

Series 3 - MR50 Serial I/O Single Card Reader Interface panel

The Avigilon™ Access Control Manager (ACM)™ system supports open field hardware from Mercury Security allowing organizations to leverage investments in non-proprietary field hardware, with retrofit programs available for industry standard door hardware and card readers, including contact/contactless smart card, proximity, magnetic stripe and barcode.





The Mercury Security
AC-MER-CONT-MR50
Series 3 from Avigilon
is an enhanced, high
performance, reliable
single card reader
interface panel that
offers all the I/O needed

for managing a single controlled opening with the Access Control Manager system. It offers an improved processor and increased memory with an embedded crypto memory chip for encryption support – enabling organizations to stay ahead of internal and external threats to achieve data security.

Each AC-MER-CONT-MR50 will interface one card reader, two general purpose input monitor points and two control relays to provide access control and security monitoring through the AC-MER-CONT-1DR, AC-MER-CONT-2DR or the ACMER-CONT-64DR intelligent controllers. The result is the flexibility, versatility and reliability required for demanding access control solutions.

The Access Control Manager system and Mercury Security Series 3 open field hardware provides the ultimate platform to complete the Avigilon physical access control security solution. **Open Architecture:** High performance, reliable platform enables use of Mercury hardware with the Access Control Manager system

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

KEY FEATURES

AES 128/256 bit data encryption for optimal data protection

Compact footprint and RS-485 connectivity

12 or 24 V DC input power support

Interfaces with a wide array of reader technologies including Wiegand, clock and data, magnetic stripe and keypads

Supports being clustered or distributed to best suit the installation environment

Inputs and the output relays support assignment to door related functions or to general purpose I/O

Inputs support normally open, normally closed, supervised and non-supervised circuits

Output relays are configurable for fail-safe or fail secure operation





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-secure operation.

When connected to an authentic 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

TECHNICAL 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	-40-75 °C operational, -55-85 °C storage
Humidity	5 to 95% RHNC
Standards	UL 294 recognized, CE compliant, RoHS, FCC Part 15 Subpart B

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

ORDERING INFORMATION

AC-MER-CONT-MR50	Reader Interface Module - (1 reader: mag or wiegand, 2 inputs, 2 relays) (Mercury Part Number: MR50-S3)
AC-IVILK-CONT-IVIK30	Reduct interface Module - (Treduct. Mag of Wiegard, 2 Inputs, 2 relays) (Mercury Fart Number. MK50-55)

