RS2 Technologies
Access Control Solutions

MR-52-S3

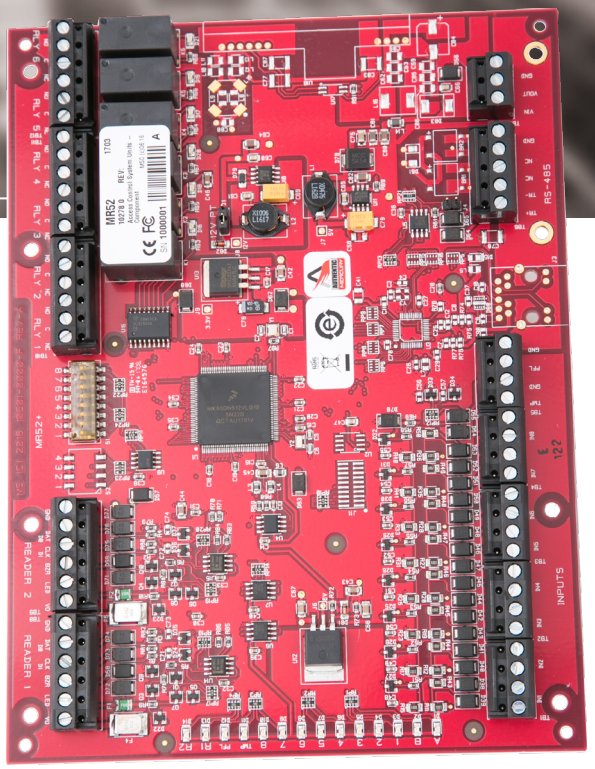
MR-52-S3 Subpanel

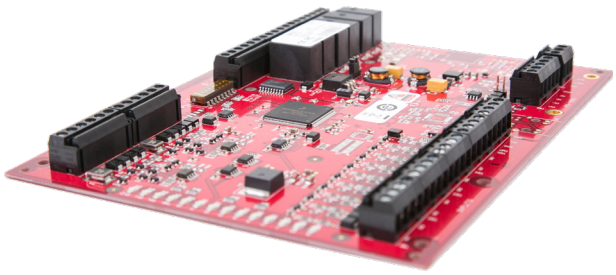
The MR-52-S3 SIO is a versatile 2 door, 4 reader subpanel. The MR-52-S3 enables simple system expansion with Mercury Controllers via RS-485 wiring. The MR-52-S3 offers an attractive expansion solution due to its versatility, reliability, and cost efficiency. The auxiliary inputs and outputs provide expanded flexibility with simplified point control and monitoring.

The MR-52-S3 is the direct replacement to the Series 2 MR-52 and uses the identical footprint and interface as the Series 2 MR-52. This allows panels to seamlessly be upgraded in existing deployments. Panels upgraded from Series 2 to Series 3 will not require any software reprogramming. The commitment to interoperability simplifies the steps to upgrade software and prevents issues in the field. The Series 3 subpanels maintain compatibility with older EP Series controllers and SCP models.

The MR-52-S3 supports a variety of reader technologies including Wiegand, F/2F, and OSDP with Secure Channel. Using OSDP Multi-drop technology allows 2 readers to me attached to a single reader port. The layout of the board provides flexibility with 4 auxiliary inputs and 4 auxiliary outputs allowing for a variety of security devices to easily connected. The auxiliary components are programmable for simplified automation and programmable supervised inputs provide an additional layer of security.

The Mercury Security platform continues to focus on data security. The MR-52-S3 subpanel supports secure communication between the controller board and the MR-52-S3 using AES-128/256 encryption over the RS-485 bus communications ensuring that data in transit remains secure. Onboard, the MR-52-S3 contains an embedded cryptographic memory chip. This memory chip stores important data, such as communication encryption keys, in a secure location ensuring data remains secure while at rest.





The MR-52-S3 is a popular SIO choice due to its versatility and cost-efficient nature. The MR-52-S3 can control two doors and the auxiliary inputs and outputs provide a simple framework to integrate devices and automate behavior.

The MR-52-S3 includes these features:

- Controls up to 2 doors with all needed I/O
- 2-reader IN/OUT door configuration on a single reader port using OSDP communication
- Reader communication support for OSDP 2 with Secure Channel
- 4 auxiliary inputs and 4 auxiliary outputs
- Programmable supervised input End-Of-Line resistance
- SCP communication secured using TLS 1.2 and AES-128/256 bit data encryption
- Simple dip switch device addressing addressable between addresses 0-31
- Identical footprint and interface as the Series 2 MR-52 allowing for a seamless transition from Series 2 to Series 3
- Embedded cryptographic memory chip ensures all local data remains secured while at rest
- Outputs can be configured for fail-safe or fail-secure operations
- Alarm keypad support
- HSPD-12/FIPS201 Compliant
- UL294 Recognized, CE Compliant, RoHS

Platinum Elite MERCURY

CE

RoHS compliant

RS2® Technologies

RS2 Technologies has constructed an integrated family of access management software and hardware that can be configured to provide a cost-effective solution for very small to very large systems. The LP series of hardware relies on open architecture to maximize freedom for users, control costs, and allow for interoperability via integration to provide the most complete solution from a platform trusted worldwide.

