

PRO-2200 Series Controller

Access Control Solutions



The PRO-2200 Intelligent Control Module (PRO22IC) is an advanced access control panel capable of providing solutions for large applications.

The PRO22IC provides power and flexibility with its 32-bit CPU architecture, optional TCP/IP protocol support, flash memory for firmware and large local card holder database. The PRO22IC 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 (RS-232 or RS-485) dialup modem or TCP/IP network connection.

The PRO22IC supports any combination of up to 8 I/O or reader boards to monitor alarm input points, relay output points and access control reader interface points. By offering a modular design, the system can be tailored to meet a wide range of applications, while optimizing cost and mounting space.

The standard PRO22IC accommodates a card database of 20,000 cards, and a standard transaction buffer of 5,000 transactions. The memory expansion module (PRO22M4) allows for a card database of 50,000 cards and a transaction buffer capable of storing 35,000 transactions.

The PRO22IC is designed with various mounting options available. Units can be mounted in a rack configuration (PRO22ENC1, PRO22ENC2 and PRO22ENC5) when space is limited, or in a tile-mount configuration (PRO22ENC3).

FEATURES

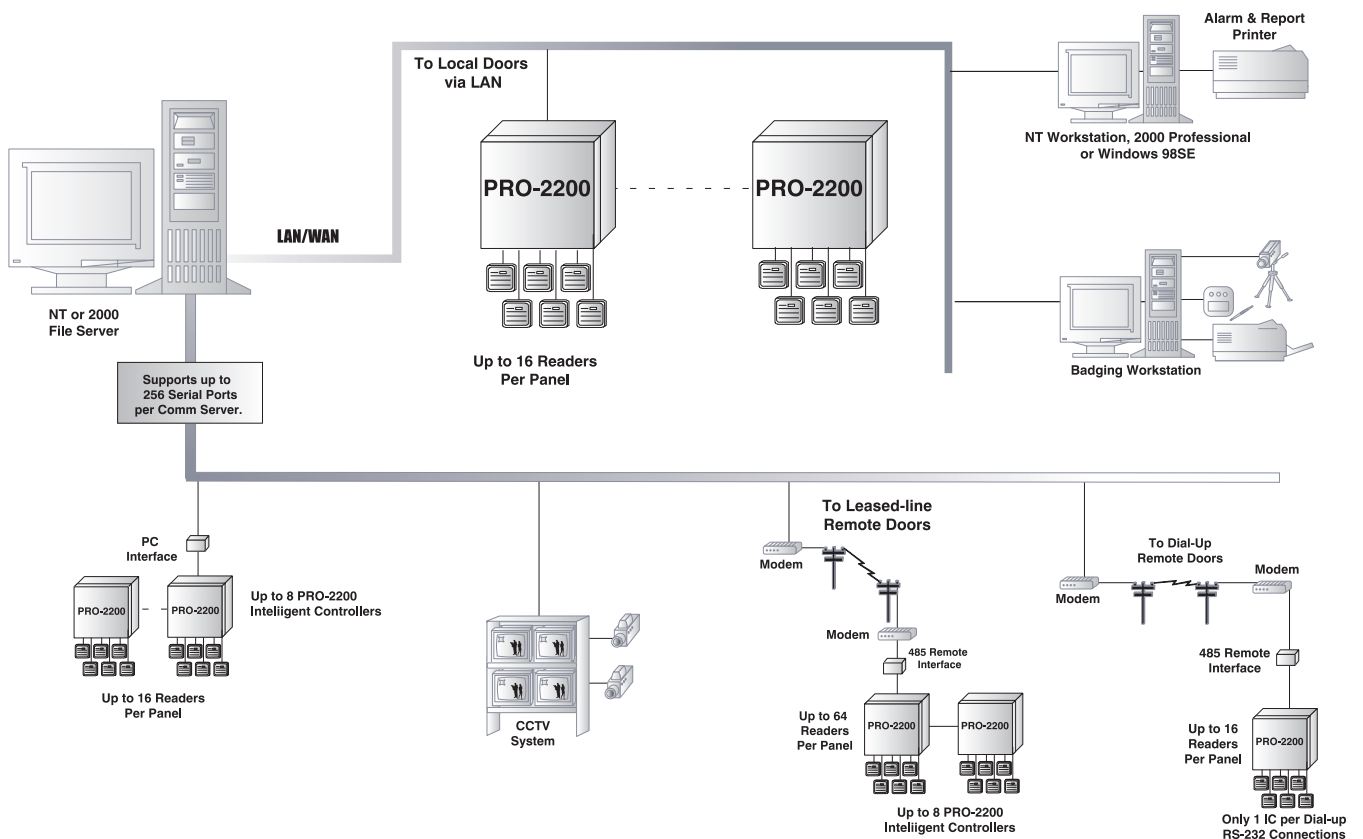
- Up to 12 intervals per time zone where each interval is a start time, stop time and day map. The day map indicates the day of the week or holiday
- 255 possible holidays are defined by a starting date and duration
- Automatic calculation of leap-year and daylight savings
- 9-digit (32-bit) user ID standard / 15-digit maximum
- Option to include or exclude fields during database configuration to maximize memory usage
- Activation and deactivation dates by card
- Up to 32 access levels per card or individual time zones per readers
- Personal Identification Number (PIN) with up to 8 digits
- 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)
- Pulse control: single pulse (up to 24 hours) or repeating pulses (on/off in 0.1 second increments, up to 255 times)
- Any combination of 8 I/O or reader modules may be connected to the PRO22IC RS-485 ports. 4,000 feet / 1,250 meters total bus length per port

