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# PRO3200

## Professional Modular Access Control Hardware

### PRO3200 Access Control Hardware

As a part of the WIN-PAK® software controlled hardware family the PRO3200 professional modular access control hardware is an advanced access control panel capable of providing solutions where installation space is at a premium. The design of the hardware is modular and flexible and can be tailored to meet a wide range of applications, while optimising cost and mounting space.

The PRO3200 system is connected to a host computer with WIN-PAK for system configuration, alarm monitoring and direct control. Using WIN-PAK SE 4.0 / PE 4.0 or higher, at least 255 PRO3200 systems can be connected to create large access control solutions.

Every PRO3200 consists of a main controller, one or more enclosures, power supplies and reader or I/O modules. A PRO3200 system can be set up as an access control system with up to 32 doors, protected with one reader each door. If additional inputs and outputs are needed for extra control within the PRO3200 system, the number of controllable doors will be limited to less than 32 doors. The access control limitations depend on the amount of extra controllable inputs and outputs needed within the modular configuration of up to 16 I/O or reader boards.

Designed to fit into tight spaces, the PRO3200 with its rack-mount design provides high-density installations for up to 16 doors per cabinet in a small space. The design makes it ideal for applications where eight or more doors are needed. Metal enclosures for up to two modules are available for remote located controllable doors, connected via a supervised RS485 bus.

### PRO3200 Main Controller

The PRO3200 main controller board (PRO32IC) accommodates a card database of 100,000 cards, a transaction buffer of 50,000 transactions and is designed to operate off-line, making access control decisions independently from a PC or other controlling devices.

The PRO32IC supports any combination of up to 16 I/O or reader boards to monitor alarm input points, relay output points and access control reader interface points. Connectivity to the host computer with WIN-PAK SE 4.0 / PE 4.0 or higher is accomplished via on board Ethernet port, serial (RS232) communication or dial-up modem.

### PRO3200 Modules

The PRO3200 professional series family of access control modules is connected to an interface with the main controller (PRO32IC) through a supervised RS485 bus. Hardware interface configuration options are stored in the main controller and may be directly controlled via operator intervention, time schedules or event-based procedures. The modules have been designed to allow for a modular customisable solution.

### PRO3200 Reader Modules

The PRO32R2 supports two card access readers to control two doors. 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 customisation allows for a door to be configured as locked, unlocked or access only via a valid facility code.

### PRO3200 I/O Modules

The PRO32OUT module provides 12 Form C, 12 VDC, 2A relay output controls when mounted in a high density rack mount enclosure (PRO22ENC1 and PRO22ENC2). If the board is tile mounted in a PRO22ENC3, four extra Form C, 12 VDC, 2A relay output controls and power fail and panel tamper inputs are provided. Relays may be used for lift control, status annunciation and for general facility control.

The PRO32IN module provides 16 supervised alarm inputs and a dedicated power fail and panel tamper when tile mounted. The inputs can be supervised with end-of-line resistors or non-supervised (digital). Inputs may be used for status and for general facility monitoring, such as door monitoring.

### Enclosures for PRO3200 devices

The PRO3200 main controller and modules are designed to accommodate various mounting options. Units can be mounted in a high-density rack configuration (PRO22ENC1 and PRO22ENC2) when space is limited or in a tile-mount configuration (PRO22ENC3) for remotely located doors and I/O. A high-density enclosure can facilitate a power supply, a main controller and up to eight modules.

- PRO22ENC1 is a wall-mounted high-density enclosure
- PRO22ENC2 is a 19" rack-mounted high-density enclosure
- PRO22ENC3 is a wall-mounted remote enclosure for up to two modules or main controllers

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## SYSTEM FEATURES

- Configurable via WIN-PAK SE 4.0 / PE 4.0 or higher access control software
- At least 225 PRO3200 systems configurable in a WIN-PAK hosted system to meet the needs of large access control and security systems
- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- Rack or tile mounting options available
- Supervised communication and lithium battery backup ensures system reliability
- Large, local controller database allows access control decisions to be made by controller in real time without the need to communicate to the server
- Seamless support for TCP/IP protocols to allow intelligent controller(s) to tap into a LAN or WAN
- True 32-bit microprocessor provides fast transaction processing for the most demanding network applications
- Any combination of 16 I/O or reader modules may be connected to the PRO32IC RS485 ports at 38,400 bps. 1250m total bus length per port.
- Accommodates a card database of 100,000 cards, and a transaction buffer of 50,000 transactions
- Option to include or exclude fields during database configuration to maximise memory usage
- Automatic calculation of leap-year and daylight savings

