

NetAXS-123

Stand-alone, modular, web-enabled access control system



NetAXS-123 is a fully featured, compact stand-alone access control solution that can be easily installed and managed via a web browser without the need to be connected to a network or the internet. Each NetAXS-123 panel can be configured for one, two or three doors.

Stand-alone panel managed using free web browser functionality

NetAXS-123 doesn't require an on-line connection or a dedicated PC and operates autonomously. To manage the card holders and access control functionality on the panel locally, simply connect via the free web browser using a USB or standard network cable to any PC or laptop.

Easy installation saves time

The NetAXS-123 panel provides all connections for 1, 2 or 3 doors with one or two readers per door. Expanding a one door system takes just minutes with the NetAXS-123 add-on boards for one or two doors. Connecting the peripherals is made easier and wiring minimised using Power over Ethernet (PoE) capability, self powered outputs for locks and USB connectivity. Units are available in either a compact plastic enclosure or a metal enclosure with a built-in power supply for panel and locks. Both are attractively designed to blend in with users' premises.

No need for dedicated software

Whether the user needs to run a report or manage card holders or you need to service and maintain the NetAXS-123 panel, there is no need for dedicated software. Everything is managed securely via the web interface.

Easy as @bc

Like surfing the internet, intuitive web pages easily guide the user through the full set of extensive access control functionality, reducing training time for both installer and user.

On-line management and remote service opportunity

As a web-based panel NetAXS-123 can be connected to the internet or a company's intranet, which enables the user to manage their access control within the company's network on-line. If the user's network provides access to the internet for the NetAXS-123 panel, the installer has the opportunity to remotely service and maintain the panel, connecting safely using secure internet protocols. In both cases, the only tool needed is a laptop with the web browser.

Up to 48 doors with Ethernet Virtual Loop connectivity

A single NetAXS-123 can be expanded to a system with 16 panels, connected via Ethernet Virtual Loop (EVL - from release 5.0). Without the need to run additional RS-485 wiring it is possible to use the existing IT network and connect up to 48 doors. Using DHCP the networked system set up is easily managed in the web interface.

Low cost of ownership

NetAXS-123 is an affordable solution for the user. As security needs grow, NetAXS-123 can be expanded up to a 93 door stand-alone system (via RS-485), all manageable via one web browser. The EVL functionality can even be implemented in existing NetAXS-123 panels just by loading the new firmware without the need to exchange the NetAXS-123 hardware. In stand alone applications, energy costs can be saved as there is no need for a dedicated PC to run 24/7.

Grow with customer needs

As an option for a remote managed solution, WIN-PAK™ Central Station can be applied to NetAXS-123 and in addition, a basic stand alone NetAXS-123 system can easily grow to an integrated security solution using WIN-PAK™. All these growth opportunities can be made without loss of investments.

NetAXS-123

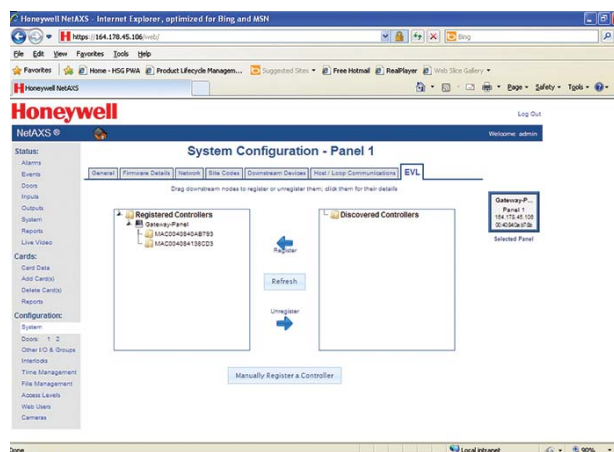
Stand-alone, Modular, Web-enabled Access Control System

