



Versatile, reliable and expandable. The three main components delivered with every N-1000 make it the most popular access control panel ever.

A key feature of the N-1000 includes its completely distributed database. All card information, time zone information, relay control information and alarm point information is loaded into the N-1000's memory. The unit will operate completely stand-alone with no dependence on any other equipment.

The most important feature of any access control system is the ability to be expanded. The N-1000 will operate as a stand-alone two or four door controller, and as needs increase up to 31 N-1000's may be connected on an RS-485 dropline (63 using 20mA current loop). Using WIN-PAK access control software, a total system is achieved by having each drop-line connected to a communication port, modem or ethernet terminal server.

The N-1000-IV 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), dial-up modem or TCP/IP network connection.

The N-1000-IV-X allows for a card database of 25,000 cards and a transaction buffer capable of storing 6,600 transactions.

### F E A T U R E S

- 4 reader control panel (N-1000-IV)
- 2 reader control panel (N-1000-III)
- Supports all major reader technologies and 16-digit ABA card formats
- Distributed database for independent operation
- Operates in remote site configurations with dial-up (requires M-9600-2 and N-485-HUB-2) or leased lines
- N-1000-IV-X: 25,000 card memory  
N-1000-IV: 5,000 card memory
- N-1000-IV-X: 6,600 buffers  
N-1000-IV: 10,200 buffers
- RS-485 and 20 mA communications are jumper selectable
- Compatible with the N-1000-II
- 16 supervised alarm inputs. Separate inputs for tamper switch and primary power fail monitoring
- DPDT Form C relays; 4 on N-1000-III/IV, 8 on N-1000-III/IV-X
- 63 time zones to control card access, relays and alarm points
- Relays are "time-programmable" for automatic control
- 12 VDC Battery Backup
- 12 VDC, 500 mA output for Reader/IR devices
- 8 programmable card formats supported
- Preassembled, hinged, locking enclosure with battery and toggle switch
- UL294 listing/CE certification

# N-1000 SERIES CONTROLLER SPECIFICATIONS

## Specifications

### Database:

- Cardholders: 5,000 standard, 25,000 with memory expansion
- Transaction storage: 10,200 standard, 6,600 with memory expansion
- Holidays: 32
- Time codes: 63 per controller
- Card reader formats: 8
- Credential facility codes: 8
- Elevator support: 32 groups
- Leap Year support

### Communication:

- Communication support:
  - RS-485
  - 20mA
- Communication speed: 38.4 Kbps (RS485 Backbone) (1200-4800/20mA)
- Automatic dial back:
  - Dial back on alarm condition
  - Dial back when transaction buffer capacity is reached
- Download functionality:
  - System functional during system download: Yes
  - System functional during credential download: Yes

### Operational Functionality:

- Duress detection
- Card/PIN:
  - Credential only
  - Credential and PIN
- Anti-passback support:
  - Learn
  - Hand
  - Forgiveness at midnight

### Enclosure Dimensions:

- 14 in. H x 16 in. W x 4 in. D (35.56 cm H x 40.64 cm W x 10.16 cm D)

### Weight:

- 21 lbs. (9.5 kg)

### Environment:

- Temperature: 35-110°F (2-43°C) operational
- Humidity: 0 to 85% RHNC

### Wire Requirements:

- Power - twisted pair, 18AWG
- RS-485 - 24 AWG, 4,000 ft. / 1,200 m max, 2 twisted pairs with shield (120Ω, 23pF, Belden 9842 or equiv.)
- Alarm input - twisted pair, 22AWG 2000 ft.
- Reader - 5 wire, 18 AWG up to 500 ft (152 m)
- Matrix keypad - 11 conductor up to 500 ft (152 m)

## Recommended Components

### Controllers:

- N-1000-III two reader controller module
- N-1000-III-X two reader controller module with four additional relay outputs and additional card capacity
- N-1000-IV four reader controller module
- N-1000-IV-X four reader controller module with four additional relay outputs and additional card capacity

### Communication Devices

- N-485-PCI-2 - RS485 direct connect to PC comm port
- N-485-HUB-2 - RS485 remote dial-up application (RS232 modem to 485 drop line)
- N485PCI2L - Convert RS485 to 232 for LANSRL100
- C-100-A2 - 20mA to 232

### Readers:

#### Proximity Readers:

#### HID

- PR-MAX-PRO (24" reader range)
- PR-P-PRO (8" reader range)
- PR-PROXPRO-K-2 (8" reader range, card / keypad reader)
- PR-MINI-PROX (5" reader range)

#### Indala

- FP603 (4" reader range)
- FP605 (4" reader range)
- FP610 (10" reader range)
- FP620 (24" reader range)

#### OmniProx

- OMNI-10 (2-3" reader range)
- OMNI-30 (4" reader range)
- OMNI-40 (4" reader range)

#### Wiegand:

- CR-1 (wiegand swipe reader)

#### Magnetic stripe readers:

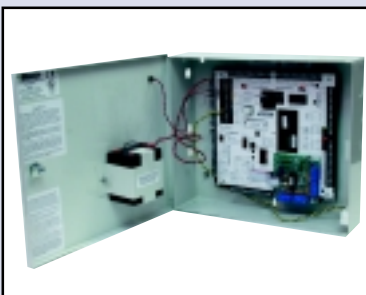
- NR-5-WR (track 2 reader)
- NR-2-WR (track 1 reader)

#### Keypads:

- KP10 switchplate 11 wire matrix
- KP11 switchplate 5 wire wiegand
- KP12 mullion mount 11 wire matrix
- KP13 mullion mount 5 wire wiegand