## ACCESS CONTROL FEATURES

- Supports a wide range of reader technologies including Wiegand, magnetic stripe, proximity, smart card and keypad
- Supports multiple reader and card formats for maximum flexibility and security options
- System off-line modes customisable per reader include facility code access, locked (no access) and unlocked (full access)
- Operating modes include locked, unlocked, facility code, card only, card and PIN, card or PIN and PIN only
- Configurable as fail-secure (energise to activate) or fail-safe (de-energise to activate)
- Up to eight card formats per reader
- Anti-passback support
- Up to 32 access levels per card or individual time zones per readers
- 10-digit (32-bit) user ID standard / 15-digit maximum
- Personal Identification Number (PIN) with up to eights digits
- Activation and deactivation dates by card
- 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
- Entire card bit-stream reported with invalid facility code or invalid card format

## INPUT / OUTPUT CONTROL FEATURES

- User programmable relay outputs allow for specific control needs
- Pulse control: single pulse (up to 255 seconds) or repeating pulses (on/off in 1 second increments, up to 255 times)
- Configurable as standard, entry delay latching, entry delay non-latching and exit delay
- User programmable alarm inputs offer flexible system configuration and control
- Alarm circuit type - normally open, normally closed, non-supervised, supervised (with correct EOL). Meets requirements for UL294 and CUL

## ENCLOSURE FEATURES


- User programmable relay outputs allow for specific control needs
- Pulse control: single pulse (up to 255 seconds) or repeating pulses (on/off in 1 second increments, up to 255 times)
- Configurable as standard, entry delay latching, entry delay non-latching and exit delay
- User programmable alarm inputs offer flexible system configuration and control
- Alarm circuit type - normally open, normally closed, non-supervised, supervised (with correct EOL). Meets requirements for UL294 and CUL

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# SYSTEM SPECIFICATIONS

**Database:**

- Flash programming for firmware revision updates
- Memory for 100,000 cards
- Memory for 50,000 events
- Access codes: Unlimited
- Holidays: Unlimited
- Time codes: 255, 64 supported by WIN-PAK
- Card reader formats: eight per reader
- Credential facility codes: eight
- Lift support: 240 floors (relays)
- 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
- Precision access groups/levels
- Multiple access groups/levels

**Communication:**

- Primary communication support:
  - On board Ethernet (TCP/IP)
  - RS232
  - Dial-up modem*
- Communication speed: 38.4 Kbps
- Automatic dial back:
  - 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

*Requires additional hardware

**Access Modules:**

- 16 total devices/modules available per PRO32IC controller
- PRO3200 modules available:
  - Dual reader module (PRO32R2)
  - 16 relay output module (PRO32OUT)
  - 16 alarm input module (PRO32IN)
- Backward compatible with PRO2200 modules:
  - Single reader module (PRO22R1)
  - Dual reader module (PRO22R2)
  - 16 relay output module (PRO22OUT)
  - 16 alarm input module (PRO22IN)
- Module connectivity via RS485 protocol (1250m)

**Access Control Operational Functionality:**

- Duress detection
- Operational modes:
  - Card only
  - PIN only
  - Card or PIN
  - Card and PIN
  - Facility code only
- Maximum PIN size: 8 digits
- Door object support
- Two person access rule
- Offline modes (selectable per reader):
  - Facility code access
  - Locked (no access)
  - Unlocked (free access)
- Anti-Passback support via RS485 modules:
  - While preventing access (hard)
  - While allowing access (soft)
- Transaction prioritisation: 99 levels

**Enclosures:**

- PRO22ENC1 (Wall-mount)
  Capacity: nine modules.
  Power supply and battery not included
- PRO22ENC2 (19" Rack-mount)
  Capacity: nine modules.
  Power supply and battery not included
- PRO22ENC3 (Tile-mount)
  Capacity: Two modules. Battery included.
  Recommended Power Supply: PSX220 Transformer 240VAC / 16VAC

**Dimensions:**

- PRO3200 Board: 22.86 cm H x 13.97 cm W x 2.54 cm D
- PRO22ENC1: 35.3 cm H x 43.18 cm W x 22.86 cm D
- PRO22ENC2: 35.3 cm H x 48 cm W x 22.86 cm D
- PRO22ENC3: 35.56 cm H x 40.64 cm W x 10.2 cm D