MANAGEMENT FEATURES USING THE WEB BROWSER



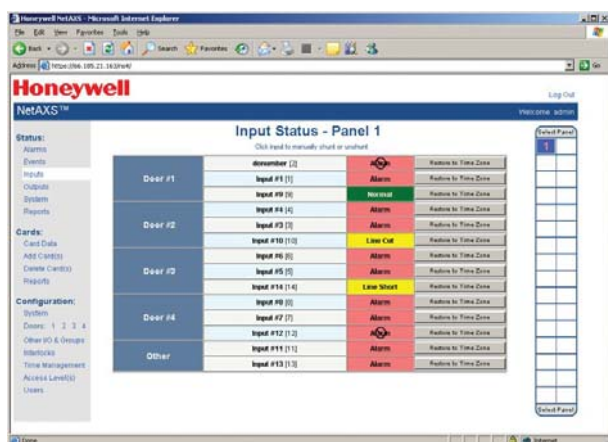
User Friendly

Easy to use landing page provides a user-friendly experience so you can provide end user training in less than 30 minutes. Whether you're showing customers how to set up access levels, or teaching them how to add or delete cards, everything you need is all located on one page. Simply log into your IP address and navigate the system like you would any other Internet site.



RS-485 or Ethernet Virtual Loop (EVL) with NetAXS-123

Ethernet Virtual Loop (EVL), a NetAXS-123 v5.0 feature, allows up to 16 IP network connected NetAXS-123 controllers to be managed as a group. The group is called a "Virtual Loop" as its functionality is similar to an RS-485 loop also featured with version 5.0 and previous releases of NetAXS firmware. NetAXS-123 downstream panels operating EVL and on the same subnet as the gateway panel are automatically discovered by the gateway panel, greatly reducing installation time and making system expansion easy.

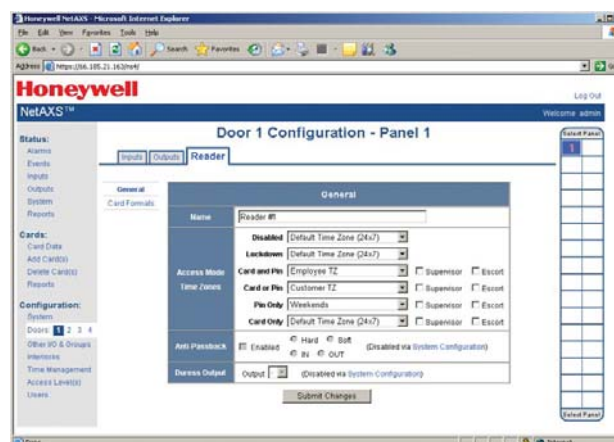


Dynamic Screen Updates

With NetAXS-123, dynamic screens refresh data automatically without having to refresh the page. This allows status updates to be pushed out to the web screens automatically, without user interaction.

Alarms, events, inputs, outputs and status screens all automatically update as information is received - great for service monitoring purposes.

Data transfer between the controller and web browsers has been optimised to reduce bandwidth requirements, improving screen response times.



Door Access Modes and Options

NetAXS-123 allows you to assign different levels of access to cardholders.

Supervisor access allows an employee to present their card once to the reader to give individual access. If the supervisor presents their card twice, they enable access for their team during the specified time zone.

Escort access requires a supervisor escort for a non-supervisor cardholder. The supervisor must present his card first, then the non-supervisor must present his card within ten seconds of the supervisor's card read.

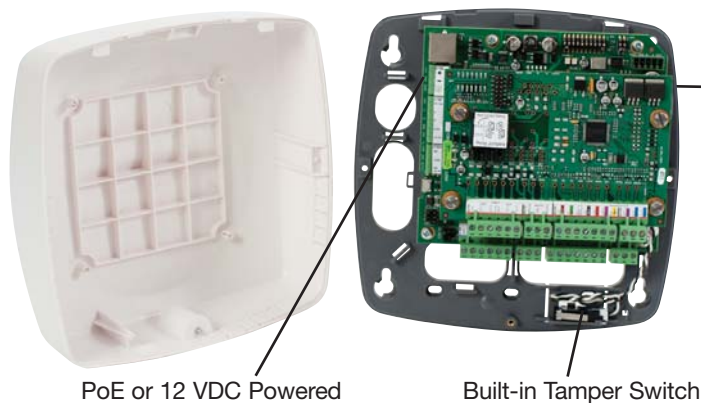
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ENCLOSURE OPTIONS

