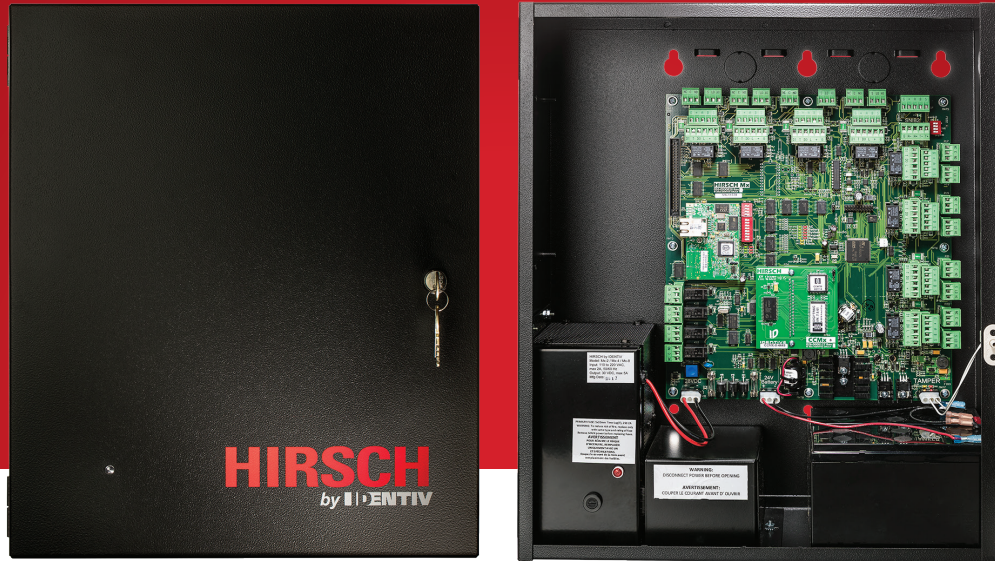




Hirsch Mx Controller

High-Security Access Control



Award-winning controllers provide scalable, networked communication.

Hirsch Mx Controllers are available in 2, 4, and 8-door models, with each door being fully supervised. The modular design and the scalable architecture of the Mx Controller enables an installation to start small and expand as needed, from a single controller system to a larger, multi-site enterprise.

The Mx Controller is fully firmware, function, and communication protocol compatible to Identiv's DIGI*TRAC line of controllers. The Mx Controller is designed to seamlessly integrate with existing systems, so that existing credentials, readers, and user databases can be retained. The Mx Controller is the core of Identiv's physical access control

system (PACS), and is designed for use with Identiv's Hirsch Velocity™ Software security management system, uTrust TS Readers, Hirsch ScramblePad®, ScrambleProx®, ScrambleSmartProx®, and secure keypads.

A range of models and expansion options in the Mx and DIGI*TRAC product lines provide a variety of access control, high-security alarm monitoring, relay control outputs, and programmable logic configurations to fit most applications.

With the Mx Controller at its core, Identiv's PACS provides a high-integrity, enterprise-class access control and security management solution.

High-Security Features

- Fully supervised Mx-2, Mx-4, and Mx-8 multi-door panels
- Integrated network communication
- Designed for use with Hirsch Velocity Software
- Scalable from a single controller to a networked multi-site/multi-campus installation
- Firmware upgrade via Velocity
- Support for uTrust TS Readers, Hirsch ScramblePad, and MATCH2 reader interfaces
- Onboard MATCH for connecting standard Wiegand readers
- Multi-microprocessor architecture
- Wiegand and MATCH2

Award-Winning Access Control

As an access control system, the Mx Controller includes extensive onboard firmware for control sequences as basic as “who goes where and when” to sophisticated functions like the two-person rule, occupancy counting, individual user tagging, door interlocking, and anti-passback. Full functionality is maintained even when Hirsch Velocity is not available (i.e., during a network outage). Access may be restricted based on time of day, day of week, and door. Access may be granted when the user presents the correct PIN code, card, or both. The user may be granted temporary access based on: use count limits, temporary day limits, and absentee rule limits, with auto-disable or auto-delete on expiration of temporary users.