**Environment:**

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

**Wiring Requirements:**

- Power - twisted pair, 18 AWG
- RS485 - 24 AWG, 1,200m max, two twisted pairs with shield (120 W, 23 pF, Belden 9842 or equivalent)
- RS232 - 24AWG, 7.6 m max
- Alarm input - twisted pair, 30 ohms max

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## MODULE SPECIFICATIONS

| **Reader Modules** | |
|---|---|
| **PRO3200 Series Dual Reader Module (PRO32R2)** | |
| **Module Specifications** | |
| Port | 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-colour LED support |
| Buzzer Support | Buzzer support only with one-wire LED control |
| Door Alarm Inputs | 4 supervised, door status and egress inputs and 2 general purpose alarm inputs with programmable circuit type (2 additional supervised inputs available when using PRO22ENC3 enclosure) |
| Alarm Inputs | 2 dedicated alarm inputs for tamper detection and power loss |
| Door Control Relays | 2 general purpose output relays, form C, 5 A 28 VDC |
| Output Relays | 2 general purpose output relays, form C, 2 A 28 VDC (2 additional output relays available when using PRO22ENC3 enclosure) |
| **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 fail-secure (energise to activate) or fail-safe (de-energise to activate) |
| Pulse Time | 1-32,400 seconds, 1-255 for door relays |
| RS485 Port | RS485 port, 1,250m total bus length |
| Default Speed | 38.4 Kbps |

| **I/O Modules** | | |
|---|---|---|
| | **PRO3200 Series 16 Relay Output Module (PRO32OUT)** | **PRO3200 Series 16 Alarm Input Module (PRO32IN)** |
| **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 (four additional are available when using PRO22ENC3 enclosure) | 1 general purpose, form C, 2 A 30 VDC relay (one additional is available when using PRO22ENC3 enclosure) |
| **Output Control Properties** | | |
| Outputs | All 16 relay outputs (mounted in PRO22ENC3) or 12 relay outputs (in PRO22ENC1 and PRO22ENC2) 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 fail-secure (energise to activate) or fail-safe (de-energise 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, 1250m total bus length per port | |
| Default Speed | 38.4 Kbps | |

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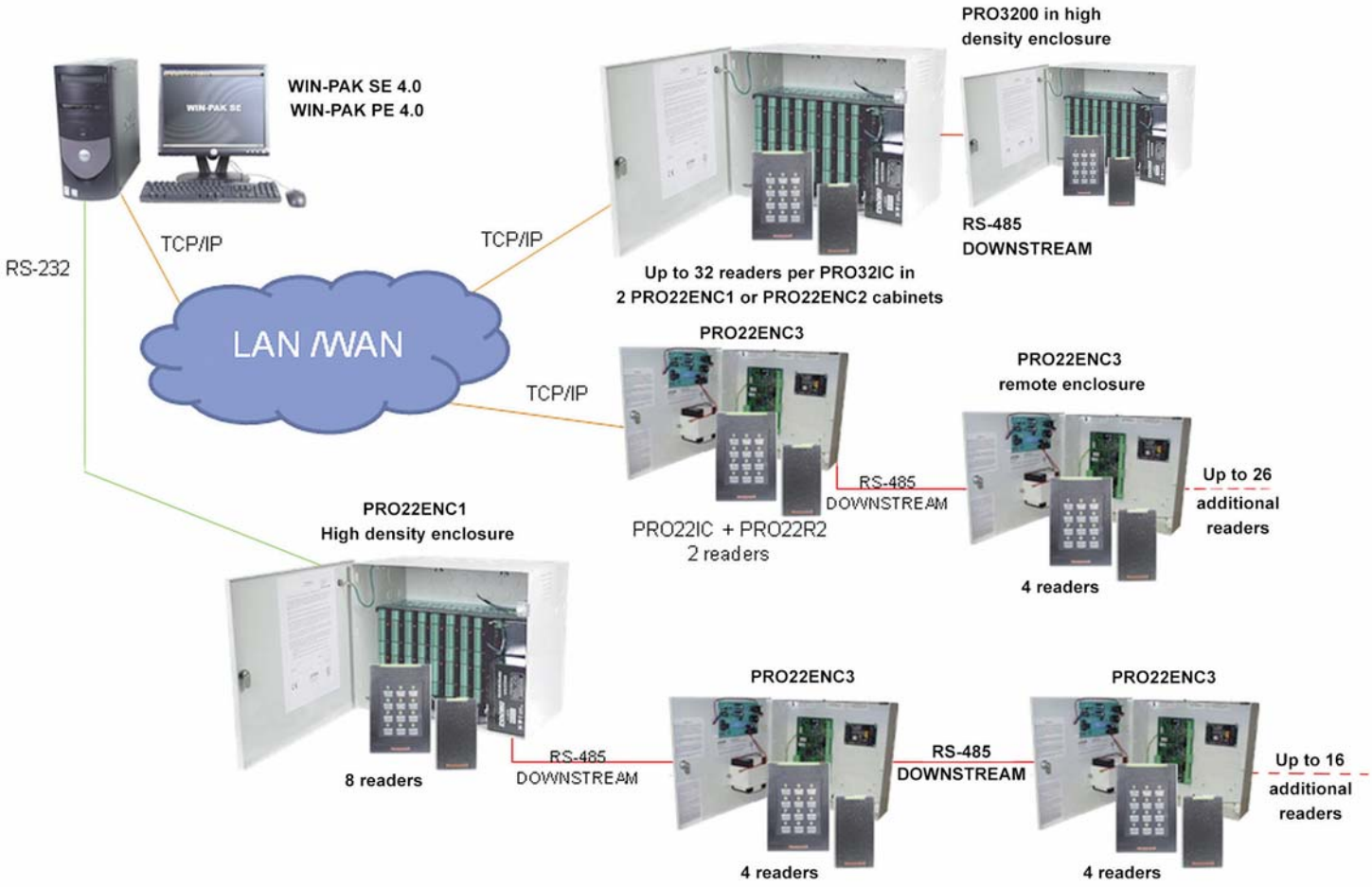
## TYPICAL SYSTEM CONFIGURATION




