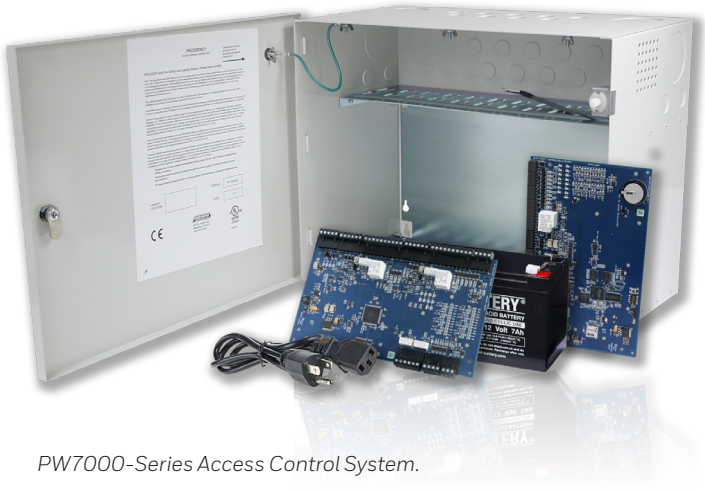
PW7000-SERIES

Controllers and I/O Boards

The PW7000-Series Access Control System is an advanced access control hardware architecture capable of providing solutions for large enterprise applications.

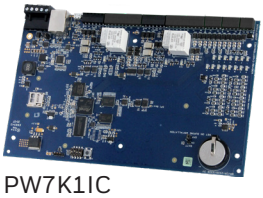


PW7000-Series Access Control System.

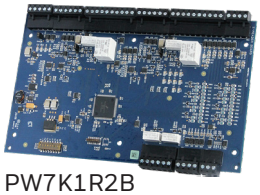
The Intelligent Controllers provide power and flexibility with an embedded Linux OS, improved processor and increased memory as well as onboard crypto chip which adds an additional layer of security to sensitive data.

The PW-series controllers support a combination of I/O and reader boards to monitor alarm input points, relay output points and interface with access control readers. By offering a modular design, the system can be tailored to meet a wide range of applications while optimizing cost and installation.

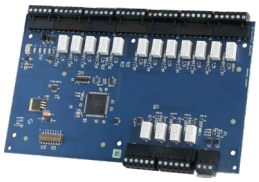
The PW7K1IC comes with 2 on-board reader ports that support multiple reader communication protocols including Wiegand and OSDP (V2) Secure Channel Protocol (SCP). OSDP SCP is now supported across all the intelligent controller and reader board hardware. PW7000-series control panels and I/O boards are backwards compatible with PW6000-Series [1].



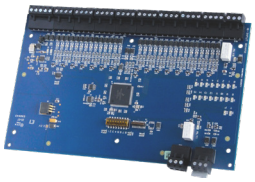
PW7K1IC



PW7K1R2B



PW7K1OUT



PW7K1IN

FEATURES AND BENEFITS

SECURE

- Latest encryption standard support with TLS1.2 and OSDP (V2) Secure Channel Protocol
- Embedded Crypto Memory Chip to protect sensitive data

VERSATILE

- Backwards compatible with PW6000 [1] controllers, reader boards, I/O boards and enclosures [1]
- On-board support for up to 2 readers (2 Doors) for PW7K1IC and up to 2 readers (1 Door) for PW7K1ICE

COMPREHENSIVE

- Wide variety of native integrations including wireless locks
- Extensive customization including If / Then macro capabilities

ADAPTABLE

- Modular design allows controllers and downstream boards to be mixed to fit the most demanding customer requirements
- Flexible power options for PW7K1ICE & PW7K1R1E including PoE and PoE+

[1] *Note: PW6K1IC board is based on Mercury's EP2500, PW7K1IC board is based on Mercury's LP1502 and includes extra reader/door connections. PW7K1IC board has 1 RS485 downstream bus. All Honeywell PW7000 Form Factor and Honeywell branded Mercury boards are backwards compatible with existing PW5000/PW6000 Enclosures.*

Honeywell

PW7000 SERIES – CONTROLLERS AND I/O BOARDS

FEATURES (CONTINUED)

FLEXIBLE

- Up to 12 intervals per time zone where each interval is a start time, stop time and day map. The day map indiactes 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 Savings Time
- 19-digit (64 bit) user ID
- Support for FIPS (U.S. Government Federal Information Processign standard) long card numbers
- Activation / deactivation dates by card
- Up to 32 access levels per card or individual time zones per reader
- Up to 8-digit Personal Identification Numbers (PIN)
- 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)

