Honeywell

PW-Series Modular Access Control System

Intelligent Controllers

The PW-Series Modular Control System is an advanced access control hardware architecture capable of providing solutions for large enterprise applications. The Intelligent Controller (PW6K1IC, PW3K1IC or PW6K1ICE) provides power and flexibility with its 32-bit architecture, TCP/IP support, flash memory, large local cardholder database, and large reader and I/O module support.

The Intelligent Controller is designed to operate off-line, making access control decisions independently from a PC or other controlling device. It can also be connected to a host computer for system configuration, alarm monitoring and direct control. Connectivity to the host computer is accomplished via direct serial communication (RS232 or RS485), dial-up modem, or TCP/IP network connection. The PW-6000 has Ethernet directly embedded and will support a second Ethernet connection.

The PW6K1IC Intelligent Controllers support any combination of up to 32 I/O or reader boards (16 for the PW3K1IC) to monitor alarm input points, relay output points and access control reader interfaces. By offering a modular design, the system can be tailored to meet a wide range of applications, while optimizing cost and mounting space.

The PW-6000 will support up to 300,000 cards and 50,000 transactions. The PW-6101 will support up to 240,000 cards and 50,000 transactions. The PW-3000 Intelligent Controller accommodates a card database of 7,800 cards and a standard transaction buffer of 5,000 transactions.

The PW-Series access modules have been designed to accommodate various mounting options. Units can be wall mounted in a high density configuration (PW5K2ENC1) when space is limited, a 19" rack configuration (PW5K2ENC2), or in a tile mount configuration (PW5K1ENC3). The PW-6000 controller utilizes a built-in Web server to configure the hardware attributes of the controller.

KEY 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 a starting date and duration
- Automatic calculation of leap year and Daylight Saving Time
- 9-digit (32-bit) user ID standard / 15-digit maximum - PW-3000, 19-digit (64-bit) user ID - PW-6000/PW-6101
- Support for FIPS long card numbers
- Activation and deactivation dates by card
- Up to 12 access levels per card or individual time zones per readers
- Up to 8-digit Personal Identification Numbers (PIN) - PW-3000, 8-digit - PW6000/PW-6101
- 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
- Up to eight card formats per reader
- 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 and 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)
- Any combination of 32 I/O or reader modules may be connected to the PW6K1IC RS485 ports. 4,000 feet / 1,250 meters total bus length per port (a max 16 I/O or reader board may connect to the PW3K1IC)
- UL294, UL1076 Listed
- AES FIPS 197 Encryption
- PW-6000 Web server for hardware configuration

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SPECIFICATIONS

Database:
- Cardholders:
  - 7,800 on PW-3000
  - 300,000 on PW-6000
  - 240,000 on PW-6101
- Transaction storage:
  - 5,000 standard, 35,000 with memory expansion on PW-3000
  - 50,000 on PW-6000/PW-6101
- Flash programming for firmware 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 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

Database values may exceed current limitations of some security management systems.

Communication Modules:
- Primary communication support:
  - RS232
  - RS485
  - Dial up modem
  - Ethernet (TCP/IP)
- Communication speed: 38.4 KBps
- Redundant communication support, automatic dial back: (PW6K1IC)
  - Dial back on alarm condition
  - Dial back on transaction buffer capacity reached
  - Dial back on primary power loss
- Download functionality:
  - System functional during system download: Yes
  - System functional during credential download: Yes

Access Modules:

PW-6000
- 2 RS485 ports supporting 32 total devices

PW-6101
- POE - Supporting 16 Single Reader Modules via ethernet (PW6K1ICE or PW6K1R1E)

PW-3000
- 2 RS485 ports supporting 16 total devices
- Access modules available:
  - Single reader module (PW5K1R1)
  - Dual reader module (PW6K1R2)
  - 16 relay output module (PW6K1OUT) (12 from the front edge)
  - 16 alarm input module (PW6K1IN)
- Module connectivity via RS485 protocol (4000')

Operational Functionality:
- Duress detection
- Operational modes:
  - Credential only
  - PIN only
  - Credential or PIN
  - Credential and PIN
  - Facility code only
- Maximum PIN size: 8 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

Reader Support:
- HID
- Indala
- OmniProx
- OmniClass
- DigiReaders
- Wiegand
- Keypads
- Ingersoll Rand AD-400 Wireless Lock Sets (PW-6000 panels only)
- Salto Sallis Wireless Readers (PW-6000 panels only)
- Assa Abloy Wireless Readers (PW-6000 Readers only)

Readers and Credentials:
- Prox:
  - OmniProx
  - HID Prox
  - DigiReaders
  - Indala Readers
- Smart:
  - OmniClass
  - iClass
  - Mifare
  - DESFire
- Keypad
- Magstripe
- Wiegand

COMMON SPECIFICATIONS

Enclosure Dimensions:
- Board: PW-3000/PW-6000 9.0" H x 5.5" W x 1.0" D (228.6 mm H x 139.7 mm W x 25.4 mm D)
- PW-6101 IC and Reader Module: 0.96" H x 5.5" W x 2.75" D (24mm H x 140mm W x 92mm D)
- PW5K2ENC1: 13.9" H x 17" W x 9" D (353.0 mm H x 431.8 mm W x 228.6 mm D)
- PW5K2ENC2: 13.9" H x 18.9" W x 9" D (353.0 mm H x 480.0 mm W x 228.6 mm D)
- PW5K1ENC3: 14" H x 16" W x 4.5" D (355.6 mm H x 406.4 mm W x 114.3 mm D)

