



UC HASTINGS
COLLEGE OF THE LAW
EST. 1878

Date: 11.25.20

ADDENDUM #3 RFP #01-0038

Attachment A API Specifications

This Addendum to RFP 01-0038 Contact Tracing Software amends the RFP to include API specifications for Evergreens Mass Notification.

Please see attached.

X _____
Bidder acknowledgement of
SIGN AND RETURN WITH YOUR RFP RESPONSE

Name of authorized signer

Date

Sincerely,

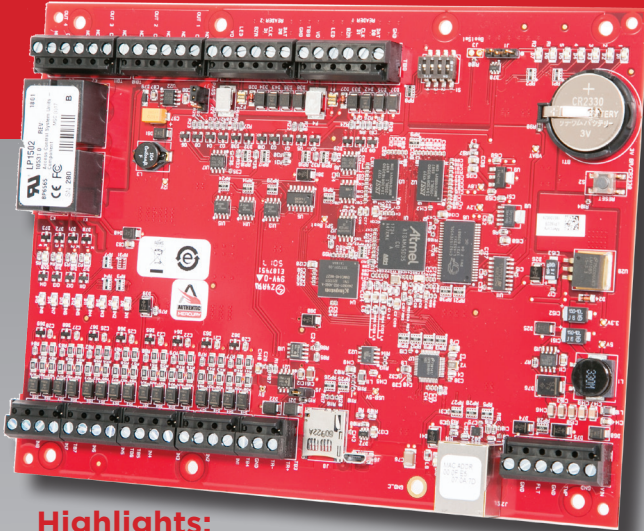
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LP Series

1502

Intelligent Controller

(2 Readers, 8 Inputs, 4 Outputs)



Highlights:

Third Party Integration Supported

- Wireless Locks
- Power Supply Alerts and Events

Security and Network

- IPv4/v6
- 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

Card Reader Functions

- Supports multiple card formats, paired and alternate readers, elevator, turnstile and biometric devices
- Anti-passback support (area, reader and time based)
- Programmable keypad user commands
- Threat level and operating mode

- **Open Architecture:** High performance, reliable platform enables use of hardware with Mercury OEM partners' software solutions
- **Enhanced Security:** Embedded crypto memory chip and data at rest encryption provides secured layer of protection of sensitive data
- **OSDP Protocol:** Secure channel communications for reader connectivity
- **Versatile Interoperability:** Same reliable interface and identical footprint as the EP controllers, enabling seamless upgrades for existing deployments

The new Authentic Mercury LP Series Intelligent

Controllers are Mercury Security's next generation advanced access control platform that runs on embedded Linux. The enhanced platform 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. Built on the Authentic Mercury open platform, LP Series controllers provide the necessary flexibility for OEMs, channel partners and end customers to choose the controller configuration that best fits their needs.

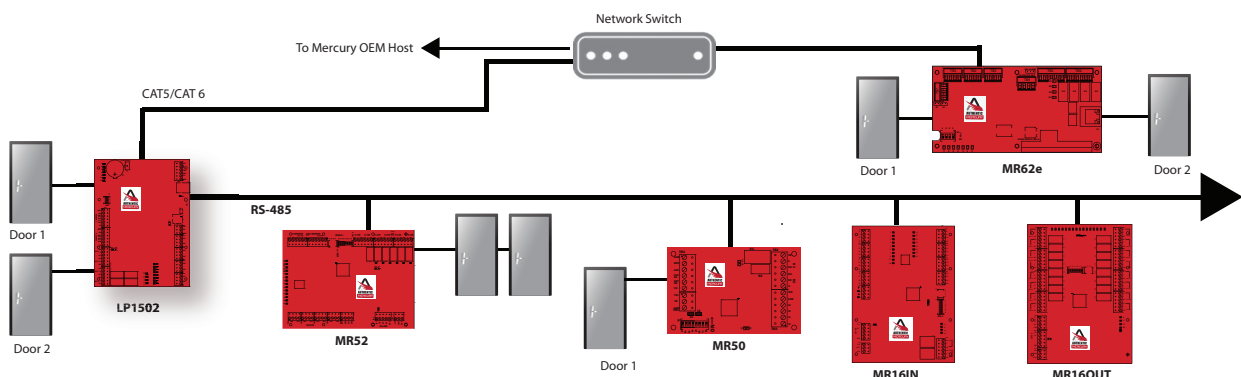
The multi-port LP1502 is a dual card reader panel for controlling two connected doors and managing up to 64 doors/openings. Built on the Authentic Mercury platform, the intelligent controller uses on-board Ethernet port to connect to cloud or server based access control hosts. The intelligent controller performs access control, alarm management and scheduled operations -- all in single package.

With native connectivity, the high-performance LP1502 functions independently of the host for performing numerous access control applications and supports OSDP, OSDP Secure Channel, keypads, biometric readers, Wiegand, clock and data, magnetic stripe, F/2F and supervised F/2F reader technologies. System configuration and setup are provided through Mercury OEM partner software applications.

