# GE Security

## Access Control M Controller Series

### Overview

The M5/M3000 20 DI (Digital Input), 16 DO (Digital Output) and 16 DOR (Digital Output with Relays) option cards provide a costeffective and convenient interface between the GE access control system and its input and output devices.

M5/M3000 options plug into the backplane. Each option has pluggable edge connectors which make field installation and maintenance quick and easy.

### Standard Features

- Compatible with Facility Commander<sup>®</sup> Wnx, Picture Perfect<sup>™</sup> and Secure Perfect<sup>®</sup> Integrated Security Management Platforms
- Compatible with all M5 and M3000 microcontrollers
- Options plug into the backplane for quick installation
- Screw-terminal connectors eliminate field wiring problems

### **PXNplus CPU Support**

A maximum of four 20 DI, either four 16 DO or four 16 DOR options can be configured into the available card slots in the M5 or M3000. These input and output points are in addition to those provided on the 2RP, 2SRP and 8RP reader processors.

### Supervised DI Points

The 20 DI option has full four-state supervision on all digital input points, providing the means to remotely sense line condition. Supervised states are closed, open, line short and line open.

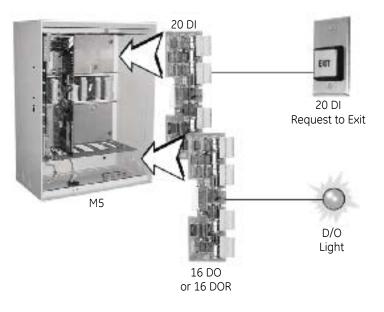
### Economical

System input and output devices can be located up to 1,000 feet from the related microcontroller. This reduces installation costs, as microcontrollers do not have to be near the monitoring device.

### Flexible DO Devices

The 16 DO and 16 DOR options make it possible to incorporate a complete range of output devices into an access control system. The 16 DO may be used to drive low-current or isolated devices or to drive low-current devices directly. Alternatively, an external relay may be used for higher-current devices. The 16 DOR includes integral relays, each of which can switch up to two amps at 40 VDC. Each card uses auto-reset fuses to protect the electronics from short circuits that may occur during installation.

# I/O Processors M5/M3000 Options: 20 DI, 16 DO, 16 DOR





# GE Security

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Specifications subject to change without notice.

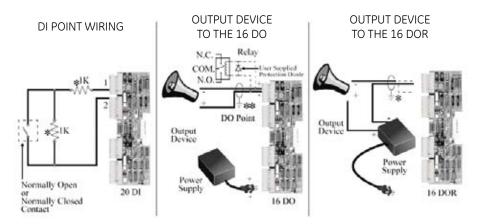
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### Product Content

The 20 DI option board includes the 20 DI board, pluggable screw-terminal connectors and 40 1000 ohm supervision resistors.

The 16 DO and 16 DOR options include the 16 DO or 16 DOR option board and pluggable screw-terminal connectors.

## Configuration



### Specifications

### Configuration

- DI point supervision resistors should be installed as close as possible to the point being supervised
- 16 DO has 16 transistor switches, each able to switch .04A @ 24 VDC
- 16 DOR has 16 2A @ 40 VDC/30 VAC relays on board
- 20 DI and 16 DO wiring, 22 AWG shielded, stranded recommended
- 16 DOR wiring, 12 to 22 AWG shielded, stranded recommended

### Ordering Information

110072003	20 DI M5 Option, 1K supervision resistors included
110071001	16 DO M5 Option, 16 transistor switches, .04A @ 24 VDC (max.)
110078001	16 DOR M5 Option, 16 relays, 2A @ 40 VDC or 30 VAC (max.)

### Notes

An installer-supplied protection diode, IN4002, IN4003 or IN4004, is required for each external relay. An installer-supplied 5 VDC to 24 VDC power supply is required to drive the 16 DO external relays and attached devices.

