PRO2200

Professional Series Access Modules

The PRO2200 professional series family of access control modules is connected to the intelligent control module through a supervised RS485 bus at 38,400 bps. Hardware interface configuration options are stored in the intelligent control module and may be directly controlled via operator intervention, time schedules or event-based procedures. The access modules have been designed to allow for a modular customizable solution.

The PRO22R1 provides I/O support for one card access reader, while the PRO22R2 supports two card access readers. Both interface with the intelligent control module (PRO22IC). In the event that communication to the intelligent control module is lost, the card access readers can be individually configured to allow entrance based on security needs. This customization allows for a door to be configured as locked, unlocked, or access only via valid facility code.

The PRO22OUT interfaces with the intelligent control module (PRO22IC) providing up to 12 or 16, Form C, 12 VDC, 2A relay output controls depending if the board is rack or tile-mounted and power fail and panel tamper when tile mounted. Relays may be used for elevator control, status annunciation and for general facility control, such as door monitoring.

The PRO22IN interfaces with the intelligent control module (PRO22IC) providing 16 supervised alarm inputs and a dedicated power fail and panel tamper when tile mounted. An analog to digital converter samples the input values and the digitized result is filtered and processed. Filter parameters are configurable for each input point, resulting in the ability to specify a custom End-Of-Line (EOL) resistance value, sensitivity range and timing parameter.

The PRO2200 Series of access modules are designed to accommodate various mounting options. Units can be mounted in a rack configuration (PRO22ENC1, PRO22ENC2 and PRO22ENC5) when space is limited, or in a tile-mount configuration (PRO22ENC3).

- The PRO22ENC1 is a wall-mounted enclosure rack unit
- The PRO22ENC2 is a 19" rack-mounted enclosure rack unit
- The PRO22ENC5 is a rack unit which fits inside a customer's enclosure

FEATURES

- Modular design fits a wide variety of applications
- Up to 9 modules, power-supply and battery can be accommodated by the PRO22ENC1, PRO22ENC2 and PRO22ENC5 (no battery) enclosures
- User programmable relay outputs allow for specific control needs
- User programmable alarm inputs offer flexible system configuration and control
- RS485 communication to all modules
- Analog to digital converter technology provides digital filtering and input conditioning

- Dedicated cabinet tamper and power monitor inputs
- Supports the choice of normally open, normally closed, supervised, and non-supervised circuits
- Supports a wide range of reader technologies including Wiegand, magnetic stripe, proximity, and keypad
- System off-line modes customizable per reader include facility code access, locked (no access), and unlocked (full access)
- Supports multiple reader and card formats for maximum flexibility and security options

- Operating modes include locked, unlocked, facility code, card only, card and PIN, card or PIN and PIN only
- Any combination of 8 I/O or reader modules may be connected to the PRO22IC RS485 ports
- Alarm circuit type - normally open, normally closed, non-supervised, supervised (with correct EOL). Meets requirements for UL294 and CUL
- Any combination of 8 I/0 or readers modules may be connected to the PRO22IC RS485 ports. 4,000 ft (1,250 m) total bus length per port