Additional functions include unlock/relock, alarm mask/unmask, and lock down/lock down release. The associated door may be monitored for door forced open and door open too long, while providing auto relock control. While the standard Mx Controller has an extensive array of options, there are many custom features that are available through Identiv Global Services. These options range from integration with time and attendance systems to Active Velocity and Active Directory

Readers and keypads supported include uTrust TS Readers, Hirsch ScramblePad, ScrambleProx, ScrambleSmartProx, and many other technologies, including magnetic stripe, smart card (i.e., DESFire, MIFARE, PIV, or PIV-I), proximity, bar code, RF, IR, and biometric. Technologies may be combined on the same controller or the same door in many different combinations.

High Security Input Monitoring

Identiv uses very stable digitally processed analog inputs with line supervision for high-security input monitoring. A line supervision module is located at the door contact, alarm sensor, request to exit (RQE/REX), or similar device to establish this supervision. Conditions reported include alarm, secure, RQE, mask, tamper alarm, tamper secure, short, open, noisy, and input-out-of-spec. This provides significant advantages over traditional error-prone, environment sensitive analog wiring back to controllers.

Relay Control System

Relay outputs on Mx Controllers can be used for electric door locks and strikes, arming/disarming security systems, alarm annunciation, elevator floor control, HVAC control, lighting control, storage locker control, and many other equipment control applications. These relays may be activated by codes (via the ScramblePad family), cards (via reader), time zones, alarms, or logic sequences linked to other relays. Mx Controllers are also ideal for after-hours tenant override systems. A history of who issued the override command is available for audit trails. The same reader or keypad used for access control can be used for tenant override and remote operator command functions.

Reliability by Design

Mx Controllers are designed for high availability as a complete system for global markets. Standby batteries for both memory and system operation are standard. The controller ships with an internal switching power supply. All door relays are socketed and replaceable. All keypad/reader terminals and power circuits are fused and are onboard resettable. Each unit is configured in a heavy duty, NEMA style enclosure, with lock and tamper alarm.

Specifications

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| Serial Interface Ports | Controller to controller: <ul style="list-style-type: none"> • RS-485 multi-drop protocol • Optically isolated port • Up to 4,000 ft (1,200 m) with 22 gauge, 2 pair, stranded, twisted, and shielded Controller to server: <ul style="list-style-type: none"> • 10/100 Ethernet (TCP/IP) • Encrypted communication |
| MATCH Protocol | 24V DC nominal |
| Reader Support | ScramblePad/MATCH2: <ul style="list-style-type: none"> • Proprietary MATCH protocol • Keypad/reader ports: 8 with 16 device addresses (8 entry and 8 exit) • Maximum wiring run: 750 ft (230 m) with 22 gauge or 1,800 ft (550 m) with 18 gauge, 2 pair, stranded, twisted, overall shield Onboard MATCH: <ul style="list-style-type: none"> • Industry standard Wiegand • Keypad/reader port: 8 using Mx device address 1 - 8 • Maximum wiring run: 500 ft (150 m) with 18 gauge, 2 pair, stranded, twisted, overall shield |
| Industry Standard Wiegand Devices | Wiegand on-board interface communicates to standard Wiegand readers |
| Command and Control Module (CCMx) | <ul style="list-style-type: none"> • Removable and upgradeable • CCM upgrades through Velocity • CCM updates all microprocessors (including onboard MATCH) • Time zones: 150 • Door groups: 128 • Control zones: 256 • Holiday schedules: 4 (366 days x 2 years) • Daylight savings time adjustment |
| Buffers | <ul style="list-style-type: none"> • Standard: 1,500 events and 1,500 alarms • MEB/CB128 (reduces users by 20%) or MEB/BE: 20,000 events and 2,000 alarms • If buffer is full, oldest information is discarded first |
| Users | <ul style="list-style-type: none"> • Standard: 4,000 • MEB/CB128: 132,000 |
| Memory Protection Battery | 30 days for code, setups, clock, and buffers |
| Security | <ul style="list-style-type: none"> • Enclosure door tamper switch • Key lock |
| Enclosure | NEMA type with conduit knockouts and removable door |
| Dimensions | 18 x 15.25 x 5.5 in (457 x 387 x 140 mm) |