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

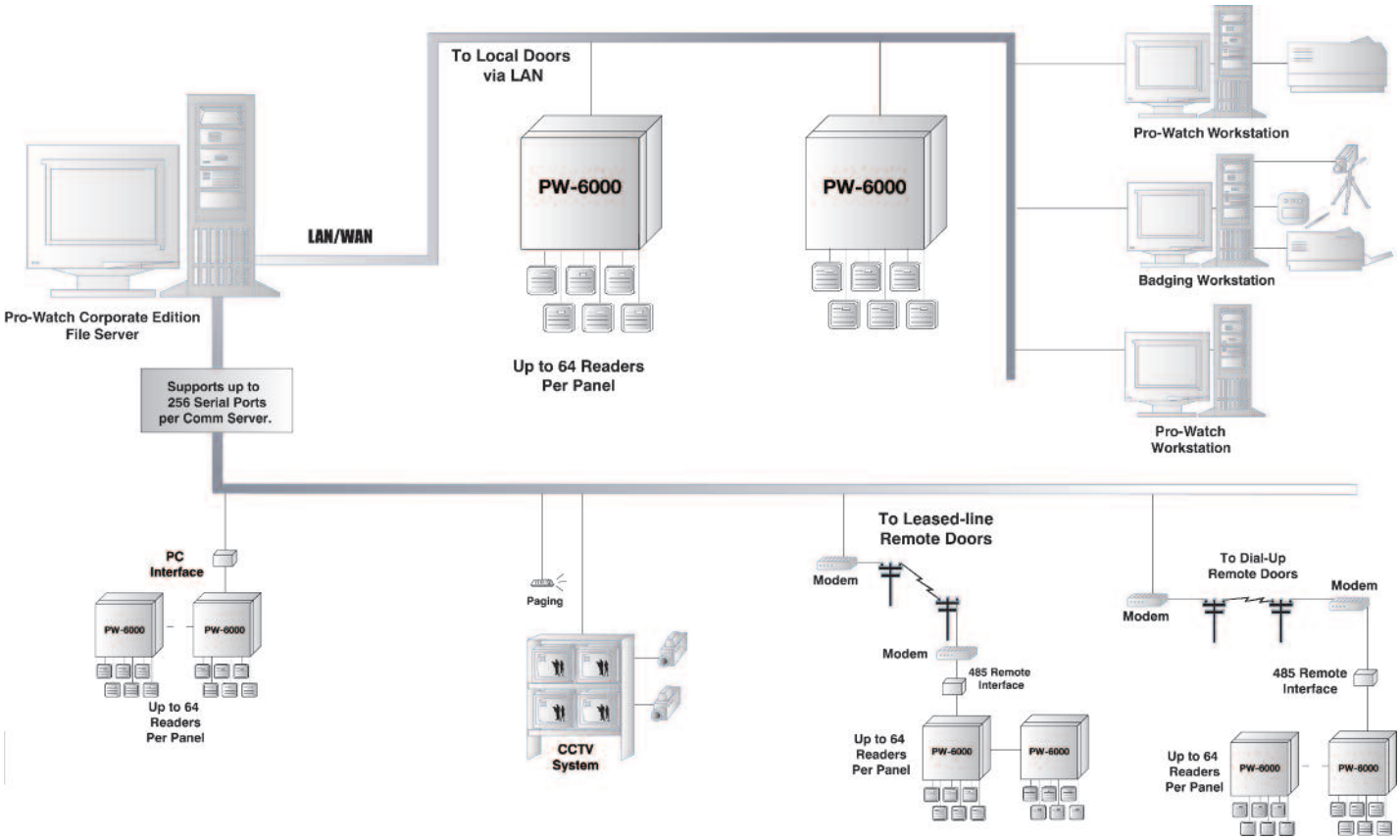
Wire requirements:
- Power - twisted pair, 18 AWG
- RS485 - 24 AWG, 4,000' (1,200m) max, 2 twisted pairs with shield (120W, 23 pF, Belden 9842 or equiv.)
- RS232 - 24 AWG, 25' (7.6m) max
- Alarm input - twisted pair, 30 ohms max

Communication Features:
- RS485 port, 4000' (1,250m) total bus length
- Standard speed is 38,400 bps

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
- Multiple communication methods provide redundant paths for more robust system connectivity
- 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)
- Redundant communication port feature allowing secondary port communication if primary fails

PW-SERIES CONFIGURATION



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ORDERING

Order #	Description
PW-3000 and PW-6000 Intelligent Control System	
PW6K1IC	PW-6000 Intelligent Controller – Capacity for 32 I/O or reader boards
PW3K1IC	PW-3000 Intelligent Controller – Capacity for 16 I/O or reader boards
PW6K1IN	PW-Series 16 input module
PW6K1OUT	PW-Series 16 relay output module
PW5K1R1	PW-Series single reader module (only for use in PW5K1ENC4)
PW6K1R2	PW-Series dual reader module
PW5K1MX8	8-Port multiplexer
PW-6101 Intelligent Control System	
PW6K1ICE	Intelligent Controller
PW6K1R1E	One door reader module

Order #	Description
Enclosures and Accessories	
PW5K2ENC1	PW-Series high density enclosure (power supply and battery not included)
PW5K2ENC2	PW-Series high density enclosure for 19" rack installations (power supply and battery not included)
PW6K2E2PS	PW-Series 110/220 VAC, 4 amp power supply for PW5K2ENC1 and PW5K2ENC2 enclosures
PW5K1ENC3	PW-Series remote enclosure with plug-in with 110V transformer/power supply
PW5K1ENC4	Single reader enclosure (for use with PW5K1R1)
PW5K1DCC	PW-Series daisy chain cable

For more information: www.honeywellintegrated.com

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