Compact Plastic Enclosure

- For 1 or 2 doors
- Power over Ethernet (PoE) option
- Using PoE, the panel lock output can power one 12 VDC low power door locking device



Control Panel (NXG1)

- Ethernet Port: Connect to web browser or WIN-PAK software
- RS485: Connect panels downstream and/or connect to WIN-PAK software
- USB Port: Easy set-up and diagnostics from your laptop
- Colour coded terminal labels
- Removable terminal blocks

Standard Metal Enclosure

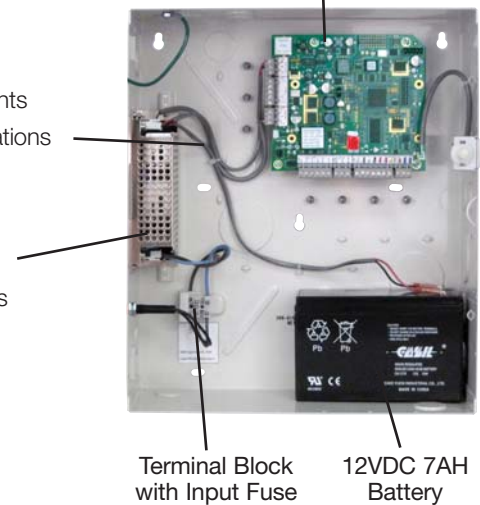
- For 1, 2 or 3 doors
- The panel lock output can power up to three 12 VDC door locking devices

Multiple Tie-Down and Grounding Points

- Cleaner and more consistent installations

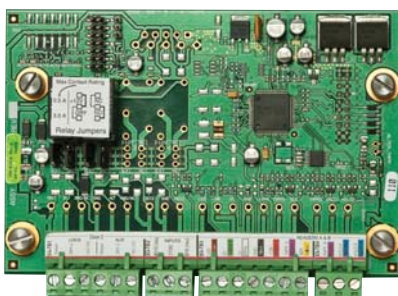
4 A, 12 VDC Power Supply

- Universal input (100-240 VAC)
- 3.5 A available to power accessories - over 1 A to power each door



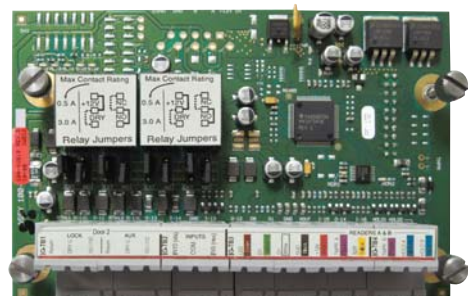
ADD-ON BOARDS

One Door Add-on Board



- One extra door for controller in plastic and metal enclosure
- The lock output can power one 12 VDC door locking device

Two Door Add-on Board



- Two extra doors for controller in metal enclosure
- The lock output can power up to two 12 VDC door locking devices