| | | PRO22ENC1 and PRO22ENC2 | | PRO22ENC3 | |
|---|---|---|---|---|---|
| **Module** | **Reader** | **Inputs** | **Outputs** | **Inputs** | **Outputs** |
| **PRO32R2** | 2 | 6 | 4 | 10** | 6 |
| **PRO32OUT** | 0 | 0 | 12 | 2** | 16 |
| **PRO32IN** | 0 | 16 | 1 | 18** | 2 |
| **Two are used to monitor Power and Tamper | | | | | |
| PRO22ENC1 and PRO22ENC2=9 Board Capacity / PRO22ENC3=2 Board Capacity | | | | | |

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## ORDERING

### PRO3200 Controllers and Modules

| | |
|---|---|
| **PRO32IC** | PRO3200 Intelligent Controller |
| **PRO32R2** | PRO3200 Dual Reader Module |
| **PRO32OUT** | PRO3200 16* Relay Output Module |
| **PRO32IN** | PRO3200 16 Alarm Input Module |

### PRO3200 High Density Enclosure kit

(add PRO3200 Modules to complete configuration)

| | |
|---|---|
| **PRO32E1EN** | PRO3200 Kit , including PRO32IC, PRO22ENC1, PRO32E1PS, PRO22BAT1, PRO22DCC |
| **PRO32E2EN** | PRO3200 Kit , including PRO32IC, PRO22ENC2, PRO32E1PS, PRO22BAT1, PRO22DCC |

### PRO3200 High Density Enclosures and Accessories

| | |
|---|---|
| **PRO22ENC1** | Wall-mount, high-density enclosure for power supply, main controller and up to eight modules. Power supply and battery not included |
| **PRO22ENC2** | 19" Rack-mount, high-density enclosure for power supply, main controller and up to eight modules. Power supply and battery not included |
| **PRO32E1PS** | 110V/240VAC - 12VDC /4 A rack-mounted power supply with battery backup |
| **PRO22DCC** | PRO3200 power/communication daisy chain harness |

### PRO3200 Remote Enclosure and Accessories

| | |
|---|---|
| **PRO22ENC3** | Wall-mount enclosure with battery for two modules. Power supply not included |
| **PSX220** | 240VAC / 16VAC transformer |

* Only 12 relay outputs are available when using the PRO22ENC1 and PRO22ENC2 enclosures

**For additional information,**
please visit www.honeywell.com/security/uk

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HAS-PRO3200-01-UK(0514)DS-E
May 2014