TABLE 1. SPECIFICATIONS (OVERALL)

DATABASE*	
Firmware	Flash programming for revision updates
Access Codes	Virtually Unlimited
Holidays	255
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 Savings Time, Leap Year Support
* Database values may exceed current limitations of some security management systems	
COMMUNICATION MODULES	
Primary Communiation Support	Ethernet (TCP/IP) RS485
Download Functionality	System Functional During System Download: Yes System functional During Credential Download: Yes
ACCESS MODULES	
Module Connectivity	Module connectivity via RS485 protocol : 4000' (1200 m)
OPERATIONAL FUNCTIONALITY	
Duress Detection	Yes
Operational Modes	Credential Only, PIN Only, Credential or PIN, Credential and PIN, Facility Code Only
Maximum PIN Size	8 digit
Door Object Support	Yes
Two Person Access Rule	Yes
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	
Reader Support	Honeywell BlueDiamond, luminAXS, OmniSmart, OmniClass, OmniProx, HID, STid
Biometric Reader Support	Idemia, TBS, Suprema (with Certified Middleware)
Electronic Lock Support	Schlage AD-400/AD-300 Wireless Lock S ets (using PIM), Allegion NDE/LE series locks (using Gateway), Assa Abloy Aperio Locks (using AH30/AH40 hubs), Salto Wireless Locks (using Sallis Nodes via RS485)
Keypad	Yes
Wiegand	Yes
RS485/OSDP(2)	Yes

