Honeywell | Integrated Security

PW-M Series Modular Access Control System

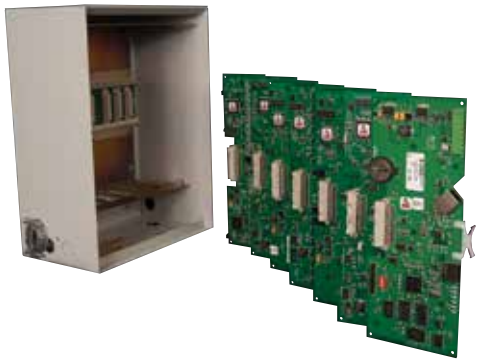
Intelligent Controllers

The PW-M Series Modular Control System is an advanced access control hardware architecture capable of providing solutions for large enterprise applications. The PWM5 boards feature a plug and play format that makes Casi upgrades a “screwdriverless” change over. This solution combines the flexibility and capabilities of Pro-Watch® with the power of the PWM5IC with its 32-bit architecture, TCP/IP support, flash memory, large local cardholder database, and large reader and I/O module support.

Pro-Watch handles system configuration, alarm/event monitoring and operation of the Intelligent Controller via TCP/IP. In the event of a communication break the Intelligent Controller is fully capable of operating off-line, making access control decisions independently of Pro-Watch. Connectivity to the host computer is accomplished via TCP/IP network connection.

The PWM5IC Intelligent Controller is a direct replacement for the Casi PX, PXN and PXNplus CPU controller.

It supports up to 64 Readers and up to 3 separate additional Micro5 enclosures via RS485 using the PWM5COM board allowing Reader, Output and Input boards to be combined as needed to minimize cost and optimize mounting options.



The PW-M series consist of the following:

PWM5IC	*Intelligent Controller*
PWM2KIC	*M2000 Intelligent Controller*
PWM52SRP	*2 Reader Board with Supervised Inputs*
PWM52RP	*2 Reader Board*
PWM58RP	*8 Reader Board*
PWM516DO	*16 Digital Output Board*
PWM516DOR	*16 Output Board with Relays*
PWM520IN	*20 Input Board*
PWM5COM	*Communication Board*
PWM5MUX8	*M5 8-Port Multiplexer*

FEATURES

- Up to 12 intervals per time zone where each interval is a start time, stop time and day map. The day map indicates the day of the week or holiday
- 255 possible holidays are defined by starting date and duration
- Automatic calculation of leap year and Daylight Saving Time
- 19-digit (64-bit) user ID
- Support for FIPS long card numbers
- Up to eight card formats per reader
- Activation/ deactivation dates by card
- Up to 12 access levels per card or individual time zones per readers
- Up to 15-digit Personal Identification Numbers (PIN)
- Operating modes include locked, unlocked, facility code, card only, card and PIN, card or PIN, and PIN only
- Strike modes include fail-safe and fail-secure
- Entire card bit-stream reported with invalid facility code or invalid card format
- Anti-passback support – free pass and exempt flags, last area accessed, last reader accessed, time/date of last access
- Configurable as standard, entry delay latching, entry delay non-latching and exit delay
- Configurable as standard (energize to activate) or fail-safe (de-energize to activate)
- Pulse control: single pulse (up to 24 hours) or repeating pulses (on/off in 0.1 second increments, up to 255 times)

PW-M Series Modular Access Control System

SPECIFICATIONS

DATABASE

Cardholders: 600,000
Transaction storage: 50,000
Firmware: Flash programming for revision updates
Access codes: virtually unlimited
Holidays: virtually unlimited
Time codes: 255
Card reader formats: 8 per reader
Credential facility codes: 8
Elevator support: 128 floors
Dedicated alarms:
- Dedicated tamper alarm
- Dedicated power fail alarm

Real time clock:
- Geographic time zone support
- Daylight Saving Time
- Leap Year support
- 4 bit parallel accurate to 50 ppm

