

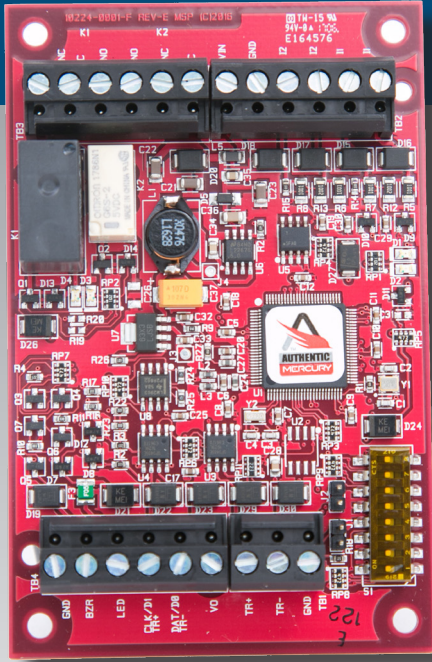
Series 3

# MR50

Serial I/O

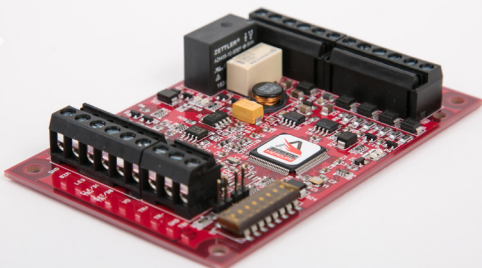
Single Card Reader Interface

**IMRON**  
CORPORATION



## 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
- **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 IMRON MR-Series 3** Serial Input/ Output (SIO) modules enable system expansion of the IMRON Intelligent Controllers as part of the 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 Authentic Mercury open platform, Series 3 modules provide the necessary flexibility and hardware configuration.

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-S3 connects one card reader, two general-purpose input monitor points and two control relays for access control and security monitoring through an IMRON intelligent controller. With two-wire RS-485 connectivity, the MR50-S3 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 IMRON's IS2000 solutions.

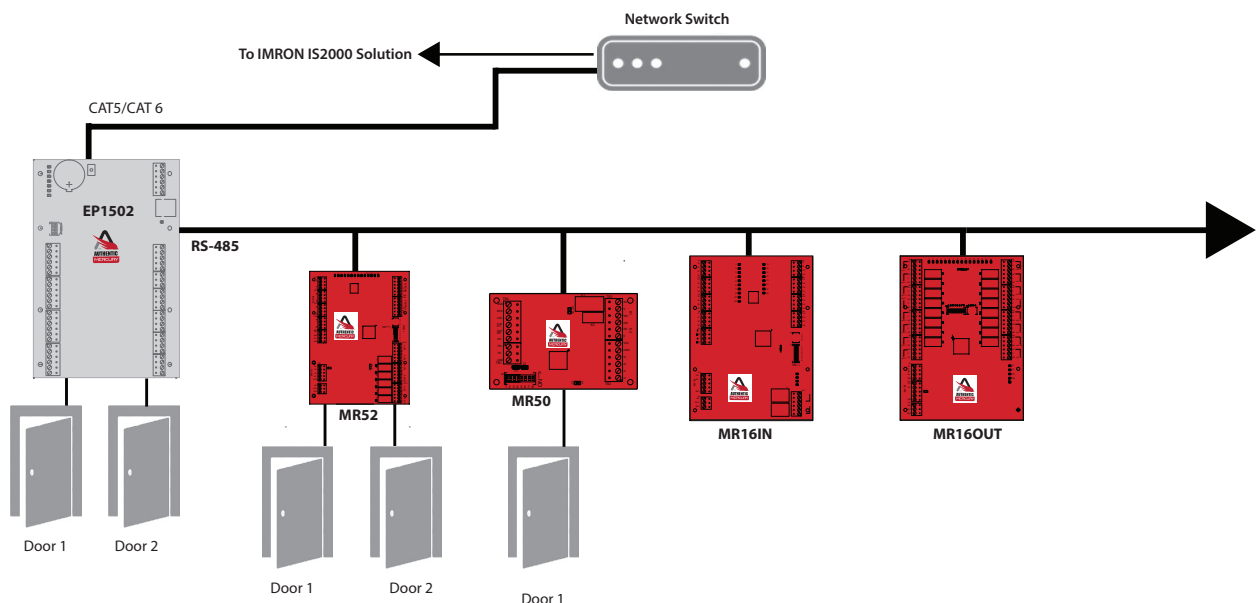
The MR50 Series 3 is the latest generation door interface module providing an open architecture solution.

### 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 IMRON intelligent controller, the MR50-S3 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-S3 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-S3.

Specifications	
<b>Primary Power</b>	12-24 Vdc +/- 10%, 150mA maximum
<b>Host Communication</b>	RS-485, 2-wire, 4,000' (twisted pair with shield, Belden 9841)
<b>Reader Port</b>	1 Reader Port*
<b>Card/Keypad Data</b>	OSDP, Clock/Data, Data-1/Data-0, RS-485 or F/2F
<b>Keypad</b>	8-bit Mercury, 8-bit Dorado/HID, 4-bit HID
<b>Reader Power</b>	Input voltage pass-through
<b>LED</b>	One-wire bi-color LED or two-wire LED
<b>Buzzer</b>	Only with 'one-wire' LED
<b>Inputs</b>	2 General Purpose: Programmable circuit type 1 Dedicated: Tamper
<b>Output Relays</b>	Relay 1: Normally open contact (NO): 5A @ 30 Vdc resistive Normally closed contact (NC): 3A @ 30 Vdc resistive Relay 2: 2A @ 30 Vdc resistive
<b>Dimensions</b>	2.75" L x 4.25" W x 1.0" H, (70mm L x 108mm W x 25.4mm H)
<b>Temperature</b>	-40-75 °C operational, -55-85 °C storage
<b>Humidity</b>	5 to 95% RHNC
<b>Standards</b>	UL 294 recognized, CE compliant, RoHS, FCC Part 15 Subpart B



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.**