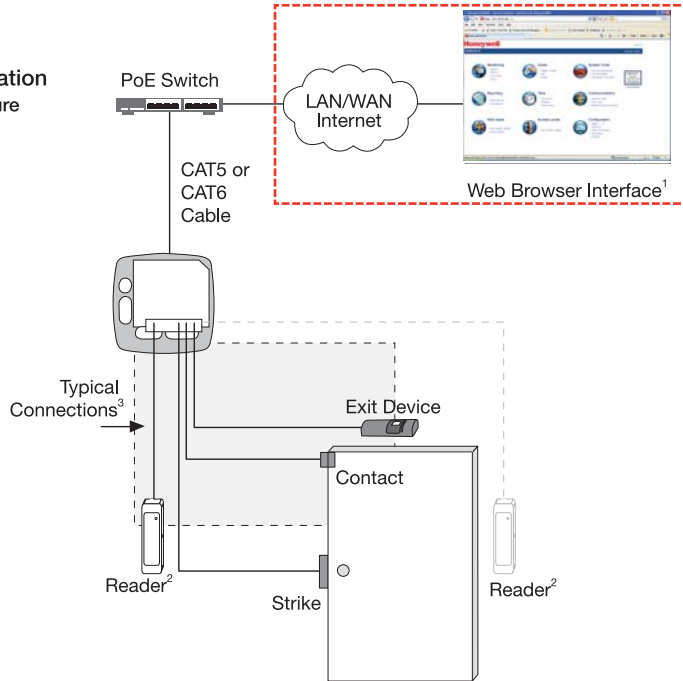
NetAXS-123

Stand-alone, Modular, Web-enabled Access Control System

SYSTEM OVERVIEW

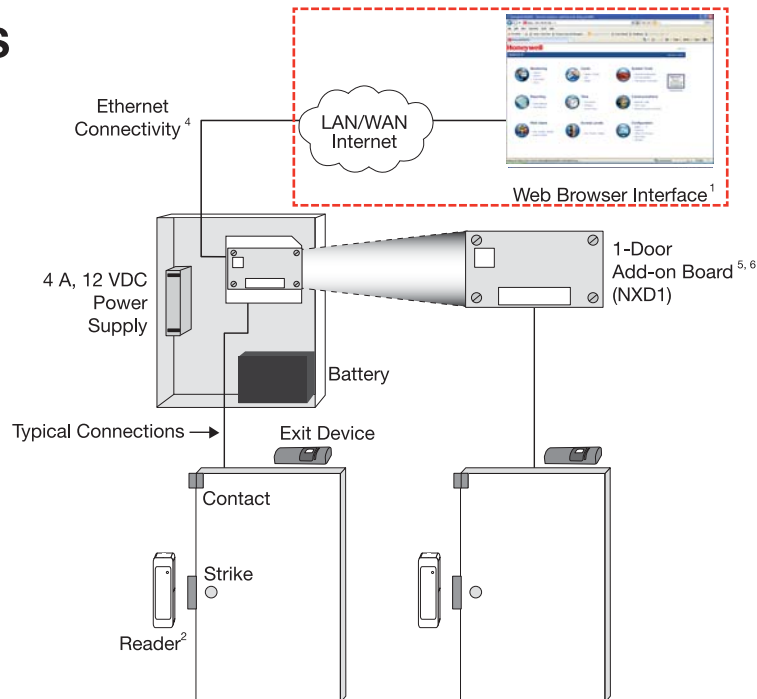
1 DOOR

Typical PoE Configuration
Compact Plastic Enclosure



2 DOORS

1 Door Standard
Metal Enclosure
shown with 1-Door
Add-on Board



¹ Also compatible with WIN-PAK® XE, WIN-PAK SE, WIN-PAK® SE, WIN-PAK® PE and WIN-PAK® CS (Managed Access)

² When using an IN and OUT reader, BOTH readers must have HOLD lines

³ 450 mA, 12 VDC is maximum available to power strike, reader(s) and input devices when using a 802.3af PoE connection. If unit is externally powered with a 12 VDC supply, higher current is available.

⁴ USB compatibility for local configuration

⁵ 1-door add-on board compatible with compact plastic enclosure

⁶ Requires external power when used in compact plastic enclosure

⁷ 2-door add-on board is not compatible with compact plastic enclosure

⁸ When mixing NetAXS-123 and 4-door NetAXS (NetAXS-4) controllers, the NetAXS-123 must be configured as the first panel or gateway

Elements inside the red dotted line are not permanently required. Connecting NetAXS-123 to a network enables remote and local management opportunities.

