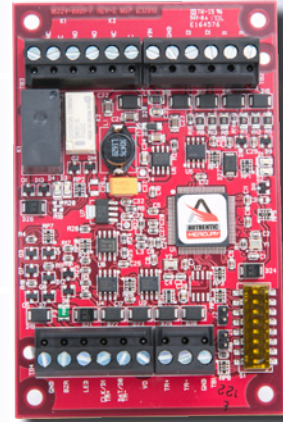


HID® Mercury™ MR50-S3 Controller



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

SERIAL I/O SINGLE CARD INTERFACE

- **Open Architecture** - High performance, reliable platform enables use of hardware with HID 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 HID Mercury MR Series 3 Serial Input/Output (SIO) modules enable system expansion of HID Mercury intelligent controllers as part of HID Mercury's distributed architecture. The enhanced modules offer an improved processor and increased memory, plus features an embedded crypto memory chip that provides a secured layer of encryption to onboard sensitive data. Built on the HID 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 MR50 Series 3 is an enhanced SIO single card reader interface panel dedicated to individual door oversight and provides of all the I/O needed for controlling a single door. Each MR50 connects one card reader, two general-purpose input monitor points and two control relays for access control and security monitoring through an HID Mercury intelligent controller.

With two-wire RS-485 connectivity, the MR50 reader port 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. System configuration and setup are provided through HID Mercury OEM partner software applications.

The MR50 Series 3 is the latest generation door interface module for HID Mercury intelligent controllers, the platform of choice for customers seeking open architecture access control solutions.

Application Notes

The inputs and the relays can 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.

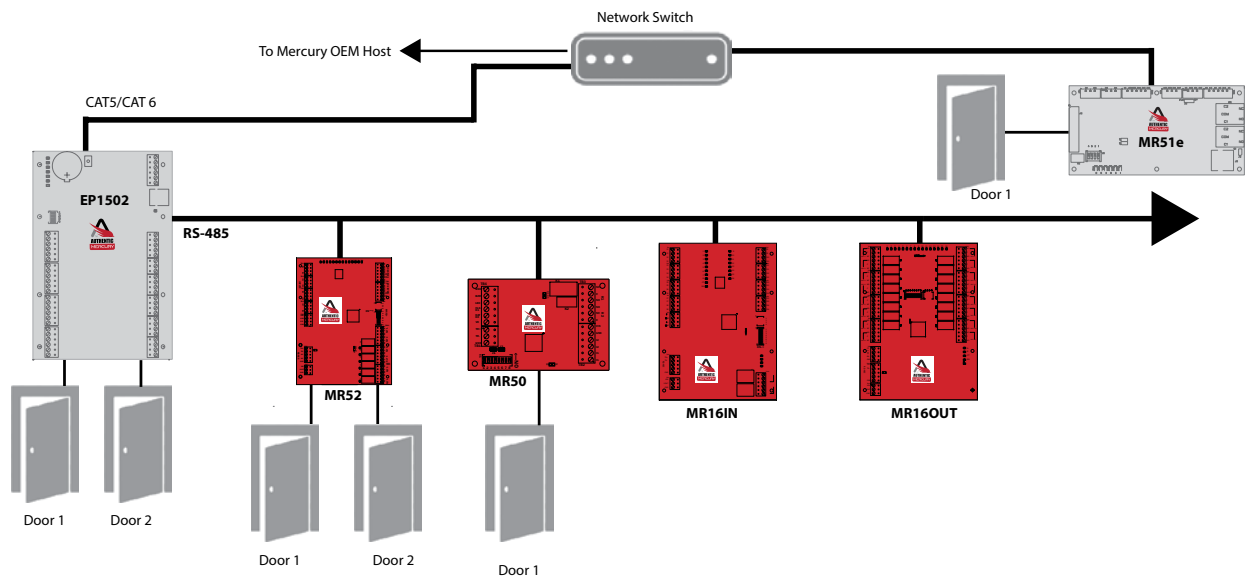
When connected to an HID Mercury intelligent controller, the MR50 can relate the activities of selected system devices to other devices within the system, generating actions and allowing activities to occur independent of the host. The MR50 can also locally process access requests based on facility code verification, even when disconnected from an intelligent controller. Up to eight facility codes may be active in each MR50.

SPECIFICATIONS

Primary Power	12-24 VDC +/- 10%, 150mA maximum
Host Communication	RS-485, 2-wire, 4,000' (twisted pair with shield, Belden 9841)
Reader Port	1 Reader Port*
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	Input voltage pass-through
LED	One-wire bi-color LED or two-wire LED
Buzzer	Only with 'one-wire' LED
Inputs	2 General Purpose: Programmable circuit type 1 Dedicated: Tamper
Output Relays	Relay 1: Normally open contact (NO): 5A @ 30 VDC resistive Normally closed contact (NC): 3A @ 30 VDC resistive Relay 2: 2A @ 30 VDC resistive
Dimensions	2.75" L x 4.25" W x 1.0" H, (70mm L x 108mm W x 25.4mm H)
Temperature	Storage: -55 - 85° C Operational: -40 - 75° C
Humidity	5 to 95% RHNC
Product Compliance	UL294 ¹ Recognized, FCC Part 15 Class A, CE Compliant, RoHS (2011/65/EU & 2015/863), EU REACH (1907/2006), California Proposition 65, NIST Certified Encryption

*Note: A single entry/exit door application (2 readers total) can be supported when connected to OSDP readers.

¹ 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 UL294B



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