

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, PW6K1ICE, or PWEP1502) provides power and flexibility with its 32-bit architecture, TCP/IP connection, flash memory, large local cardholder database, and large reader and I/O module support.

The Intelligent controllers provide off-line operation, making access control decisions independently from the network or Pro-Watch Software. Scalability, compatibility and 3 different types of Intelligent controllers provide endless combinations for any scenario, segment, or niche. In case a distributed intelligent architecture based on RS485 downstream panels/Interfaces is preferred, the PW6K1IC and/or the latest IP-based PWEP1502 suits the purpose. If an 'IP-TO-THE-DOOR' solution is required, the PW6K1ICE and the PW6K1R1E perfectly meets the specification.

The PW-Series Intelligent Controllers also support a combination of I/O and/or reader boards 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 PW6K1IC will support up to 300,000 cards and 50,000 transactions. The PW6K1ICE will support up to 240,000 cards and 50,000 transactions. The PWEP1502 will support up to 240,000 cards and 50,000 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). These controllers utilize a built-in Web server to configure the hardware attributes of the controller.

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
- 19-digit (64-bit) user ID – PW6000/PW6101/PWEP1502
- Support for FIPS (U.S. Government Federal Information Processing Standard) long card numbers
- Activation/deactivation dates by card
- Up to 32 access levels per card or individual time zones per readers
- Up to 8-digit Personal Identification Numbers (PIN) – PW6000/PW6101/PWEP1502
- Operating modes include locked, unlocked, facility code, card only, card and PIN, card or PIN, and PIN only
- Up to eight card formats per reader
- Entire card bit-stream reported with invalid facility code or invalid card format
- Anti-passback support, 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)

SPECIFICATIONS

DATABASE

Cardholders:

PW6K1IC: 300,000
PW6K1ICE: 240,000
PWEP1502: 240,000

Transaction storage:

PW6K1IC/PW6K1ICE/PWEP1502: 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

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

COMMUNICATION MODULES

Primary communication support:

Ethernet (TCP/IP)
RS232
RS485
Dial up modem

Serial 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

PW6K1IC: 2 RS485 ports supporting 32 total devices

PW6K1ICE: POE – Supporting 16 Single Reader Modules via ethernet (PW6K1ICE or PW6K1R1E)

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' (1200 m)

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

Honeywell

luminAXS

HID

Indala

OmniAssure

OmniClass

DigiReaders

Wiegand

Keypads

Ingersoll Rand AD-400 Wireless Lock Sets (PW6K1IC panels only)

Salto Sallis Wireless Readers (PW6K1IC panels only)

Assa Abloy Wireless Readers (PW6K1IC Readers only)

READERS AND CREDENTIALS

Prox:

OmniProx
HID Prox
DigiReaders
Indala Readers

Smart:

OmniClass
iClass
Mifare
OmniAssure - DESFire EV1 / EV2
luminAXS - DESFire EV2

Keypad

Wiegand

RS485/OSDP(2)

BOARD AND ENCLOSURE DIMENSIONS

Board:

PW6K1IC:

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)

PW6K1ICE and

PW6K1R1E:

0.96" H x 5.5" W x 2.75" D
(24 mm H x 140 mm W x 92 mm D)

PWEP1502:

8.0" H x 6.0" W x 1.0" D
(203 mm H x 152 mm W x 25 mm 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)

PW5K1ENC4:

8.375" H x 7.625" W x 3.701" D
(212.75 mm H x 194 mm W x 94 mm D)

Environment:

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

Humidity: to 95% RHNC

Wire requirements:

Power: Twisted pair, 18 AWG (0.75 mm²)

Ethernet:

10/100 BaseT/RJ45
UTP/FTP/STP
CAT5E/6/7
90m max

RS485: 24 AWG (0.2 mm²), 4,000' (1,200m) max, 2 twisted pairs with shield (120R, 23 pF, Belden 9842 or equiv.)