Specifications

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| Weight | 30 lbs (13.6 kg) |
| Expansion Boards | 6 x 4.25 x 0.75 in (152 x 108 x 19 mm) and 1.0 lb (0.45 kg) |
| Operating Temperature Range | 32° to 140°F (0° to 60°C) |
| Relative Humidity | 0 to 90%, non-condensing |
| Keypad/Reader Power (8 Terminals) | <ul style="list-style-type: none"> • 1.0 Amp at 24VDC each, fused and resettable • 2.9 Amp at 24VDC each • Powers ScramblePads and MATCH2 |
| Wiegand Keypad/Reader (8 Terminals) | <ul style="list-style-type: none"> • 500 mA at 12VDC each, fused and resettable • 2.0 Amp at 12VDC total • Powers standard PACS readers |
| Power Supply | <ul style="list-style-type: none"> • Switching • 110 - 240 VAC, 50/60, fused |
| Standby Batteries | 7 Ah included with Mx-4 and Mx-8 1.3 Ah included with Mx-2 |
| Door Relays | 5 Amp, form C |
| Alarm Relays | 2 Amp, form C |

Ordering Information for Mx Controllers

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| <p>Model Mx-2 controller, for up to 2 doors Part Number: MX-2</p> | <p>Controls 2 Supervised Doors. 4,000 Users. Includes 2 door relays, 2 Alarm Inputs (requires Line Modules), enclosure, power supply, battery, tamper switch, key lock, and integrated SNIB2. Supports Expansion Boards. 110-240 VAC.</p> |
| <p>Model Mx-4 controller, for up to 4 doors Part Number: MX-4</p> | <p>Controls 4 Supervised Doors. 4,000 Users. Includes 4 door relays, 4 Alarm Inputs (requires Line Modules), enclosure, power supply, battery, tamper switch, key lock, and integrated SNIB2. Supports Expansion Boards. 110-240 VAC.</p> |
| <p>Model Mx-8 controller, for up to 8 doors Part Number: MX-8</p> | <p>Controls 8 Supervised Doors. 4,000 Users. Includes 8 door relays, 8 Alarm Inputs (requires Line Modules), enclosure, power supply, battery, tamper switch, key lock, and integrated SNIB2. Supports Expansion Boards. 110-240 VAC.</p> |

Ordering Information for Expansion Boards

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| <p>AEB8 Alarm Expansion Board with 8 Inputs</p> | <p>Adds eight (8) additional high security alarm inputs. Velocity supports up to four (4) AEB8's. Each input requires an appropriate Line Module. Features removable connectors.</p> |
| <p>REB8 Relay Expansion Board with 8 Relays</p> | <p>Adds additional two (2) Amp Form C relays. Up to five (5) REB8s per controller. Status LEDs and removable connectors</p> |
| <p>MEB/BE Memory Expansion Board – Buffer Expansion</p> | <p>Expands standard buffer from 1,500 events and 1,500 alarms to 20,000 events and 2,000 alarms. Protected from data loss during power failures for up to 30 days by controller memory battery.</p> |
| <p>MEB/C64 Memory Expansion Board – CODE Expansion of 64,000</p> | <p>Expands CODE Memory by 64,000 (from 4,000 to 68,000) with CCM 7.X on Velocity. A portion of the Code Memory may be allocated to alarm and event buffers on Velocity only. Protected from data loss during power failures for up to 30 days by controller memory battery.</p> |
| <p>MEB/CB128 Memory Expansion Board – CODE Expansion of 128,000 with Buffer Option</p> | <p>Expands CODE Memory by 128,000 (from 4,000 to 132,000) credentials. A portion of the Code Memory may be allocated to alarm and event buffers, which will reduce the number of users. Protected from data loss during power failures for up to 30 days by controller memory battery. (Limited Availability. Use MEB/CB64 or MEB/CB128.)</p> |