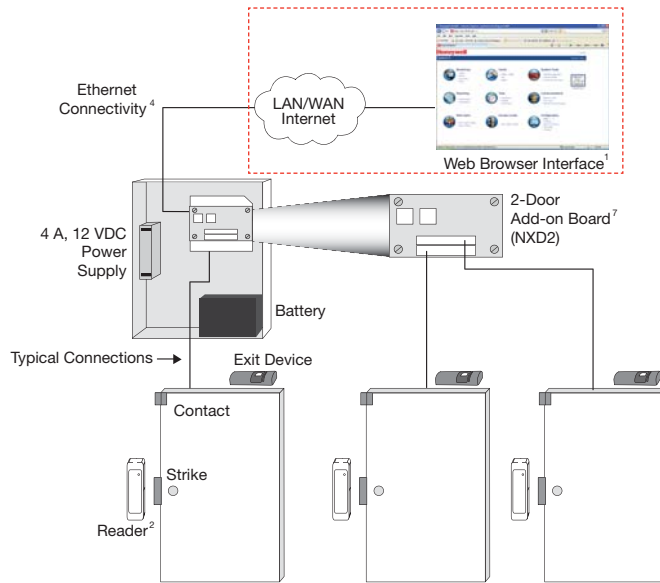
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SYSTEM OVERVIEW

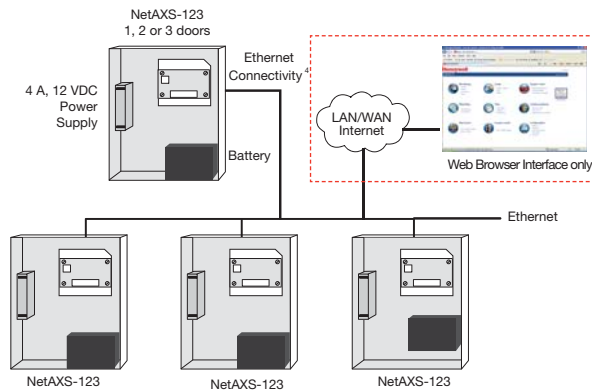
3 DOORS

1 Door Standard Metal Enclosure shown with 2-Door Add-on Board



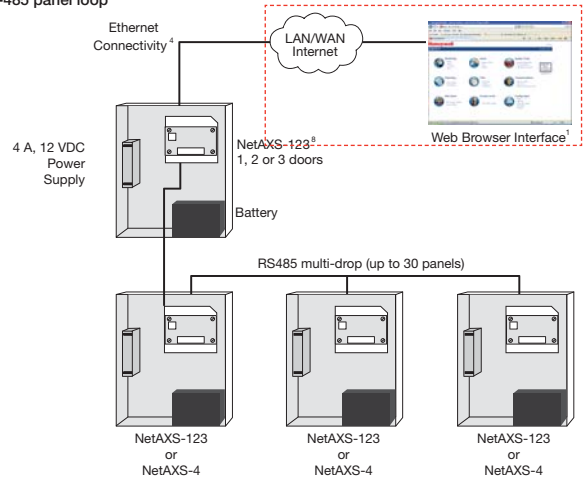
>3 DOORS

Scalable Architecture up to 16 panels
Ethernet Virtual Loop



>3 DOORS

Scalable Architecture up to 31 panels
RS-485 panel loop



¹ Also compatible with WIN-PAK® XE, WIN-PAK SE, WIN-PAK® SE, WIN-PAK® PE and WIN-PAK® CS (Managed Access)

² When using an IN and OUT reader, BOTH readers must have HOLD lines

³ 450 mA, 12 VDC is maximum available to power strike, reader(s) and input devices when using a 802.3af PoE connection. If unit is externally powered with a 12 VDC supply, higher current is available.

⁴ USB compatibility for local configuration

⁵ 1-door add-on board compatible with compact plastic enclosure

⁶ Requires external power when used in compact plastic enclosure

⁷ 2-door add-on board is not compatible with compact plastic enclosure





⁸ When mixing NetAXS-123 and 4-door NetAXS (NetAXS-4) controllers, the NetAXS-123 must be configured as the first panel or gateway

⁹ NetAXS-123 v5.0 or later supports Ethernet Virtual Loop (EVL). NetAXS-4 DOES NOT SUPPORT EVL. Therefore, systems using EVL must use NetAXS-123 panels.

