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 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 PW-Series Intelligent Controllers 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 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-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.

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 – PW-6000/ PW-6101

- Support for FIPS 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/ 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)

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SPECIFICATIONS

DATABASE

Cardholders:
PW-6000: 300,000
PW-6101: 240,000
Transaction storage:
PW-6000/PW-6101: 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:
RS232
RS485
Dial up modem
Ethernet (TCP/IP)
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

PW-6000: 2 RS485 ports supporting 32 total devices
PW-6101: 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'

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

ENCLOSURE DIMENSIONS

Board:
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: 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: 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
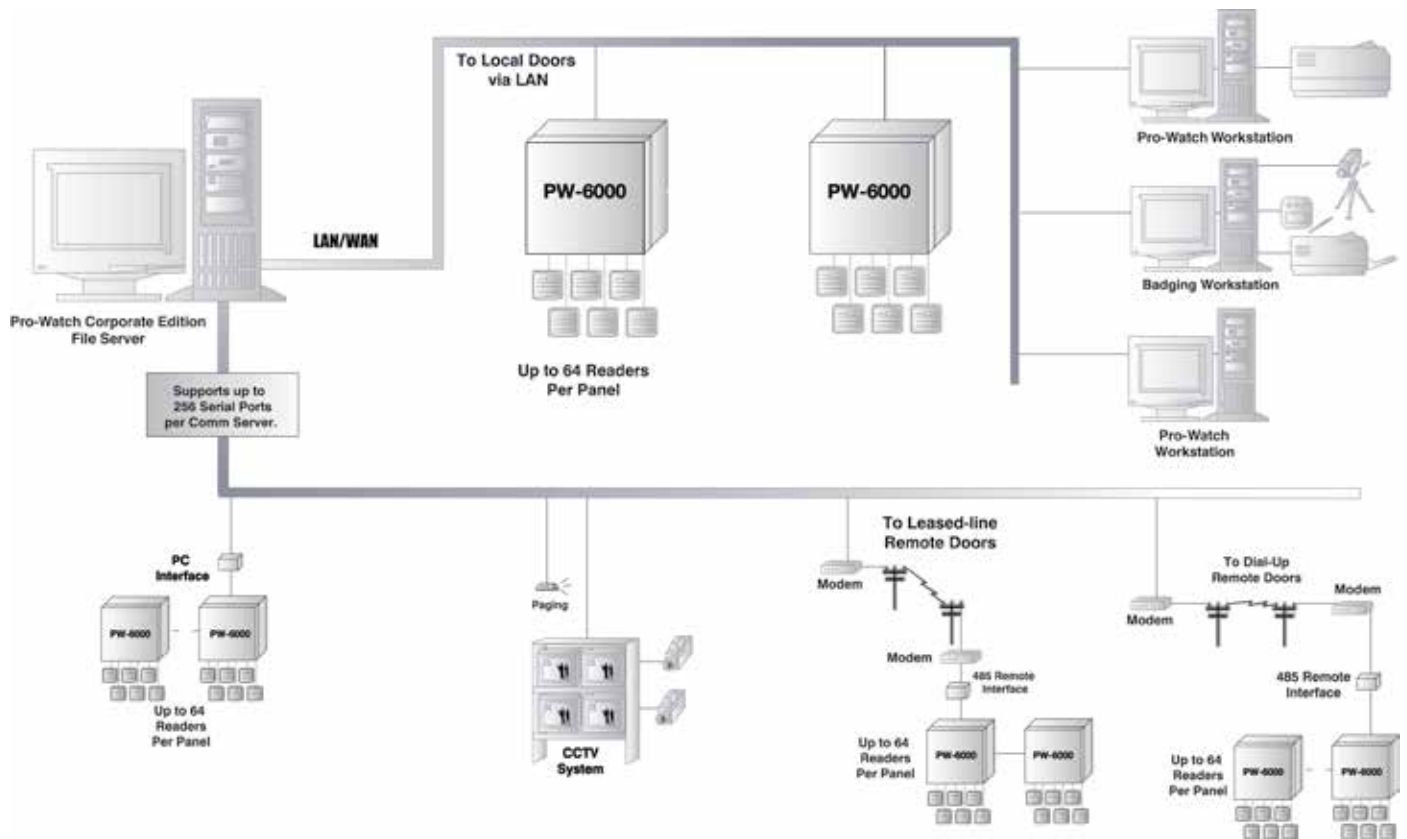
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ORDERING

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 Controller
PW6K1R1E	One door reader module
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

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