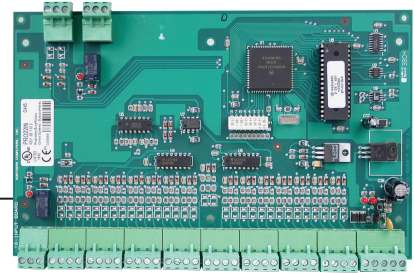


## PRO-2200 Series Access Modules

**PRO22IC, PRO22R1, PRO22R2, PRO22OUT, PRO22IN**



The PRO-2200 Series family of access modules is controlled by and connected to the intelligent control module through a supervised RS-485 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 customisable 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 two dedicated power fail and panel tamper when tile mounted. Up to 12 or 16, form C, 12 VDC, 2 amp, relay output controls depending if the board is rack or 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 two 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 PRO-2200 Series of access modules is 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 inch rack-mounted enclosure rack unit
- The PRO22ENC5 is a rack unit which fits within a customers enclosure.

## FEATURES

- Modular design fits a wide variety of applications
- Up to nine modules, power-supply and battery can be accommodated by the PRO22ENC1, PRO22ENC2 and PRO22ENC5 enclosures
- User programmable relay outputs allow for specific control needs
- User programmable alarm inputs offer flexible system configuration and control
- RS-485 communication to all modules
- Dedicated cabinet tamper and power monitor inputs
- Analog to digital converter technology provides digital filtering and input conditioning
- 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 RS-485 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/O or readers modules may be connected to the PRO22IC RS-485 ports. 4,000 feet / 1,250 meters total bus length per port

