

MR-50-S3

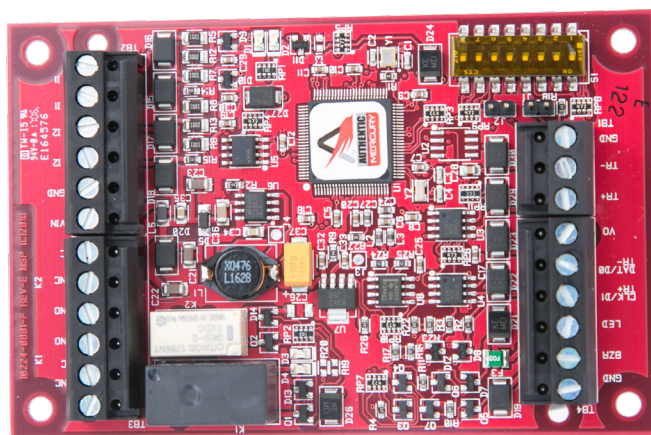
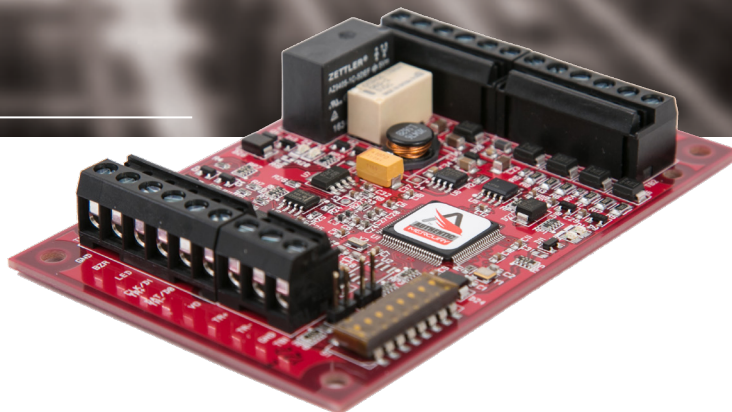
MR-50-S3 Subpanel

The MR-50 SIO is a reliable interface component for a single door. The MR-50-S3 will interface one card reader, associated door hardware, and one general-purpose control relay. Its compact 2.75" x 4.25" (70 mm x 108 mm) size makes it ideal for applications requiring installation at or near the door it is controlling.

The MR-50-S3's reader port supports magnetic stripe, Wiegand, OSDP (Open Supervised Device Protocol) with Secure Channel, and proximity card readers. Hardware interface and card format settings are loaded through software commands. Inputs support normally open, normally closed, supervised, and non-supervised circuits. EOL (end-of-line) resistance values are configurable.

The relays can be configured for fail-safe or fail-secure operation. The secondary relay can be assigned to general purpose I/O. With its compact footprint and RS-485 connectivity, the MR-50 can be clustered or distributed to best suit the installation environment.

The Mercury Security platform continues to focus on data security. The MR-50-S3 subpanel supports secure communication between the controller board and the MR-50-S3 using AES-128/256 encryption over the RS-485 bus communications ensuring that data in transit remains secure. Onboard, the MR-50-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-50 is a single door SIO dedicated to an individual door and provides all the needed I/O for a single door.



The MR-50-S3 includes these features:

- Controls 1 door with all needed I/O
- 2-reader IN/OUT door configuration on a single reader port using OSDP communication
- 1 programmable auxiliary output
- Identical footprint and interface as the Series 2 MR-50 allowing for a seamless transition from Series 2 to Series 3
- Reader communication support for OSDP 2 with Secure Channel
- Simple dip switch device addressing addressable between addresses 0-31
- SCP communication secured using TLS 1.1/1.2 or AES-128/256 bit data encryption
- Embedded cryptographic memory chip ensures all local data remains secured while at rest
- Output can be configured for fail-safe or fail-secure operations
- Alarm keypad support
- HSPD-12/FIPS201 Compliant
- UL294 Recognized, CE Compliant, RoHS



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.

MR-50-S3

| Technical Specifications | |
|-------------------------------|---|
| Access Configurations | |
| MR-50-S3 Configuration | Supports 1 Doors, 2 Readers Uses 1 SIO Address Valid Between 0-31 |
| Power | |
| Primary Power | 12 to 24 Vdc +/- 10% 150 mA maximum |
| Reader Power | Input Voltage Pass-Through |
| Communication | |
| SIO Communication | RS-485 2-Wire AES-128/256 Encryption |
| Panel Specifications | |
| Inputs | 1 Unsupervised/Supervised Door Contact 1 Unsupervised/Supervised Request to Exit 1 Unsupervised Cabinet Tamper Programmable Supervised End-of-Line Resistance Values |
| Outputs | 1 Door Strike Form-C Contact NC 3 A @ 30 Vdc, resistive NO 5 A @ 30 Vdc, resistive 1 Auxiliary Form-C Contact 2 A @ 30 Vdc, resistive |
| Readers | 1 Reader Ports 2 Readers Maximum using OSDP IN/OUT Mode OSDP with Secure Channel, Wiegand, Keypads, Biometric Readers, Clock and Data, Magnetic Stripe, F/2F |

| Technical Specifications | |
|-----------------------------------|--|
| 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 | 4.25 in. (108 mm) W x 2.75 in. (70 mm) L x 1 in. (25 mm) |
| Humidity | 5 to 95% RHNC |
| Temperature | -55 to +85 °C Storage -40 to +75 °C Operating |
| Weight | 4 oz |