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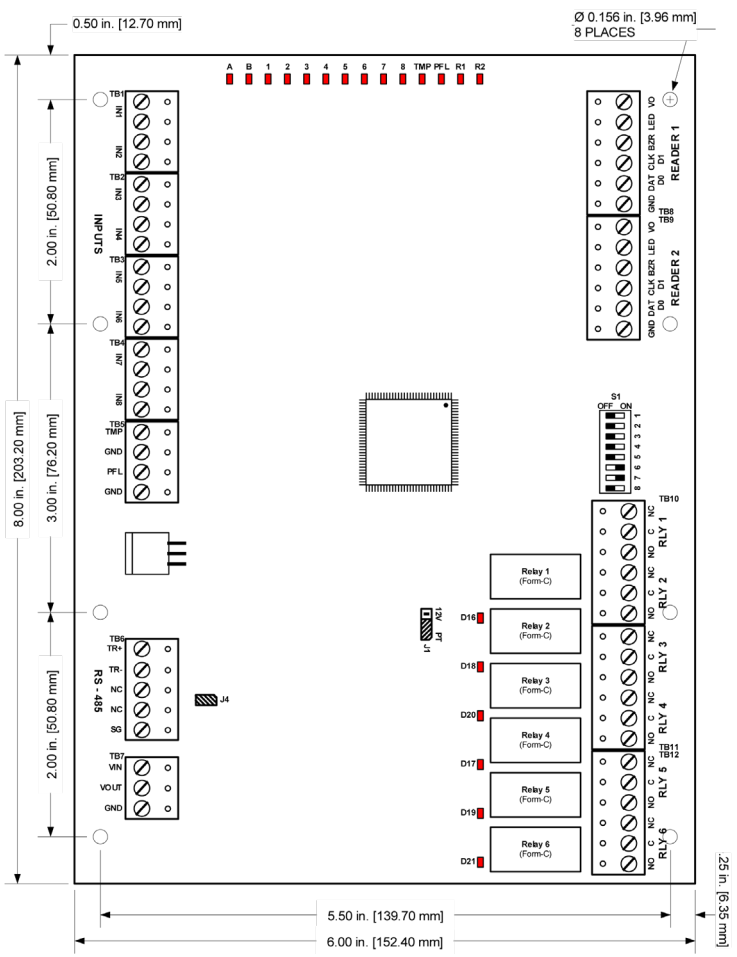
MR-52-S3

Technical Specifications	
Access Configurations	
MR-52-S3 Configuration	Supports 2 Doors, 4 Readers Uses 1 SIO Address Valid Between 0-31
Power	
Primary Power	12 to 24 Vdc +/- 10% 550 mA maximum
Reader Power	Pass-through or 12 Vdc regulated 300 mA maximum per reader
Communication	
SIO Communication	RS-485 2-Wire AES-128/256 Encryption Addressable between addresses 0-31



Technical Specifications	
Panel Specifications	
Inputs	2 Unsupervised/Supervised Door Contact 2 Unsupervised/Supervised Request to Exit 1 Unsupervised Cabinet Tamper 1 Unsupervised Power Monitor 4 Unsupervised/Supervised Auxiliary Programmable Supervised End-of-Line Resistance Values
Outputs	2 Door Strike Form-C Contact NC 3 A @ 30 Vdc, resistive NO 5 A @ 30 Vdc, resistive 4 Auxiliary Form-C Contact NC 3 A @ 30 Vdc, resistive NO 5 A @ 30 Vdc, resistive
Readers	2 Reader Ports 4 Readers Maximum using OSDP IN/OUT Mode OSDP with Secure Channel, Wiegand, Keypads, Biometric Readers, Clock and Data, Magnetic Stripe, F/2F
Cabling	
Power & Relays	1 Twisted Pair - 18 to 16 AWG
F/2F	4-Conductor, 18 AWG, 500 Foot Maximum
Magstripe and Wiegand(TTL)	6-Conductor, 18 AWG, 500 Foot Maximum
OSDP RS-485	1 Twisted Pair, Shielded, 120 Ohm Impedance, 24 AWG, 2,000 Foot Maximum
SIO RS-485	1 Twisted Pair with Drain Wire and Shield, 120 Ohm Impedance, 24 AWG, 4,000 Foot Maximum
Physical Specifications	
Dimensions	6 in. (152mm) W x 8 in. (203 mm) L x 1 in. (25 mm)
Humidity	5 to 85% RHNC
Temperature	-55 to +85 °C Storage 0 to +49 °C Operating
Weight	11 oz

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