PW7000 SERIES - CONTROLLERS AND I/O BOARDS

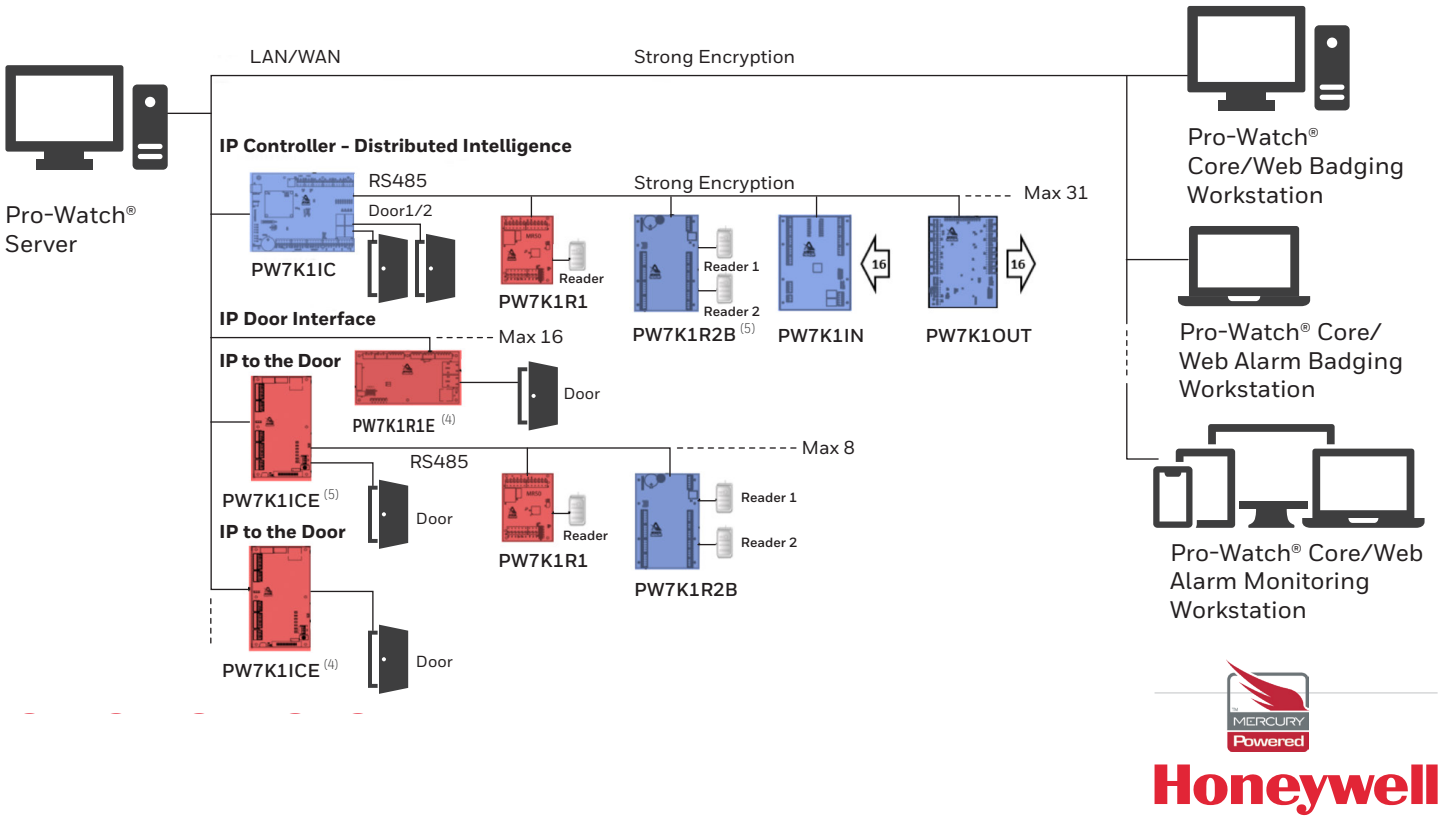
TABLE 2. SPECIFICATIONS BY MODEL

DESCRIPTION	PW7K1IC	PW7K1ICE	PW7K1R1	PW7K1R1E	PW7K1R2B	PW7K1IN	PW7K1OUT
Maximum # of Openings Managed	64 (2)	17 (2)	1	2	2		
Maximum # of Readers Directly Connected	2 (4 with OSDP)	2 (2 with OSDP)	1 (2 with OSDP)	(4) OSDP Only	2 (4 with OSDP)		
Maximum # of Cardholders	240,000	240,000					
Transaction Storage	50,000	50,000					
Access Levels per Cardholder	255	255					
On-board Inputs	8	2	2	6	8	16	2 (Pwr Fail+Tmp)
On-board Outputs	4	2	2	4	6	2	16
IP Protocol	IPv4 / IPv6(4)	IPv4 / IPv6(4)		IPv4 / IPv6(4)			
OSDP(V2) SCP On-board	Yes	Yes	Yes	Yes	Yes		
Host Communication	10/100Mbps TLS1.2	10/100Mbps TLS1.2		10/100Mbps TLS1.2			
Primary Power	12 VDC 500mA max	PoE / PoE+ 12VDC 1.8A max	12-24 VDC 150mA max	PoE / PoE+ 12VDC 1.7A max	12-24 VDC 650mA max	12-24 VDC 250mA max	12-24 VDC 385A max
Processor	ARM Cortex-A5 core, 32-bit, upt to 536 MHz, with a hardware encrption engine and secure boot				ARM Cortex-M4, 120MHz, with Secure Crypto Engine	ARM Cortex-M4, 100MHz	ARM Cortex-M4, 100MHz
Storage Temperature	-55 °C - +85 °C	-55 °C - +85 °C	-55 °C - +85 °C	-55 °C - +85 °C	-55 °C - +85 °C	-55 °C - +85 °C	-55 °C - +85 °C
Operating Temperature	0 °C-49 °C	0 °C-70 °C	0 °C-70 °C	0 °C-70 °C	0 °C-49 °C	0 °C-49 °C	0 °C-49 °C
Operating Humidity	5 to 85% RHNC (3)	5 to 95% RHNC	5 to 95% RHNC	5 to 95% RHNC	5 to 85% RHNC	5 to 85% RHNC	5 to 85% RHNC
Dimensions (H x W x D)	9.0" x 5.5" x 1.0" 230 x 140 x 25mm	5.5" x 2.75" x 1.0" 140 x 70 x 25mm	2.75" x 4.25" x 1.0" 70 x 108 x 25mm	5.5" x 2.75" x 1.0" 140 x 70 x 24mm	9.0" x 5.5" x 1.0" 230 x140 x25mm	9.0" x 5.5" x 1.0" 230 x 140 x25mm	9.0" x 5.5" x 1.0" 230 x 140 x 25mm
Compliance	UL294 ULC S319 CE EN 50130-4 EN 61000-6-3 EN IEC 61000-3-2 EN 61000-3-3 EN 62368-1 EN- IEC 63000 FCC IC	UL 294 Recognized (*) FCC Part 15 Class A CE Compliant RoHS (2011/65/ EU & 2015/863) EU Reach (1907/2006) California Prop 65 NIST Certified Encryption	UL294 Recognized FCC Part 15 Class A CE Compliant RoHS (2011/65/ EU & 2015/863) EU Reach (1907/2006) California Prop 65	UL 294 Recognized (5) FCC Part 15 Class A CE Compliant RoHS (2011/65/ EU & 2015/863) EU Reach (1907/2006) California Prop 65	UL294 ULC S319 CE EN 50130-4 EN 61000-6-3 EN IEC 61000-3-2 EN 61000-3-3 EN 62368-1 EN- IEC 63000 FCC IC	UL294 ULC S319 CE EN 50130-4 EN 61000-6-3 EN IEC 61000-3-2 EN 61000-3-3 EN 62368-1 EN- IEC 63000 FCC IC	UL294 ULC S319 CE EN 50130-4 EN 61000-6-3 EN IEC 61000-3-2 EN 61000-3-3 EN 62368-1 EN- IEC 63000 FCC IC
Warranty	3 years	3 years	3 years	3 years	3 years	3 years	3 year

(2) Including sub-panels
(3) RHNC = Relative Humidity at Non-Condensing
(4) IPv6 support in Pro-Watch is yet to be implemented
(5) = For UL, the Power Sourcing Equipment (PSE) such as a PoE or PoE+ enabled network switch and or PoE or PoE+ power injectors must be UL Listed under UL 294B

PW7000 SERIES – CONTROLLERS AND I/O BOARDS

CONFIGURATION



(4) *PW7K1R1E is supported with PW7K1IC in Pro-Watch 5.5 or higher.*

(5) *PW7K1ICE works as a PW6K1ICE (in Pro-Watch 5.5 or earlier). Native mode supported from PW 6.0*

FUNCTIONAL DESCRIPTION

The multi-port PW7K1IC is a dual card reader panel for controlling two connected doors and managing up to 64 doors/openings. Built with Authentic Mercury Technology, the intelligent controller uses on-board Ethernet port to connect to the Honeywell server-based platform 'Pro-Watch'.

The intelligent controller performs access control, alarm management and scheduled operations, all in single package. The high-performance PW7K1IC functions independently of the host for performing numerous access control applications and supports OSDP, OSDP Secure Channel, keypads, biometric readers, Wiegand, clock and data, F/2F and supervised F/2F reader technologies.

System configuration and setup are provided through Pro-Watch software applications/tools. For a comprehensive and open Honeywell access control platform, and a reliable hardware platform running in a secure environment, the PW7K1IC is the clear solution. It delivers a complete security and access control solution as well as innovative application extensions, interoperability and data security.

Note: PW7K1IC native mode is supported in Pro-Watch 4.5 SP3 / 5.0 SP1 or above. All versions from Pro-Watch 4.4 support PW7KIC in legacy mode as a PW6K1IC

PW7000 SERIES – CONTROLLERS AND I/O BOARDS

ORDERING

PW-7000 INTELLIGENT CONTROL SYSTEM	
PART NUMBER	DESCRIPTION
PW7K1IC	PW-7000 Intelligent Controller – Capacity for 32 I/O or Reader Boards
PW7K1IN	PW-7000 16 Input Module
PW7K1OUT	PW-7000 16 Relay Output Module
PW7K1R1	PW-7000 Single Reader Module (only for use in PW5K1ENC4)
PW7K1R2B	PW-7000 Dual Reader Module
PW5K1MX8	PW-Series 8-Port Multiplexer

PW-7101 INTELLIGENT CONTROL SYSTEM	
PART NUMBER	DESCRIPTION
PW7K1ICE	PW-7101 IP (PoE) Intelligent Controller, embedded Ethernet
PW7K1R1E	PW-7101 IP (PoE) Door Reader Module (1 Door)

HARDWARE ADD-ON KIT	
PART NUMBER	DESCRIPTION
PW7KRD4	PW7K hardware add-on kit - 4DR
PW7KRD2	PW7K hardware add-on kit - 2DR
PW7KRD8	PW7K hardware add-on kit - 8DR
PW7KTD2	PW7K hardware add-on kit - 2DR T-Mount

ENCLOSURES AND ACCESSORIES	
PART NUMBER	DESCRIPTION
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)
PW7KPSU120	PW-Series 110 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 PW7K1R1)
PW5K1DCC	PW-Series daisy chain cable
3-000246	Battery - Lead-Acid 12V

For More Information
buildings.honeywell.com/security

Building Automation
Commercial Security
715 Peachtree St NE
Atlanta, GA 30308
1.800.323.4576

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