PRO-2200 Series Controller

BENEFITS

- **32-Bit Microprocessor**
True 32-bit microprocessor provides fast transaction processing for the most demanding network applications
- **Modular Hardware**
Modular hardware architecture provides flexibility and expansion capabilities
- **Flash Memory**
Flash memory allows new versions of firmware to be downloaded from the host computer to the controller(s) through the central network
- **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 Architecture**
Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond initial installation
- **LAN or WAN Connectivity**
Seamless optional support for TCP/IP protocols to allow intelligent controller(s) to tap into a LAN or WAN connectivity
- **Multiple Readers**
Supports multiple reader and card formats for maximum flexibility and security options
- **Scalable Memory**
Scalable memory option is cost effective from small to very large system applications
- **Multiple Communication**
Multiple communication methods provide redundant paths for more robust system connectivity
- **Supervised Communication**
Supervised communication and lithium battery backup ensures system reliability
- **Customisable Systems**
System offline modes customisable per reader include facility code access, locked (no access), and un-locked (full access)

CONFIGURATION



SPECIFICATIONS

Database

- Cardholder capacity: 20,000 standard, 50,000 with memory expansion
- Transaction storage: 5,000 standard, 35,000 with memory expansion
- Flash programming for firmware revision updates
- Access codes: Unlimited
- Holidays: Unlimited
- Time codes: 255
- Card reader formats: 8 per reader
- Credential facility codes: 8
- Elevator support: 128 floors
- Dedicated tamper alarm
- Dedicated power fail alarm
- Real time clock:
 - Geographic time zone support
 - Daylight savings time
 - Leap year support
 - 4-bit parallel accurate to 50 ppm
- Precision access groups / levels
- Multiple access groups / levels

- 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

- Card 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

Access Modules:

- 8 total devices available per controller
- Access modules available:
 - Single reader module (PRO22R1)
 - Dual reader module (PRO22R2)
 - Sixteen relay output module (PRO22OUT)
 - Sixteen alarm input module (PRO22IN)
- Module connectivity via RS-485 protocol (4000 feet)

Communication Modules:

- Primary communication support:
 - RS-232
 - RS-485
 - Dial-up modem
 - Ethernet (TCP/IP)

Operational Functionality:

- Duress detection
- Operational modes:
 - Card only
 - PIN only
 - Card or PIN

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.

PRO-2200 Series Controller

Access Control Solutions

ORDERING

Order #	Description
---------	-------------

PW-2200 Controllers

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

PRO-Series 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

Communications

PRO22EN	Ethernet daughter board for TCP/IP communication
PRO22CVT1	RS-232 to RS-485 single port converter
PRO22DCC	PRO-2200 power / communication daisy chain harness for PRO22ENC1, PRO22ENC2 and PRO22ENC5

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

Honeywell Security

Charles Avenue

Burgess Hill

West Sussex

RH15 9UF

Tel: 01444 251180

Fax: 01444 871074

www.honeywell.com/security/uk

HAS-PRO2200-02-EN(0808)DS-LD

August 2008

© 2008 Honeywell International Inc.