Elements inside the red dotted line are not permanently required. Connecting NetAXS-123 to a network enables remote and local management opportunities.





NetAXS-123

Stand-alone, Modular, Web-enabled Access Control System

		NetAXS-123		Add-on Boards	
					
		NX1P	NX1MPS	NXD1	NXD2
READERS/DOORS	Door/Reader Capability	1 Door Controller ^{1,4}	1, 2 or 3 Door Controller (NXD1 or NXD2 add-on board is required for 2nd or 3rd door)	1 additional Door	2 additional Doors
	Expandability	Expandable up to 93 DOORS (186 readers) per RS-485 controller loop ^{2,3} Expandable up to 48 DOORS (92 readers) per EVL controller loop ^{2,3}		N/A	
	Dual Reader Control Capability (IN/OUT Reader per Door)	YES ⁵ – IN and OUT reader capability per door (readers must have HOLD line capability)			
	Reader Compatibility	Standard Wiegand protocol supported ABA not supported			
OUTPUTS	Number of Outputs	Two SPDT relays (jumper selectable NO or NC contacts) per door rated at 3 A @ 28 VDC Two open collector outputs (OC) (16 ma, 12 VDC): reader LED (Aux) and reader buzzer (Aux) per door are available.			
	Output Expandability	2-door solution has 8 total outputs: 4 relays, 4 OC (requires NXD1 add-on board)	2-door solution has 8 total outputs: 4 relays, 4 OC (requires NXD1 add-on board) 3-door solution has 12 total outputs: 6 relays, 6 OC (requires NXD2 add-on board)	N/A	
	Relay Power Source	Selectable: +12 VDC self-powered - OR - 0 to 28 VDC externally supplied source			
INPUTS	Number of Inputs	Controller has a total of six configurable four-state supervised input points. (Factory default settings are Status, REX, Reader Tamper A, Reader Tamper B, Power Fail and General Input)		Add-on board has a total of four configurable four-state supervised input points per door. (Factory default settings are Status, REX, Reader Tamper A, and Reader Tamper B)	
	Input Expandability	2-door solution has a total of 10 inputs (requires NXD1 add-on board)	2-door solution has a total of 10 inputs (requires NXD1 add-on board). 3-door solution has a total of 14 inputs (requires NXD2 add-on board)	N/A	
	Power-Fail and Panel Tamper	Yes		N/A	
	'Off the Wall' Tamper Capability	Yes	N/A	N/A	
POWER INPUT	Unit Input	Power over Ethernet (PoE) 802.3af or external 12 VDC supply	93 VAC to 264 VAC, 50/60 Hz input provides 12 VDC, 4 A output	N/A	
	Socket or Hardwire AC Input	N/A	Yes	N/A	
	Control Board Power Input	Power over Ethernet (PoE) or +12 VDC	+12 VDC from included power supply	N/A	
POWER OUTPUT	Power for Reader(s), Input Devices and locks / strikes	450 mA, 12 VDC is available to power strike, reader(s) and input devices when using PoE. If higher current is needed, power by external 12 VDC supply	1.15 A per door for locks/strikes, readers and input devices (3.5 A @ 12 VDC total)	1.15 A @ 12VDC per door for locks/strikes, readers and input devices when externally powered or powered by the built in power supply	
	Back-up Battery System	External ⁶ 12 VDC	7 AH battery 12 VDC	Dependent on controller enclosure	
ENCLOSURE	Material	High Impact Plastic	Metal	Dependent on controller enclosure	
	Size	196.85H x 196.85W x 69.85D (mm)	353.06H x 302.26W x 119.38D (mm)	Dependent on controller enclosure	
	Wiring Access Holes/Knockouts	7	19	N/A	
INSTALLATION	Removable Terminal Blocks with Colour Coded Labels	Yes			
	Graphic Wiring Cards / Labels	Yes			
	Captive Mounting Hardware	Yes	Yes	N/A	
	Cable Shield Termination Points	No	Yes	Dependent on controller enclosure	
SYSTEM INFORMATION	Real Time Clock	Global Geographic Time Zone Support Daylight Saving Time Support			
	Clock Synchronisation	Yes - via NTP network server			
	Processor	Freescale Coldfire 32-bit			
	System MTBF (mean time between failures)	250,000 hours			
	Temperature Ratings	0°C to 49°C Operating, -55°C to +85°C Storage			
	Certifications and Approvals	CE and FCC compliant UL-294 listing pending			