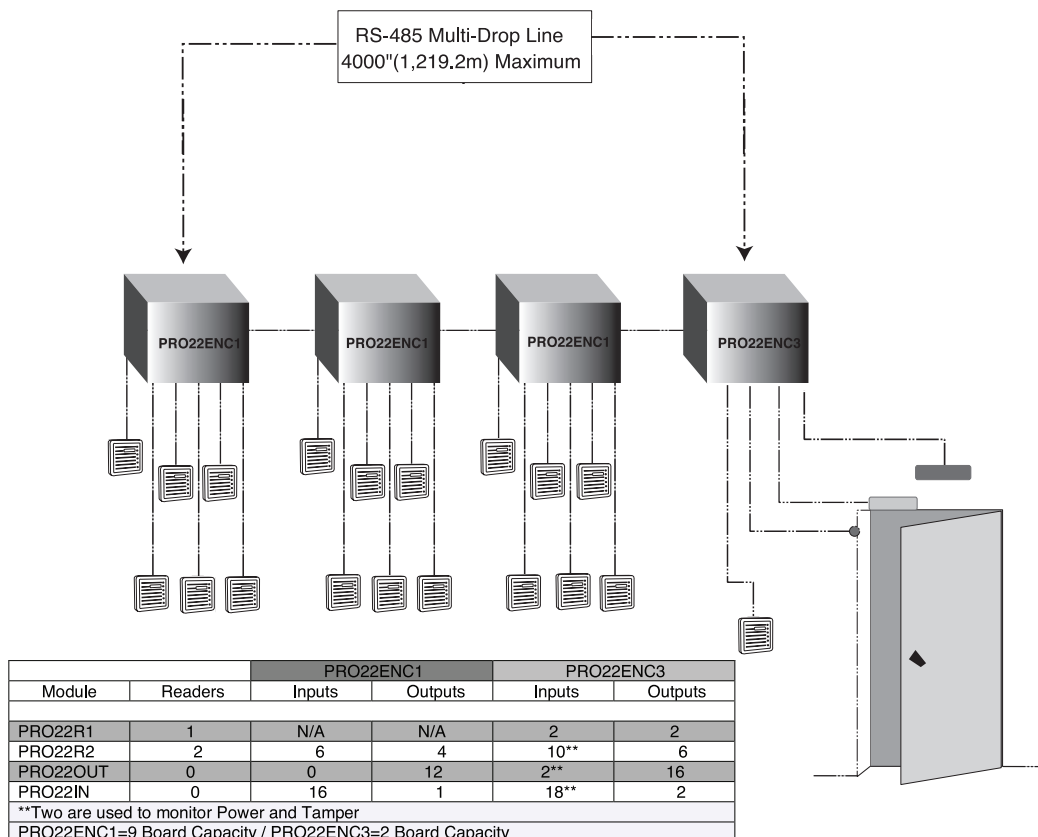
# PRO-2200 Series Access Modules

PRO22IC, PRO22R1, PRO22R2, PRO22OUT, PRO22IN

## BENEFITS

- Anti-passback support**  
 Anti-passback support – free pass and exempt flags, last area accessed, last reader accessed and time/date of last access
- Modular Hardware**  
 Modular hardware architecture provides flexibility and expansion capabilities
- Database**  
 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**  
 Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- Alarm Inputs**  
 Four-state alarm input circuits - normally opened, normally closed, non-supervised, supervised (w/EOL)
- Mounting Options**  
 Rack or tile mounting options available
- Programmable Sensitivity**  
 Alarm conditioning with programmable sensitivity and hold time
- ADA Compliant**  
 ADA compliant allowing expanded door times selectable per reader
- Multiple Reader States**  
 Selectable reader states include card and PIN, card or PIN, card only, or PIN only
- Auto Switching**  
 Auto switching power supply allows 110 / 220 operation with PROENC1
- Customisable Modes**  
 System off-line modes customizable per reader include facility code access, locked (no access), and unlocked (full-access)
- Multiple Reader Formats**  
 Supports multiple reader and card formats for maximum flexibility and security options

## CONFIGURATION



## SPECIFICATIONS

### PRO-2200 Series Single Reader Modules (PRO22R1)

#### Module Specifications:

- 1 Reader port - 12 VDC at 50 mA, clock / data or data0 / data1
- Keypad multiplexed with card data
- Two-wire or one-wire bi-color LED support
- Buzzer support only with one-wire LED control
- 2 supervised, general purpose alarm inputs with programmable circuit type
- 1 dedicated alarm input for tamper detection
- 1 general purpose output relay, form-C, 5A 28 VDC
- 1 general purpose output relay, form-C, 1A 28 VDC
- To be used only with the PRO22ENC4 enclosure

#### Alarm Input Properties:

- Inputs may be assigned to door related functions or general purpose I/O
- Circuit type – normally open, normally closed, non-supervised, supervised (with standard 1K or custom end-of line resistance 200-10K)
- Line conditioning – programmable sensitivity and hold time

#### Output Control Properties:

- Outputs may be assigned to door related functions or general purpose I/O
- The 5A relay(s) are rated to handle the inductive loads of door locking devices
- The 1A relay is rated to handle dry circuit logic
- Configurable as standard (energize to activate) or fail-safe (de-energize to activate)
- Pulse control – single pulse (up to 24 hours) or repeating pulse (on/off in 0.1 second increments, up to 255 times)

### PW-Series Dual Reader Module (PRO22R2)

#### Module Specifications:

- 2 Reader ports - 12 VDC at 50 mA, clock/data or data0/data1
- Keypad multiplexed with card data
- Two-wire or one-wire bi-color LED support
- Buzzer support only with one-wire LED control
- 8 supervised, general purpose alarm inputs with programmable circuit type (only 6 available when using PRO22ENC1, PRO22ENC2 and PRO22ENC5 enclosures)
- 2 dedicated alarm inputs for tamper detection and power loss
- 2 general purpose output relay, form-C, 5A 28 VDC
- 4 general purpose output relay, form-C, 2A 28 VDC (only 2 available when using PRO22ENC1, PRO22ENC2 and PRO22ENC5 enclosures)

#### Alarm Input Properties:

- Inputs may be assigned to door related functions or general purpose I/O
- Circuit type – normally open, normally closed, non-supervised, supervised (with standard 1K or custom end-of line resistance 200-10K)
- Line conditioning – programmable sensitivity and hold time

#### Output Control Properties:

- Outputs may be assigned to door related functions or general purpose I/O
- The 5A relay(s) are rated to handle the inductive loads of door locking devices
- The 1A relay is rated to handle dry circuit logic
- Configurable as standard (energize to activate) or fail-safe (de-energize to activate)
- Pulse control – single pulse (up to 24 hours) or repeating pulse (on/off in 0.1 second increments, up to 255 times)

### PRO-2200 Series Sixteen Relay Output Module (PRO22OUT)

#### Module Specifications:

- 2 dedicated alarm inputs for tamper detection and power loss (tile-mounted only)
- 12 general purpose output relays, form C, 2A 30 VDC (16 are available when using PRO22ENC3 tile-mounted enclosure)

#### Output Control Properties:

- All 16-relay outputs in the tile-mount configuration (12" rack-mount) are available for general purpose I/O
- The 2A relays are rated to handle dry circuit logic
- Pulse control – single pulse (up to 24 hours) or repeating pulse (on/off in 0.1 second increments, up to 255 times)
- Configurable as standard (energize to activate) or failsafe (de-energize to activate)

### PRO-Series Sixteen Alarm Input Module (PRO22IN)

#### Module Specifications:

- 2 dedicated alarm inputs for tamper detection and power loss (tile-mounted only)
- 16 general purpose inputs with programmable circuit type
- 2 general purpose, form C, 2A 30 VDC relays (only one available when using PRO22ENC1, PRO22ENC2 and PRO22ENC5)