For partners seeking a comprehensive and open access control platform, and a reliable hardware platform running in a secure environment, the LP1502 is the clear solution. It delivers a complete security and access control solution as well as innovative application extensions, interoperability and data security.

Specifications	
Access Control	240,000 cardholder capacity 50,000 transaction buffer Supports total of 1 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 520 inputs and 516 outputs
Door Control	Natively supports for up to 4 readers and 2 openings. Expands to support up to 64 readers and openings
General	
Primary Power	12 to 24 Vdc ± 10 %, 500 mA maximum (reader and USB ports not included)
Reader Port	600 mA 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	microSD or microSDHC; 2GB to 8GB
Host Comm.	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	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
Reader Interface	
Reader Power	12-24 Vdc ± 10 % regulated, 300 mA maximum each reader
Data Inputs	TTL compatible, F/2F or 2-wire RS-485
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

Specifications	
Cable Requirements	
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, 120 ohm impedance, 24 AWG, 2,000 ft. (610 m) max.
I/O Devices	1 twisted pair with drain wire and shield, 120 ohm impedance, 24 AWG, 4,000 ft. (1,219 m) maximum
Alarm Input	1 twisted pair, 30 ohms maximum
Environmental	
Temperature	-55 to +85 °C, storage, 0 to +70 °C, operating
Humidity	5 to 95% RHNC
Mechanical	
Dimensions	8 in. (203.2 mm) W x 6 in. (152.4 mm) L x 1 in. (25 mm) H
Weight	9 oz. (255 g) nominal, board only
Compliance and Warranty	
Product Compliance	UL294 Recognized, FCC Part 15 Class A, CE Compliant, RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65, NIST Certified Encryption
Warranty	Mercury Security warrants the product is free from defects in material and workmanship under normal use and service with proper maintenance for one year from the date of factory shipment.



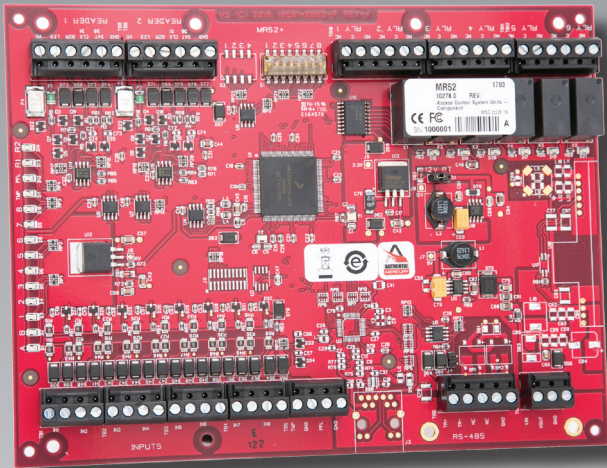
The Authentic Mercury open platform delivers quality assurance derived from the most proven and reliable hardware in the industry. Driven by our engineering excellence and technology leadership, Authentic Mercury hardware is designed as an access control platform that easily encompasses emerging technologies, changing industry standards and evolving system environments. Make yours Authentic, Make sure its Merc.

Series 3

MR52

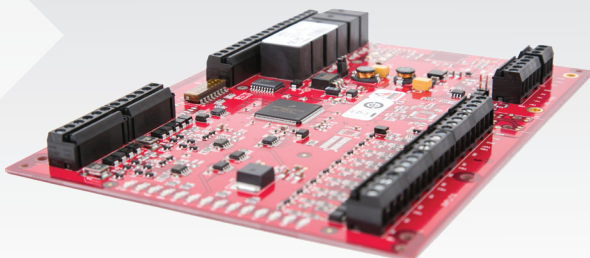
Serial I/O

Dual Card Reader Interface



Features

- AES 128/256 bit data encryption
- HSPD-12/FIPS201 compliant
- UL 294 recognized, CE compliant, FCC, RoHS
- Supports OSDP, OSDP Secure Channel, FICAM government profiles, keypads, biometric readers, Wiegand, clock and data, magnetic stripe, F/2F and supervised F/2F reader technologies
- RS-485 host connectivity



- **Open Architecture:** High performance, reliable platform enables use of hardware with Mercury OEM partners' software solutions
- **OSDP Protocol:** Supports OSDP and Secure Channel protocol for device connectivity, file transfer and extended applications such as biometrics and federal government profile support
- **Enhanced Security:** Embedded crypto memory chip provides secured layer of encryption to protect sensitive data
- **Versatile Interoperability:** Same reliable interface and identical footprint as the Series 2 Mercury IO modules, enabling seamless upgrades for existing deployments

The new Authentic Mercury MR Series 3 Serial Input/Output (SIO) modules enable system expansion of Authentic Mercury intelligent controllers as part of Mercury's distributed architecture. The enhanced modules offer an improved processor and increased memory, plus feature an embedded crypto memory chip that provides a secured layer of encryption to onboard sensitive data. Built on the Authentic Mercury open platform, Series 3 modules provide the necessary flexibility for OEMs, channel partners and end customers to choose the controller configuration that best fits their needs.