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		NetAXS-123		Add-on Boards	
					
		NX1P	NX1MPS	NXD1	NXD2
LEDS	Status LEDs	12 LEDs total (12V power, PoE, over current, Ethernet, RS485, reader(s), door state, run, relay status)		2 + 4 LEDs per door (power, reader(s), door state, run, relay status)	
COMMS	Built-in Communication Options	Ethernet, USB ⁸ , RS485		Direct to controller	
	I/O Expansion Module Connectivity	N/A			
	Controller Loop Capability	Total of 16(EVL)/31(RS485) panels in a loop ^{2,3}			
HOST	Software Compatibility ⁹	WIN-PAK XE, WIN-PAK SE, WIN-PAK PE, WIN-PAK PRO CS, WIN-PAK CS 4.x WIN-PAK 2005, WIN-PAK PRO 2005, WIN-PAK 2.0 Release 4, WIN-PAK PRO Release 4			
	NetAXS-123 as Gateway Panel	Supported downstream panels include NetAXS-123 and NetAXS-4	N/A		
	NetAXS-4 as Gateway Panel	Currently supported downstream panels include NetAXS-4 only	N/A		
	using PCI3 Converter	Supported downstream panels include NetAXS-123, NetAXS-4, N-1000 family and NS2	N/A		
using N-485-PCI-2 Converter	Not compatible with NetAXS-123 or NetAXS-4		N/A		
DOOR CONTROL	Door Control Modes	Card only, card and PIN, card or PIN, PIN only, lockdown, disabled, supervisor, escort, limited use card, expire on date, first card rule, snow day rule, time zone toggle, anti-passback, duress ⁵			
	Interlocks for custom actions	Yes			
	Anti-Passback Capability	Local and global capability, hard and soft implementation NetAXS-123 allows anti-passback using In and Out readers per door (local and global) ⁵			
CARDS and DATABASE	Card and Event Buffer Capacity	10,000 card capacity, 25,000 event capacity			
	Firmware Revision	On-board flash memory for field firmware revision updates and feature expansion			
	Offline Database back-up available	Card and configuration databases			
	Export Capabilities	Card database, alarms and events (CSV format) ⁵			
	Number of Card Formats	128 unique card formats can be supported ⁵			
	Site Codes	8			
	Maximum Card Format Size	75-bit (maximum card # = 64-bits) ^{5,7}			
	Time Zones			127 ⁵	
	Access Levels			128	
Holidays			255 ⁵		
REPORTING and ANALYSIS	Integrated basic reports	Yes		Via Controller	
	Import/export of card database	Yes		Via Controller	
	Alarms and events can be exported and saved in offline storage	Yes		Via Controller	
EMBEDDED WEB SERVER	Supported Browsers	Internet Explorer and Mozilla Firefox		Via Controller	
	Icon Driven Landing Page	Yes		Via Controller	
	Web Browser Control	Full control monitor and view live events manually control doors and readers		Via Controller	
	Web Server Support	All access control functions		Via Controller	
	Secure Web Browsing	SSL and SHA-1 secure socket layer encryption		Via Controller	
	Dynamic Screen Refresh	Yes		Via Controller	
	Multiple user connections	Yes		Via Controller	
WORLDWIDE ACCEPTABILITY	Global Languages Supported	English, Italian, French, Dutch, Spanish, Czech, Russian, Danish, Portuguese, Simplified Chinese and Arabic			
	Printed Documentation	English, Italian, French, Dutch, Spanish, Czech, Simplified Chinese and Arabic			
	Quick Start Guides	Yes			
	Full User and Installation Guides	On product CD			
	Multi-Language Basic Installation Guides	Yes			
	User Translated Files	Customer ability to export, import, modify, create and add language files. Can be selected for use with unique login accounts.			
	Universal Power Supply Input	Power over Ethernet (PoE) 802.3af	Yes	93-264 VAC, 50/60 Hz input	Via Controller