#### Alarm Input Properties:

- All 16 inputs may be assigned to door related functions or general purpose I/O
- Circuit type – normally open, normally closed, nonsupervised, supervised (with correct EOL)
- Line conditioning – programmable sensitivity and hold time

#### Output Control Properties:

- Both relay outputs are available for general purpose I/O and rated to handle dry circuit logic
- Pulse control – single pulse (up to 24 hours) or repeating pulse (on/off in 0.1 second increments, up to 255 times)

## COMMUNICATION SPECIFICATIONS

### PRO-2200 Access Modules (PRO22R1) (PRO22R2) (PRO22OUT) (PRO22IN)

#### Module Specifications:

#### Communication Features:

- RS-485 port, 4000 feet / 1,250 meters total bus length
- Standard speed is 38.4 KBps

# PRO-2200 Series Access Modules

## COMMON SPECIFICATIONS

### Dimensions:

- Board: 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
- PRO22ENC1: 13.9" H x 17" W x 9" D / 353 mm H x 431.8 mm W x 228.6 mm D
- PRO22ENC2: 13.9" H x 18.9" W x 9" D / 353 mm H x 480.06 mm W x 228.6 mm D
- PRO22ENC3: 14" H x 16" W x 4" D / 355.6 mm H x 406.4 mm W x 102 mm D
- PRO22ENC4: 8.37" H x 7.63" W x 7.63" D / 212.8 mm H x 194 mm W x 194 mm D
- PRO22ENC5: 9.35" H x 16.85" W x 5.6" D / 237.4 mm H x 427.9 mm W x 142.2 mm D

### 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. Power supply and battery included

- PRO22ENC4 (Tile-mount) Capacity:
  - One module (PRO22R1 only) Power supply and battery included
- PRO22ENC5 (Cage only for custom enclosures) Capacity:
  - Nine modules. Power supply and battery not included

### Environment:

- Temperature: 0 to 70° C operational: -55 to 85° C storage
- Humidity: 0 to 95% RHNC

### Wire Requirements:

- Power - twisted pair, 18 AWG
- RS-485 - 24 AWG, 4,000 ft. / 1,200 m max, two twisted pairs with shield (120W, 23pF, Belden 9842 or equiv.)
- RS-232 - 24 AWG, 25 ft. / 7.6 m max.
- Alarm input - twisted pair, 30 ohms max.

## ORDERING

### Order # Description

#### PW-2200 Controllers

<b>PRO22IC</b>	PRO-2200 Intelligent Controller
<b>PRO22R1</b>	PRO-2200 Single Reader Module
<b>PRO22R2</b>	PRO-2200 Dual Reader Module
<b>PRO22OUT</b>	PRO-2200 Sixteen Relay Output Module
<b>PRO22IN</b>	PRO-2200 Sixteen Alarm Input Module
<b>PRO22EN</b>	PRO-2200 Network Interface Module

#### PRO-Series Enclosures

<b>PRO22ENC1</b>	(Wall-mount) Capacity: Nine modules. Power supply and battery not included
<b>PRO22ENC2</b>	(19" Rack-mount) Capacity: Nine modules. Power supply and battery not included
<b>PRO22ENC3</b>	(Tile-mount) Capacity: Two modules. Power supply and battery included
<b>PRO22ENC4</b>	(Tile-mount) Capacity: One module (PRO22R1 only). Power supply and battery included
<b>PRO22ENC5</b>	(Cage only for custom enclosures) Capacity: Nine modules. Power supply and battery not included

#### Optional Accessories

<b>PRO22DCC</b>	Daisy Chain cable required for PRO22ENC1, PRO22ENC2 and PRO22ENC5
<b>PRO22E1PS</b>	4-Amp rack-mounted power supply with battery backup required for PRO22ENC1, PRO22ENC2 and PRO22ENC5

#### Hardwired Kits

<b>PRO22E1IC</b>	Includes: PRO22ENC1, PRO22IC, PRO22E1PS, PRO22BAT1 and PRO22DCC
<b>PRO22E2IC</b>	Includes: PRO22ENC2, PRO22IC, PRO22E1PS, PRO22BAT1 and PRO22DCC

#### Network Kits

<b>PRO22E1EN</b>	Includes: PRO22ENC1, PRO22IC, PRO22EN, PRO22E1PS, PRO22BAT1 and PRO22DCC
<b>PRO22E2EN</b>	Includes: PRO22ENC2, PRO22IC, PRO22EN, PRO22E1PS, PRO22BAT1 and PRO22DCC

For more information: [www.honeywell.com/security/uk](http://www.honeywell.com/security/uk)

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