COMMUNICATION MODULES

Communication Ports:
- **Host Port 0:** 10/100- TX Ethernet
- **Optional alternative Port:** 10-BaseT/100Base-TX Ethernet port using a Lantronix Micro125 interface daughter board, p/n MO11AA003-01R, or equivalent
- **Peripheral interface Port 2:** 2-wire RS-485, asynchronous
- **Peripheral interface Port 3:** 2-wire RS-485, asynchronous
- **Inputs:** Two dedicated: tamper and power monitor

Connectivity:
- **Primary Port:** 10/100 Ethernet
- **IP Server, IP Client, DHCP Client**
- **HTTP, TLS, X.509**

Download functionality
- **System functional during system download:** Yes
- **System functional during credential download:** Yes

OPERATIONAL FUNCTIONALITY

Duress detection
Operational modes:
- Credential only
- PIN only
- Credential or PIN
- Credential and PIN
- Facility code only

Maximum PIN size: 15 digit
Door object support
Threat level support: 100 levels
Two person access rule
Offline modes (selectable per reader):
- Facility code access
- Locked (no access)
- Unlocked (free access)

Anti-passback support:
- While preventing access (hard)
- While allowing access (soft)

Transaction prioritization: 999 levels

READERS AND CREDENTIALS

Prox:
- OmniProx
- HID Prox
- DigiReaders
- Indala Readers

Smart:
- OmniClass
- iClass
- Mifare
- DESFire

Keypad
Magstripe
Wiegand
Casi F/2F

BOARD DIMENSIONS

PWM5IC:
10.25" L x 4.56" W x 0.8" H
(260.4 mm L x 115.8 mm W x 20.3 mm H)

PWM2KIC:
11.375" L x 8.375" W x 1.04" H*
(289.1mm L x 212.7mm W x 26.5mm H)
* without PWM5IC

PWM52SRP:
10.25" L x 3.5" W x 0.69" H
(260.35mm L x 88.9mm W x 17.5mm H)

PWM52RP:
10.25" L x 3.5" W x 0.69" H
(260.35mm L x 88.9mm W x 17.5mm H)

PWM58RP:
10.25" L x 3.5" W x 0.69" H
(260.35mm L x 88.9mm W x 17.5mm H)

PWM516DO:
10.25" L x 3.5" W x 0.69" H
(260.35mm L x 88.9mm W x 17.5mm H)

PWM516DOR:
10.25" L x 3.5" W x 0.5" H
(260.35mm L x 88.9mm W x 12.7mm H)

PWM520IN:
10.25" L x 3.5" W x 0.69" H
(260.35mm L x 88.9mm W x 17.5mm H)

PWM5COM:
10.25" L x 3.5" W x 0.6" H
(260.35mm L x 88.9mm W x 15.24mm H)

PWM5MUX8:
10.25"L x 3.5"W x 0.69"H
(260.35mm L x 88.9mm W x 17.5mm H)

ENVIRONMENT

Temperature:
32 to 158° F (0 to 70° C) operational; -67 to 185° F (-55 to 85° C) storage

Humidity:
0 to 95% RHNC

WIRE REQUIREMENTS

Power:
Twisted pair, 18 AWG

RS485:
24 AWG, 4,000' (1,200m) max, 2 twisted pairs with shield (120W, 23 pF, Belden 9842 or equiv.)