¹ A second door may be added with a NXD1 add-on board however, PoE power restrictions apply (see footnote 4).

² A total of 31 NetAXS-123 and NetAXS-4 panels may be combined in a controller loop for a maximum of 123 doors.

³ When mixing NetAXS-123 and NetAXS-4 controllers, NetAXS-123 must be the gateway Panel and the panel loop must be RS-485.

⁴ 450 mA, 12 VDC is maximum current available to power strike, reader(s) and input devices when using a 802.3af PoE connection. If unit is externally powered, higher current is available.

⁵ When using WIN-PAK software, this feature may have limitations or not exist.

⁶ An external UPS is required to power the PoE power source for battery back-up.

⁷ Suitable for handling the 75-bit transparent card format of PIV, TWIC and FRAC cards.

⁸ USB port for setup and troubleshooting. USB port not available when used with Video add on kit.

⁹ WIN-PAK software compatibility for NetAXS

a) All NetAXS versions programmed as an N1000:

WIN-PAK SE, WIN-PAK PE, WIN-PAK PRO CS, WIN-PAK CS 4.1

WIN-PAK 2005, WIN-PAK PRO 2005, WIN-PAK 2.0 Release 4

b) NetAXS v3.x: WIN-PAK v3.0-3.2 (Builds 670.14 or greater) or WIN-PAK CS 4.2

(Build 1017.33 or greater)

c) NetAXS v4.0 or greater: WIN-PAK v3.3 (Build 670.21) or greater or WIN-PAK CS 4.2

(Build 1017.33) or greater

NetAXS-123

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ORDERING

Part Number	Description
NetAXS-123	
1 Door Solutions	
NX1P	One door, compact (plastic) enclosure - PoE or external 12 VDC power supply required
NX1MPS	One door, standard (metal) enclosure with tamper switch and terminal block. Includes 4 A, 12 VDC output/ 100-240 VAC input power supply and 12V, 7 AH battery
2 Door Solutions	
NX2P	Two door, compact (plastic) enclosure - External 12 VDC power supply required
NX2MPS	Two door, standard (metal) enclosure with tamper switch and terminal block. Includes 4 A, 12 VDC output/ 100-240 VAC input power supply and 12V, 7 AH battery
3 Door Solutions	
NX3MPS	Three door, standard (metal) enclosure with tamper switch and terminal block. Includes 4 A, 12 VDC output/ 100-240 VAC input power supply and 12V, 7 AH battery
Add-on Boards (For 1 and 2 door expansions)	
NXD1*	One door add-on board (Adds 1 door to your existing 1-door system = 2 doors)
NXD2**	Two door add-on board (Adds 2 doors to your existing 1-door system = 3 doors)
OmniClass™ Readers	
OM30BHOND	OmniClass 2.0 mini-mullion reader
OM45BHOND	OmniClass 2.0 EU single gang and wall reader
OM55BHOND	OmniClass 2.0 single gang and wall reader with keypad, black
Cards	
OKPON34	OmniClass PVC 2k2 smart card, printable
PXKEYH16K16	OmniClass 16k16 smart key fob

* Requires external power when used in compact plastic enclosure

** 2-door add-on board is not compatible with compact plastic enclosure

NOTE: Honeywell reserves the right, without notification, to make changes in product design or specifications.

For additional information,

please visit www.easyaccesscontrol.com

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