The MR52 Series 3 is a dual card reader interface panel with on-board flexibility to connect a wide range of security devices. The MR52 is easy to install and provides the required I/O for interfacing two card readers, eight general-purpose input monitor points and six control relays to any Authentic Mercury series intelligent controller.

With two-wire RS-485 connectivity, the MR52's two reader ports support OSDP, OSDP Secure Channel, FICAM government profiles, keypads, biometric readers, Wiegand, clock and data, magnetic stripe, F/2F and supervised F/2F reader technologies. System configuration and setup are provided through Mercury OEM partner software applications.

The MR52 Series 3 is the latest generation door interface module for Authentic Mercury intelligent controllers, the platform of choice for customers seeking open architecture access control solutions.

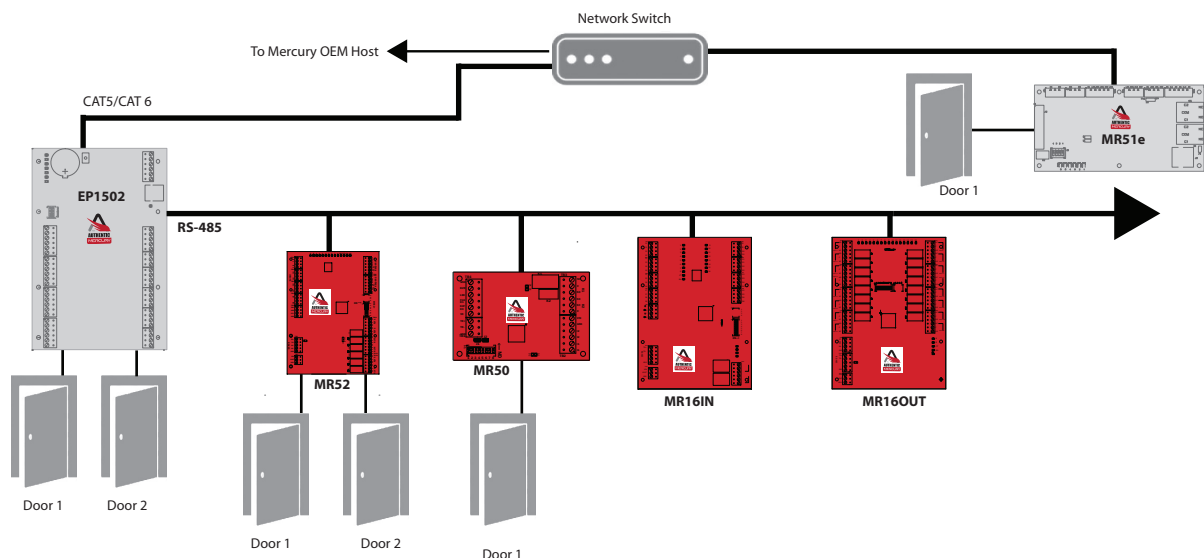
Application Notes

The inputs and the relays may be assigned to door-related functions or to general-purpose I/O. The inputs support normally open, normally closed, supervised, and non-supervised circuits. End-of-line (EOL) resistance values are configurable, and the relays can be configured for fail-safe or fail-secure operation.

When connected to an Authentic Mercury intelligent controller, the MR52 can relate the activities of selected system devices to other devices within the system, generating actions and allowing activities to occur independent of the host. The MR52 can also locally process access requests based on facility code verification, even when disconnected from an intelligent controller. Up to eight facility codes may be active in each MR52.

***Note:** Up to two entry/exit door applications (4 readers total) can be supported when connected to OSDP readers.

Specifications	
Primary Power	12-24 Vdc +/- 10%, 550mA maximum
Host Communication	RS-485, 2-wire, 4,000' (twisted pair with shield, Belden 9841)
Reader Ports	2 Reader Ports*
Card/Keypad Data	OSDP, Clock/Data, Data-1/Data-0, RS-485, or F/2F
Keypad	8-bit Mercury, 8-bit Dorado/HID, 4-bit HID
Reader Power	Pass-through or 12 Vdc regulated 300mA each reader
LED	One-wire bi-color LED or two-wire LED
Buzzer	Only with 'one-wire' LED
Inputs	8 General Purpose: Programmable circuit type 2 Dedicated: Tamper and Power Monitor
Output Relays	Six Form-C Relays: Normally open contact (NO): 5A @ 30 Vdc resistive Normally closed contact (NC): 3A @ 30 Vdc resistive
Dimensions	6.0" W x 8.0" L x 1.0" H (152mm W x 203mm L x 25mm H)
Temperature	0-70 °C operational, -55-85 °C storage
Humidity	5 to 95% RHNC
Product Compliance	UL294 Recognized, FCC Part 15 Class A, CE Compliant, RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65, NIST Certified Encryption



The Authentic Mercury open platform delivers quality assurance derived from the most proven and reliable hardware in the industry. Driven by our engineering excellence and technology leadership, Authentic Mercury hardware is designed as an access control platform that easily encompasses emerging technologies, changing industry standards and evolving system environments. Make yours Authentic, **Make sure its Merc.**