## BENEFITS

- 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
- Scalable architecture ensures optimal performance with a seamless upgrade path to accommodate future growth beyond its initial installation
- Multiple communication methods provide redundant paths for more robust system connectivity (requires N485DRLA)
- Supervised communication
- SuperCap instead of Lithium battery provides maintenance free backup of panel programming and data storage



# Recommended Components

## Credentials

Proximity:

HID Proximity Cards

- PX-4-H (34-bit)
- PX-26-H (26-bit)
- PVC-H-4 (34-bit for video badging)
- PVC-H-4-26 (26-bit for video badging)
- PVC-H-5 (34-bit with magnetic stripe for video badging)

Motorola Proximity Cards

- PX-121-I (26-bit)
- PVC-I-6 (26-bit with magnetic stripe for video badging)
- PVC-I-7 (26-bit for video badging)

Magnetic Stripe

- NC-2 (32-bit standard)
- PVC-M-2 (PVC card for video badging)

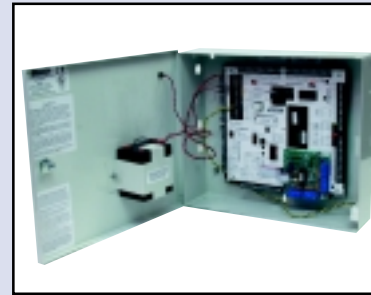
Wiegand

- SC-2 (26-bit with hot stamp number)
- PVC-W-2 (26-bit with hot stamp number for video badging)

## Miscellaneous

X-4 power transformer for N-1000

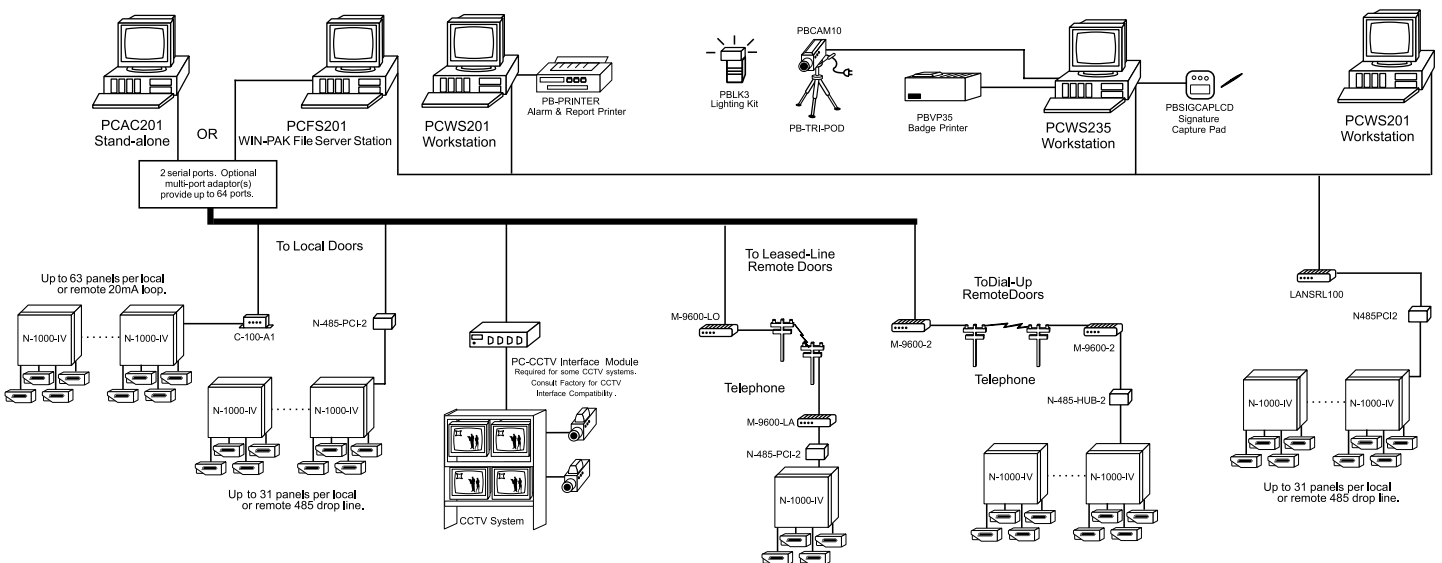
S-4 suppressor kit for each active relay



## BENEFITS

- Optional support for TCP/IP protocols to allow intelligent controllers to tap into a LAN or WAN connectivity
- Supports multiple reader and card formats for maximum flexibility and security options
- Scalability makes the N-1000 very cost effective for all applications, from small to very large systems

## N-1000 Configuration using WIN-PAK



# N-1000 ACCESS MODULES

## ORDERING INFORMATION

Order #	Description
<b>N-1000 Series Controllers</b>	
N-1000-III	Two reader controller module, 4 DPDT relays, 16 supervised inputs
N-1000-III-X card	Two reader controller module with 8 DPDT relay outputs and additional capacity
N-1000-IV	Four reader controller module, 4 DPDT relays, 16 supervised inputs
N-1000-IV-X card	Four reader controller module with 8 additional relay outputs and additional capacity
<b>Hardwired communication devices for N-1000 series controllers</b>	
N-485-PCI-2	RS-232 to RS-485 single port converter
C-100-A2	RS-232 to 20mA single port converter
<b>Network communication devices for N-1000 series controllers</b>	
LANSRL100	RS-232 to LAN converter, 10/100 mbps
<b>Dial-up communication devices for N-1000 series controllers</b>	
N485PCI2L LANSR100L	RS-232 to RS-485 LAN converter that works in conjunction with the
N-485-HUB-2	RS-232 / 25 pin modem converter to RS-485
M-9600-2	Dial-up modem
<b>Miscellaneous</b>	
X4	Power transformer for N-1000
S4	Suppressor kit for each active relay



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