or 12 VDC +/- 10 %, 1.8 A maximum
Power Output	PoE: 12 VDC @ 625 mA including reader and AUX output* PoE+ or external 12 VDC: 12 VDC @ 1.25 A including reader and AUX output* *Excluding micro USB port
Micro USB Port	5 VDC maximum (deduct 270 mA from reader and Auxiliary Power output)
Battery	Memory/Clock Backup: Super Capacitor (10 days). 3 Volt Lithium, type BR2330 or CR2330 slot available for additional capacity. (CR2330 battery not included)
microSD Card	microSD or microSDHC; 2GB to 8GB
Host Communication	Ethernet: 10-BaseT/100Base-TX and USB port (2.0) with optional adapter: pluggable model USB2- OTGE100
Serial I/O Device	2-wire RS-485, 2,400 to 115,200 bps, asynchronous, half-duplex, 1 start bit, 8 data bits, and 1 stop bit
Inputs	8 unsupervised/supervised, standard EOL: 1k/1k ohm, 1%, ¼ watt 2 unsupervised dedicated for cabinet tamper and UPS fault monitoring
Output Relays	4 relays, Form C NO 5 A @ 30 VDC resistive NC 3 A @ 30 VDC resistive



READER INTERFACE

Reader Power	12 VDC $\pm$ 10 %: PoE, PoE+ or local power supply, 600 mA maximum
Data Inputs	Reader port 1: TTL compatible or 2-wire RS-485 Reader port 2: TTL compatible
LED Output	TTL compatible, 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

CABLE REQUIREMENTS

Header	I/O Devices RS-485
Data	1 twisted pair, shield. 120 ohm impedance, 24 AWG, 4,000 ft. (1,219 m) maximum
Power and Relays	1 twisted pair, 18 AWG (when using local 12 VDC power supply)
Ethernet	CAT-5, minimum
Reader TTL	6-conductor, 18 AWG, 500 ft. (152 m) maximum
Reader RS-485	1 twisted pair, shielded. 24 AWG, 120 ohm impedance, 2000 ft. (610 m) maximum
Alarm Input	1 twisted pair per input, 30 ohms maximum
Alarm Output	As required for the load

ENVIRONMENTAL

Temperature	Storage: -55° to 85° C Operating: 0° to 70° C
Humidity	5 to 95% RHNC

MECHANICAL

Dimensions	5.5 in. (140 mm) W x 2.75 in. (70 mm) L x 0.96 in. (24 mm) H without bracket 5.5 in. (140 mm) W x 3.63 in. (92 mm) L x 1.33 in. (34 mm) H with bracket
Weight	3.6 oz. (103 g) without bracket 4.43 oz. (125.5 g) with bracket

COMPLIANCE AND WARRANTY

Product Compliance	UL 294 Recognized, FCC Part 15 Class A, CE Compliant, RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65, NIST Certified Encryption (in process)
Third-Party Warranty	For more information, visit avigilon.com/support/warranty/third-party

For UL, the Power Sourcing Equipment (PSE) such as a PoE or PoE+ enabled network switch and/or PoE or PoE+ power injectors must be UL Listed under UL 294B.



Ordering Information

PART NUMBER	DESCRIPTION
AC-MER-CONT-MP1501	MP Series Intelligent Controller, Linux-based with 1 door, 2 inputs and 2 outputs, PoE+ support (Mercury part number: MP1501)

Support

For product support, visit: [avigilon.com](https://www.avigilon.com) or sales@avigilon.com

To learn more, visit:
[avigilon.com/access-control/cloud](https://www.avigilon.com/access-control/cloud)



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