RS232: 24 AWG (0.2 mm²), 25' (7.6m) max

Alarm input: Twisted pair, 30 ohms max

Communication Features:

RS485 port: 4000' (1,200m) total bus length

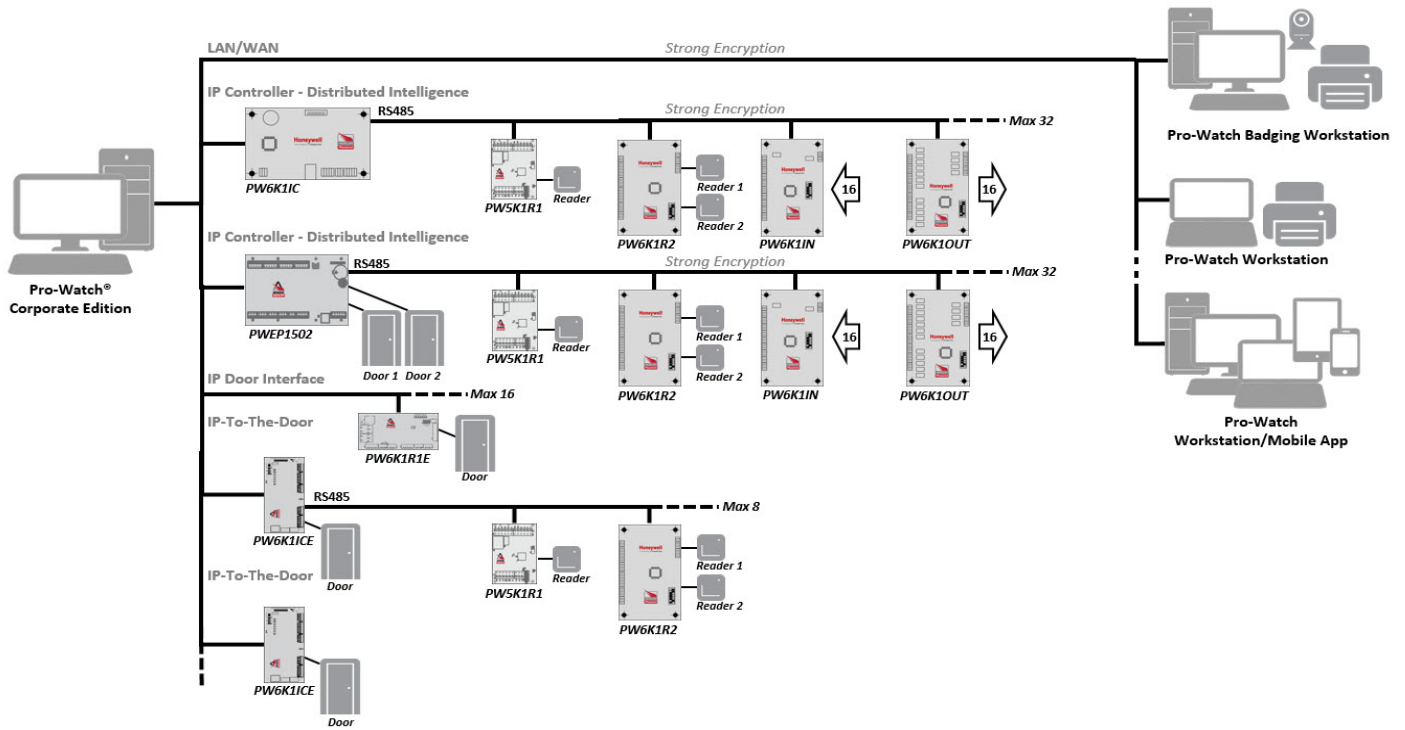
Standard speed: 38,400 bps

Ethernet: 10/100 Mbps

BENEFITS

- 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
- Distributed Intelligence
- Centralized Management
- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- 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 path communication if primary fails
- Easy installation of Single Door Controller (IP-TO-THE-DOOR) by PoE Support (PW6K1ICE, PW6K1R1E and PWEP1502)

Honeywell / Pro-Watch PW-Series



PW-Series Modular Access Control System

ORDERING

PART NUMBER	DESCRIPTION
PW-6000 INTELLIGENT CONTROL SYSTEM	
PW6K1IC	PW-6000 Intelligent Controller – Capacity for 32 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 IP Controller - Ethernet (PoE) with capacity for 17 doors
PW6K1R1E	One door reader module - Ethernet (PoE)
PWEP1502	Intelligent IP Controller with capacity for 64 doors
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 VAC, 4 amp Power Supply for PW5K2ENC1 and PW5K2ENC2 enclosures
PW5K1ENC3	PW-Series remote enclosure with plug-in with 110 VAC transformer/power supply
PW5K1ENC4	Single reader enclosure (for use with PW5K1R1)
PW5K1DCC	PW-Series daisy chain cable
PSX220	PW-Series 220 VAC (EURO) transformer Power Supply kit (to be used with PW5KENC3 or PW5K1ENC4)

For more information

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