



MX iCLASS Card Reader

Overview

The Matrix Systems MX iCLASS card reader has everything needed to handle your most demanding access control and security applications. Built-in security features. Application flexibility. Compact, rugged construction. With the MX iCLASS, your organization's doors, gates, turnstiles, and elevators can all be easily controlled and monitored. Plus its microprocessor-based, CMOS-programmable microcontroller provides reliable power and intelligence, all in one small package.

Support for multiple formats

The flexible MX iCLASS reads all HID iCLASS card formats, including 26-bit and 37-bit proximity cards, dual-technology cards, and key fobs. The reader displays the prompt, PRESENT CARD, to indicate proximity operation. Access control can be enhanced with the use of personal identification numbers (PINs), "two badge" rules, anti-passback, and other special controls.

Flexible keypad and display

Every MX iCLASS features an easy-to-use, 16-position keypad plus a 32-character, LED-backlit liquid crystal display that can be adjusted to suit any lighting condition. The handy telephone-style layout of the MX iCLASS supports silent duress alarm, permits arm/disarm of security zones, and allows for PIN and keypad entry. Other standard features include:

- PIN entry to provide an additional line of security
- Operation prompts (PRESENT CARD) to allow easy unassisted operation
- Door status indicators (LOCKED or UNLOCKED) to minimize errors and protect occupants
- Modification and display of zone status (ARMED or DISARMED) to simplify operation
- Display of custom messages and prompts, which contribute to improved communications



Highlights

- **Convenient telephone-style layout supports all key security functions needed**
- **Close-in reading range and high-speed communications system allow authorized personnel to pass quickly through secure areas**
- **Support for industry access control standards, including UL 294 and UL 1076, provides critical security assurance**
- **Clear audible and visual feedback plus compatibility with many card formats make the MX iCLASS a snap to use**
- **Adjustable-contrast display adapts to any lighting condition, including bright office areas**
- **Durable construction allows for easy use in both indoor and outdoor environments**

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Easy to install and use

Designed for a five-conductor plug and cable, the Matrix card readers connect easily to the Matrix Reader Control Module (RCM) as part of a total access control system. The keypad and display are used during installation to set the reader address and define which door and which side of the door is being controlled. The RCM can control up to two doors, with one or two readers per door (IN and OUT). With Matrix high-speed communications, plus a nominal card reading range of up to 4 inches (with the MXProx2 and MX iCLASS) or high-coercivity badge encoding (MX2), these card readers get authorized personnel in and out of secure areas quickly and easily.

Adaptable to any environment

The rugged, tamper-resistant construction and weather-resistant finish of each Matrix card reader makes it an ideal choice for the harshest outdoor environment, while still being equally suitable for indoor mounting. Each card reader has high-impact, ABS plastic construction, a sealed membrane keypad, a built-in tamper switch, and high-security mounting screws with a 2-gang switchbox mounting.

Specifications

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|---------------------------|---|
| Physical | Dimensions: 4.6" (116.8 mm) width x 4.6" (116.8 mm) height x 1.5" (38.1 mm) depth Weight: 15 oz (425.25 g) ABS plastic construction; steel backplate |
| Keypad | 16-position alphanumeric telephone-style keypad Silver/mylar membrane switch |
| Display | Back-lit 32-character display Character size: 2.95 mm width x 3.80 mm height (5 x 7 dots) LCD contrast adjustable through keypad |
| Environmental | Temperature: -35°C (-31°F) to +66°C (151°F); U.L. 294 Humidity: 0% to 100% |
| Input voltage | 12 VDC nominal at 100 mA from RCM |
| Communications | 9600 baud RS-485 communications to RCM |
| Electronics | Main electronic circuit board contains a single CMOS programmable microcontroller Connects to reader through a five-position pluggable connector for the following: +data, - data, power ground, +12VDC, earth ground |
| Transmit frequency | 13.56 MHz |
| Read time | 140 mS |
| Read range | 2" to 4" |
| Error checking | Parity and longitudinal redundancy check (LRC) |
| Installation and mounting | Mounts on 2-gang switchbox surface mounting box Weather hood and turnstile or parking pedestal options available where required |
| Warranty | One year from date of installation Return-to-factory standard Other levels of warranty available as options |



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