Alarm input:
Twisted pair, 30 ohms max

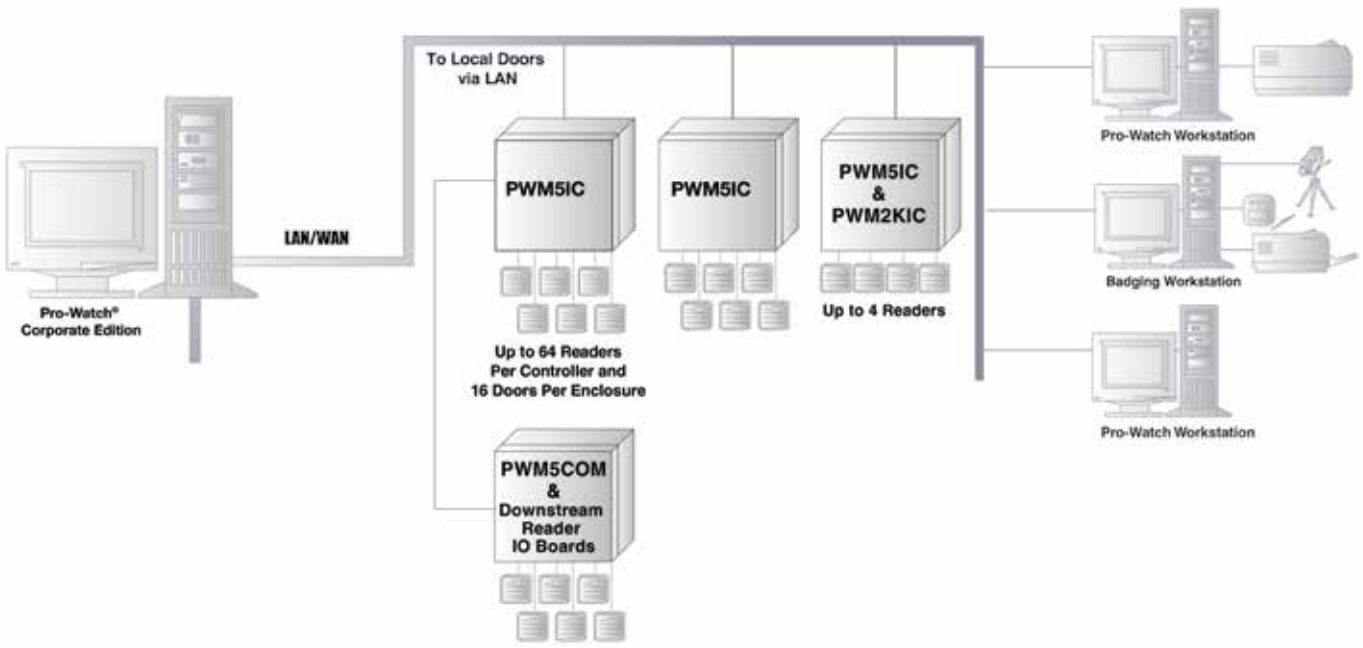
COMMUNICATIONS – BACK PLANE SUPPLIED

9600, 19200, 38400, or 115200 bps, asynchronous

BENEFITS

- True 32-bit microprocessor provides fast transaction processing for the most demanding network applications
- Modular hardware architecture provides flexibility and expansion capabilities
- Flash memory allows new versions of firmware to be downloaded from the host computer to the controller(s) through the central network
- Large, local controller database allows access control decisions to be made by controller in real time without the need to communicate to the server
- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- Seamless support for TCP/IP protocols to allow intelligent controllers to tap into a LAN or WAN connectivity
- Supports multiple reader and card formats for maximum flexibility and security options
- Supervised communication and Lithium battery backup ensures system reliability
- System offline modes customizable per reader include facility code access, locked (no access), and unlocked (full access)

PW-M Series Configuration



DESCRIPTION	CASI/GE/UTC	HONEYWELL PART NUMBER
Intelligent Controller	PX, PXN, PXN+	**PWM5IC**
Communication Board	PWR/COM	**PWM5COM**
2 Reader Board	2RP	**PWM52RP**
2 Reader Board with Supervised Inputs	2SRP	**PWM52SRP**
8 Reader Board	8RP	**PWM58RP**
16 Digital Output Board	16DO	**PWM516DO**
16 Output Board with Relays	16DOR	**PWM516DOR**
20 Input Board	20DI	**PWM520IN**

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ORDERING

PART NUMBER	DESCRIPTION
PW-M SERIES	
PWM5IC	Intelligent Controller – Capacity for up to 64 Readers
PWM2KIC	M2000 Intelligent Controller*
PWM52SRP	2 Reader Board with Supervised Inputs
PWM52RP	2 Reader Board
PWM58RP	8 Reader Board
PWM516DO	16 Digital Output Board
PWM516DOR	16 Output Board with Relays
PWM520IN	20 Input Board
PWM5COM	Communication Board
PWM5MUX8	8-port Multiplexer

*PWM5IC needed in conjunction with PWM2KIC sub-panel

For more information
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