

RS2 Technologies

a family of access management hardware solutions

MR-50



The MR-50 is a cost-effective, high-performance single reader I/O module.

The MR-50 includes these features:

- Support for up to 8 different card formats/technologies, as well as keypads, integrated keypad readers, and biometric readers
- Universal I/O device characterization
- Hardware interface and card format settings are loaded through software commands
- Inputs and relays assignable to door-related functions or general purpose I/O
- Relays can be configured for fail-safe or fail-secure operation
- 2-wire RS-485 serial communications
- Supervised or unsupervised inputs
- Up to 8 facility codes may be active in each unit
- AES 128-bit data encryption
- UL, CE, RoHS, HSPD12/FIPS201

RS2 Technologies has developed an integrated family of access management hardware that can be configured to meet a wide variety of applications. The RS2 family includes a selection of field Input/Output (I/O) Card Reader Modules that adds functionality and flexibility to the System Control Processor line. RS2 I/O Modules include the MR-50 single-reader model, the MR-51E network-capable, PoE (Power-over-Ethernet)-enabled single-or-paired-reader model, and the MR-52 dual-reader model. All three models pass access request and status change information to an SCP for processing. Data and activities from selected system devices pass from other devices in the network, generating actions and activities as they transpire, independent of the host computer. When not connected to an SCP, the units are capable of locally processing access requests based on facility code verification.

MR-50 (Single-Reader I/O Module)

The MR-50 will interface one card reader and 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. Up to eight facility codes may be active in each MR-50.

The MR-50's reader port supports magnetic stripe, Wiegand, OSDP (Open Supervised Device Protocol) and proximity card readers, as well as keypads and integrated keypad 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.

Application Note

The MR-50 is a versatile, reliable interface component for a single door. With its compact footprint and RS-485 connectivity, the MR-50 can be clustered or distributed to best suit the installation environment.



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Technical Specifications

Primary Power:

12-24 VDC +/- 10%, 150 mA maximum
 12 VDC @ 110 mA nominal
 24 VDC @ 60 mA nominal

Communication:

RS-485, 2-wire, 4,000' (1,200 m), twisted pair

Reader Ports:

1 reader port

Power:

Input voltage pass-through

LED:

2-wire, or 1-wire bi-color LED support

Buzzer:

Only with 1-wire LED

Inputs:

2 general purpose: programmable circuit type
 1 dedicated: tamper

Output Relays:

Relay 1: Form C, 5 A 28 VDC
 Relay 2: Form C, 1 A, 28 VDC

Dimensions:

2.75" x 4.25" x 1.0"
 (70 mm x 108 mm x 25 mm)

Temperature:

-40° to +75°C operational, -55° to +85°C storage

Humidity:

0% to 95% RHNC

Standards:

UL 294, CE, RoHS

For more information, please contact:

