



RBH
ACCESS
TECHNOLOGIES
INC.



**BUILDING
SECURITY
WORLDWIDE**

- Access Control
- Intrusion Alarms
- Elevator Control
- CCTV & DVR

AxiomTM

ENTERPRISE SECURITY MANAGEMENT SYSTEM

- Photo ID
- Building Automation
- On & Offsite Monitoring





CORPORATE VISION



RBH Access Technologies was established on March 1, 1995 to undertake the design, development, and manufacture of Integrated Access Control and Enterprise Security Management Systems.

Drawing on decades of experience in the Electronic Access Control markets, RBH's founders insisted that **Innovation**, **Quality**, **Integrity**, and **Value** be the cornerstones of the company and its products – and that the advantages resulting from dedication to these principles flow to its dealers and customers.

RBH markets its products worldwide through an international network of security dealers and systems integrators. Selected dealer recruitment and comprehensive training ensure customer satisfaction. RBH Axiom systems have been installed in dozens of countries, in multiple languages, on four continents.

RBH's growth is currently several times the industry average – bearing testimony the acuity of its vision.

RBH continues to invest in research and development to provide innovative and effective products that address the ever-growing market demands for open, stable, and scalable integrated security management systems. RBH will continue to compliment its exceptional products with first-rate support and competitive pricing to the ultimate satisfaction of its dealers and their customers.

• **Innovation** • **Quality** • **Integrity** • **Value**

Axiom Lite™

SECURITY MANAGEMENT SYSTEM

INTEGRATED

Access Control

Intrusion Alarms

Elevator Control

CCTV & DVR

Photo ID

Building Automation

On & Offsite Monitoring

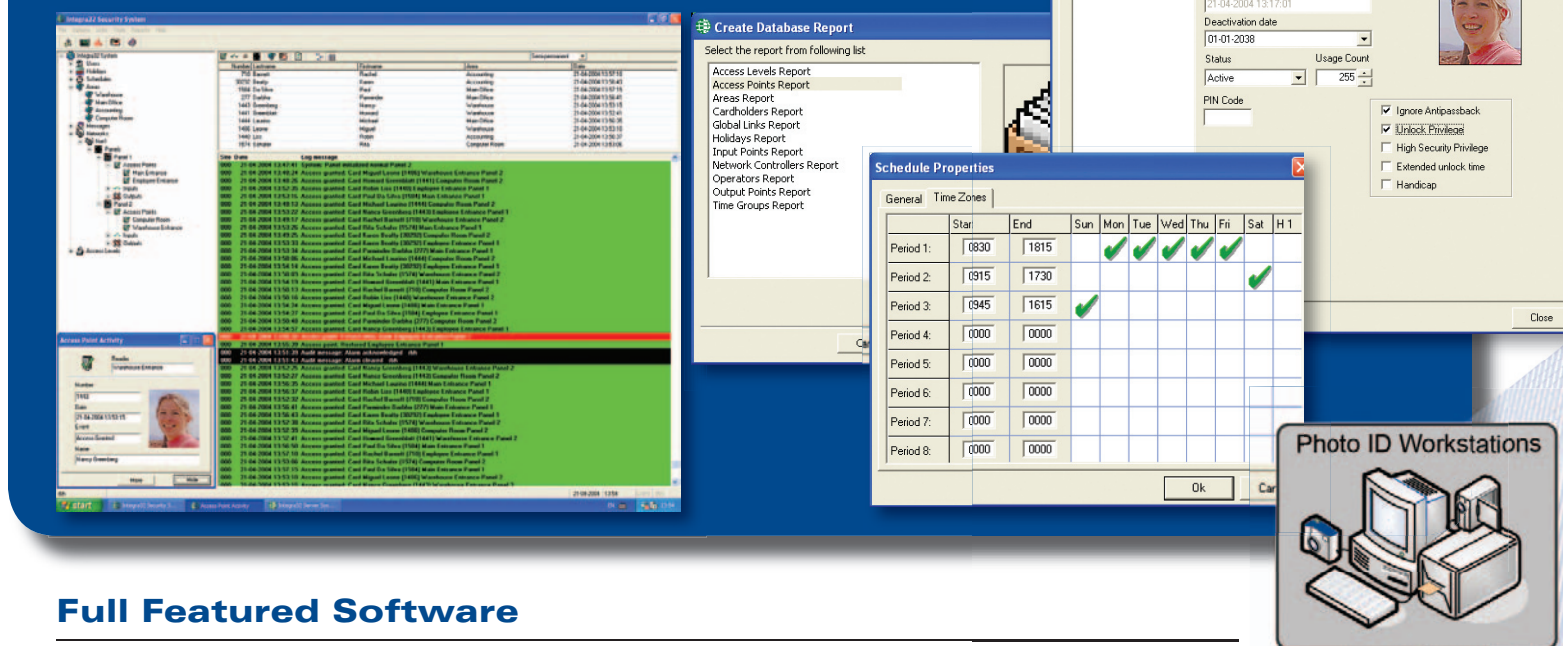
AxiomLite integrates all of the above functions into a single elegant security management system for modern buildings.

AxiomLite's advanced architecture is specifically designed to take advantage of Microsoft Windows XP and 2000 operating systems. This user friendly software ensures that security management needs are met easily and economically with minimal training.



... Versatile Solution for Tomorrow's Needs

Axiom Lite™



Full Featured Software

- **Modern architecture...**
 - Designed to take full advantage of Microsoft Windows XP operating system
- **Advanced Client-Server design...**
 - Includes 10 simultaneous full function clients over LAN/WAN
- **Multiple site management...**
 - Control an unlimited number of sites from a single location with complete database, graphics and history segregation
- **Optimum system capacity...**
 - Up to 99 system operators with individually definable privileges and a choice of languages (English, French, Spanish, and many others)
 - Up to 64 Integra32 controllers
 - Up to 128 access points (128 IN and 128 OUT readers), 512 inputs and 512 outputs
 - Up to 16 networks, including direct, TCP/IP, dial-up and wireless
 - 5,000 cards per panel, expandable to 8,000
 - 32 schedules with 8 time zones each
 - 40 user definable holidays
 - 10 digit card numbers
- **"Double Swipe"...**
 - Authorized cards can lock and unlock doors, permanently or temporarily overriding schedules by presenting a card to a reader twice in a row. This provides the ability to close early without access to the Security Workstation.
- **High Security Mode...**
 - Dynamically suspend and re-instate a cardholder's access privileges while maintaining access for specially authorized cards. This mode can be activated by "FourSwipe", system link, or an operator command from any Security Workstation.
- **"Four Swipe"...**
 - Authorized cards can enable and disable High Security Mode on specific doors by presenting a card to a reader four times in a row.
- **Personalized disability privileges...**
 - Disabled cardholders can be accommodated with extended door unlock times and dedicated automatic door activation.
- **Anti-Passback...**
 - Global and local anti-passback supports soft or hard enforcement and anti-tailgating. This feature also includes scheduled area reset, live status monitoring and timed anti-passback.
- **Global Link Commands...**
 - System is capable of creating an unlimited number of system-wide automation command sequences with steps individually enabled by schedules.
- **Alarm acknowledgment...**
 - Alarms can be individually configured for a required acknowledgement restricted by schedule with up to 99 priority levels and associated instructions.
- **Additional features include, but not limited to...**
 - "First person delay"
 - "Man-trap" (or "Air-lock") logic
 - "Code Reader Links" – a sophisticated way for system automation
 - "Door held open" alarm and warning
 - Up to 10 uniquely configured cards per cardholder
 - Scheduled locking/unlocking, reader and keypad operation
 - Visual cardholder verification – fully configurable
 - Customized formats for exporting reports to any other application
 - Time and attendance reports
 - Integrates with most Human Resources systems

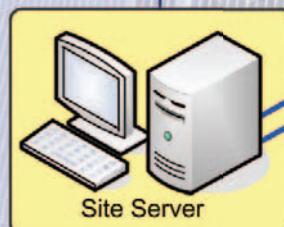
Photo ID Workstations



TCP/IP
LAN, WAN
INTERNET

Direct
Networks
RS-232
and
RS-485

TCP/IP Ethernet



Up to 16 Networks / Site

- **Direct Networks:**
RS-232 and RS-485
- **Remote Networks:**
Dial-up and TCP/IP