PRO2200

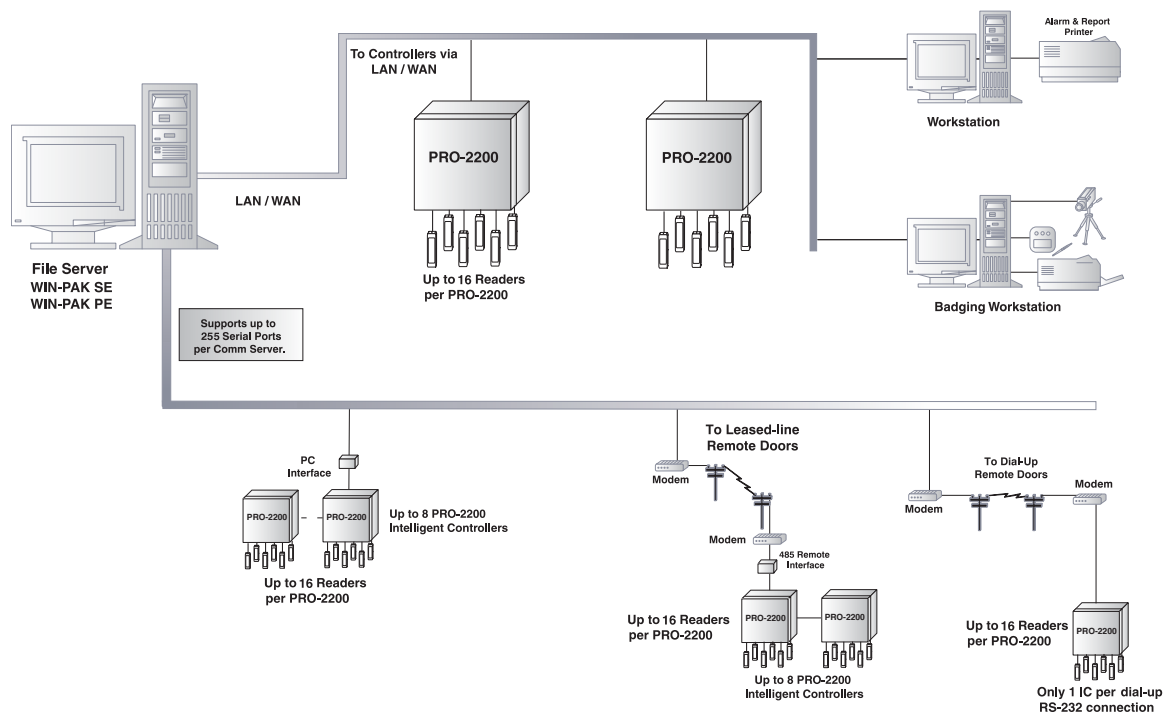**Professional Series Access Modules**

SPECIFICATIONS

	PRO2200 Series Single Reader Module (PRO22R1)	PRO2200 Series Dual Reader Module (PRO22R2)
Module Specifications		
Port	1 reader port - 12 VDC at 50 mA, clock / data or data0 / data1	2 reader ports - 12 VDC at 50 mA, clock / data or data0 / data1
Keypad	Keypad multiplexed with card data	
Wire Support	Two-wire or one-wire bi-color LED support	
Buzzer Support	Buzzer support only with one-wire LED control	
Alarm Inputs	2 supervised, general purpose alarm inputs with programmable circuit type	8 supervised, general purpose alarm inputs with programmable circuit type (only 6 supervised inputs available when using PRO22ENC1, PRO22ENC2 and PRO22ENC5 enclosures)
Alarm Inputs	1 dedicated alarm input for tamper detection	2 dedicated alarm inputs for tamper detection and power loss
Output Relays	1 general purpose output relay, form C, 5 A 28 VDC	2 general purpose output relay, form C, 5 A 28 VDC
Output Relays	1 general purpose output relay, form C, 1 A 28 VDC	4 general purpose output relay, form C, 2 A 28 VDC (only 2 output relays available when using PRO22ENC1, PRO22ENC2 and PRO22ENC5 enclosures)
Mounting	Designed to be tile-mounted using the PRO22ENC4 enclosure	N/A
Alarm Input Properties		
Inputs	Inputs may be assigned to door related functions or general purpose I/O	
Circuit Type	Circuit type - normally open, normally closed, non-supervised, supervised (with standard 1K or custom end-of-line resistance 200-10K)	
Line Conditioning	Line conditioning - programmable sensitivity and hold time	
Output Control Properties		
Outputs	Outputs may be assigned to door related functions or general purpose I/O	
Relay Rating	The 5 A relay(s) are rated to handle the inductive loads of door locking devices	
Configurable	Configurable as standard (energize to activate) or fail-safe (de-energize to activate)	
Pulse Time	1-32,400 seconds, 1-255 for door relays	
RS485 Port	RS485 port, 4,000 ft (1,250m) total bus length	
Standard Speed	38.4 Kbps	

	PRO2200 Series Sixteen Relay Output Module (PRO22OUT)	PRO2200 Series Sixteen Alarm Input Module (PRO22IN)
Module Specifications		
Alarm Inputs	2 dedicated alarm inputs for tamper detection and power loss (tile-mounted only)	
Alarm Inputs	N/A	16 general purpose inputs with programmable circuit type
Output Relays	12 general purpose output relays, form C, 2 A 30 VDC (16 are available when using PRO22ENC3 tile-mounted enclosure)	2 general purpose, form C, 2 A 30 VDC relays (only one available when using PRO22ENC1, PRO22ENC2 and PRO22ENC5)
Output Control Properties		
Outputs	All 16-relay outputs in the tile-mount configuration (12" rack-mount) are available for general purpose I/O	Both relay outputs are available for general purpose I/O
Dry Circuit Logic	The 2 A relays are rated to handle dry circuit logic	Both relay outputs are rated to handle dry circuit logic
Pulse Time	1-32,400 seconds	
Configurable	Configurable as standard (energize to activate) or fail-safe (de-energize to activate)	N/A
Alarm Input Properties		
Inputs	N/A	All 16 inputs may be assigned to door related functions or general purpose I/O
Circuit Type	N/A	Circuit type - normally open, normally closed, non-supervised, supervised (with correct EOL)
Line Conditioning	N/A	Line conditioning - programmable sensitivity and hold time
Communication Features		
Measurements	RS485 port, 4,000 ft (1,250m) total bus length per port	
Speed	38.4 Kbps	

BENEFITS

- Anti-passback support - free pass and exempt flags, last area accessed, last reader accessed and time/date of last access

- Modular hardware architecture provides flexibility and expansion capabilities

- Large, local controller database allows access control decisions to be made by controller in real time without the need to communicate to the server

- ADA compliant allowing expanded door times selectable per reader

- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation

- Four-state alarm input circuits - normally opened, normally closed, non-supervised, supervised (w/EOL)

- Rack or tile mounting options available

- Alarm conditioning with programmable sensitivity and hold time

- Selectable reader states include card and PIN, card or PIN, card only, or PIN only

- Auto switching power supply allows 110 / 220 operation with PRO22E1PS

- System off-line modes customizable per reader include facility code access, locked (no access), and unlocked (full-access)

- Supports multiple reader and card formats for maximum flexibility and security options

PRO2200 CONFIGURATION

		PRO22ENC1		PRO22ENC3	
Module	Readers	Inputs	Outputs	Inputs	Outputs
PRO22R1	1	N/A	N/A	2	2
PRO22R2	2	6	4	10**	6
PRO22OUT	0	0	12	2**	16
PRO22IN	0	16	1	18**	2
**Two are used to monitor Power and Tamper					
PRO22ENC1=9 Board Capacity / PRO22ENC3=2 Board Capacity					

PRO2200
Professional Series Access Modules

SPECIFICATIONS

Dimensions:
- Board: 9.0" H x 5.5" W x 1.0" D (22.9 cm H x 14 cm W x 2.5 cm D)
- PRO22ENC1: 13.9" H x 17" W x 9" D (35.3 cm H x 43.2 cm W x 22.9 cm D)
- PRO22ENC2: 13.9" H x 18.9" W x 9" D (35.3 cm H x 48 cm W x 22.9 cm D)
- PRO22ENC3: 14" H x 16" W x 4" D (35.6 cm H x 40.6 cm W x 10.2 cm D)
- PRO22ENC4: 8.37" H x 7.63" W x 7.63 D (21.28 cm H x 19.4 cm W x 19.4 cm D)
- PRO22ENC5: 9.35" H x 16.85" W x 5.6" D (23.7 cm H x 42.8 cm W x 14.2 cm D)

Environment:
- Temperature: 0°C to 49°C operational; -55°C to 85°C storage
- Humidity: 0 to 85% RHNC

Wire Requirements:
- Power - twisted pair, 18 AWG
- RS485 - 24 AWG, 4,000 ft (1,200m) max, two twisted pairs with shield (120 ohms, 23 pF, Belden 9842 or equiv)
- RS-232 - 24 AWG, 25 ft (7.6m) max
- Alarm input - twisted pair, 30 ohms max

Enclosures:
- PRO22ENC1 (Wall-mount) Capacity: 9 modules. Power supply and battery not included
- PRO22ENC2 (19" Rack-mount) Capacity: 9 modules. Power supply and battery not included
- PRO22ENC3 (Tile-mount) Capacity: 2 modules. Power supply and battery included
- PRO22ENC4 (Tile-mount) Capacity: 1 module (PRO22R1 only). Power supply and battery included
- PRO22ENC5 (Cage only for custom enclosures) Capacity: 9 modules. Power supply and battery not included

ORDERING

PRO2200 Controllers

PRO22IC	PRO2200 Intelligent Controller
PRO22R1	PRO2200 Single Reader Module
PRO22R2	PRO2200 Dual Reader Module
PRO22OUT	PRO2200 16 Relay Output Module
PRO22IN	PRO2200 16 Alarm Input Module
PRO22EN	PRO2200 Network Interface Module

PRO-Series Enclosures

PRO22ENC1	(Wall-mount) Capacity: 9 modules. Power supply and battery not included
PRO22ENC2	(19" Rack-mount) Capacity: 9 modules. Power supply and battery not included
PRO22ENC3	(Tile-mount) Capacity: 2 modules. Power supply and battery included
PRO22ENC4	(Tile-mount) Capacity: 1 module (PRO22R1 only). Power supply and battery included
PRO22ENC5	(Cage only for custom enclosures) Capacity: 9 modules. Power supply and battery not included

PRO2200 Starter Kit with Software

PRO22SKD8	8 Door Starter Kit with WIN-PAK SE Software, PRO22IC Controller, (4) PRO22R2 Reader Boards, Enclosure, Power Supply and Ethernet Module

PRO2200 Expansion Kits

PRO22E1D2	2 Door Rack-Mount Kit with PRO22IC, (1) PRO22R2, Power Supply, Ethernet Module
PRO22E1D4	4 Door Rack-Mount Kit with PRO22IC, (2) PRO22R2, Power Supply, Ethernet Module
PRO22E1D8	8 Door Rack-Mount Kit with PRO22IC, (4) PRO22R2, Power Supply, Ethernet Module

Optional Accessories

PRO22DCC	Daisy Chain cable required for PRO22ENC1, PRO22ENC2 and PRO22ENC5
PRO22E1PS	4 A rack-mounted power supply with battery backup required for PRO22ENC1, PRO22ENC2 and PRO22ENC5
PRO22M4	4 MB Memory Expansion Module

Hardwired Kits

PRO22E1IC	Includes: PRO22ENC1, PRO22IC, PRO22E1PS, PRO22BAT1 and PRO22DCC
PRO22E2IC	Includes: PRO22ENC2, PRO22IC, PRO22E1PS, PRO22BAT1 and PRO22DCC

Network Kits

PRO22E1EN	Includes: PRO22ENC1, PRO22IC, PRO22EN, PRO22E1PS, PRO22BAT1 and PRO22DCC
PRO22E2EN	Includes: PRO22ENC2, PRO22IC, PRO22EN, PRO22E1PS, PRO22BAT1 and PRO22DCC

For more information: www.honeywellaccess.com

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