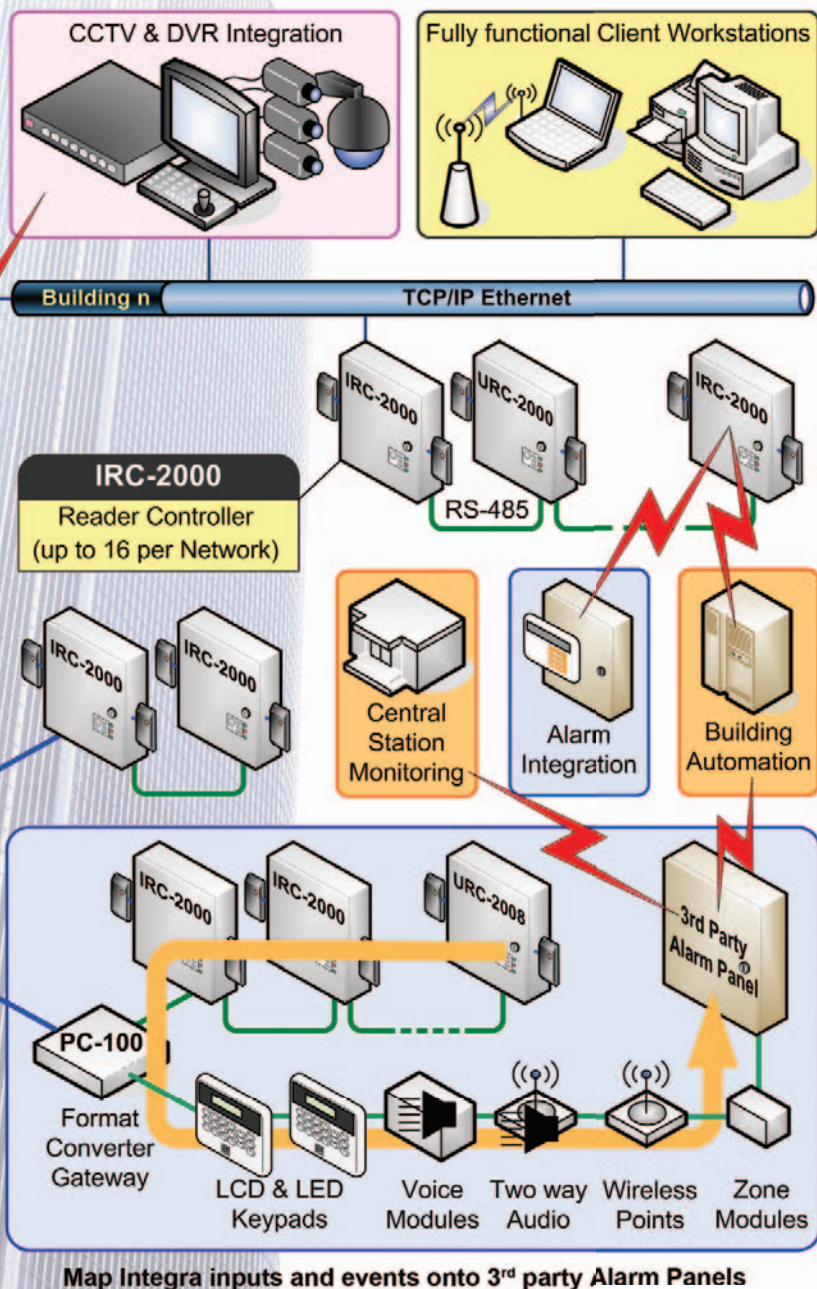
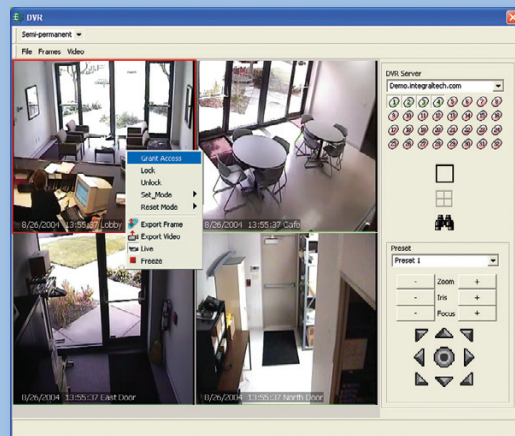
Complete CCTV & DVR Integration

Over the Internet or office LAN, the system user has direct system-wide access to live video, event viewing, history event based video search and video export functionality.

Custom tailored assignments link individual Access and Monitoring Points to specific cameras across multiple DVRs, providing an ability to set pre- and post-alarm viewing preferences and PTZ shots.

Supporting multiple DVRs from different manufacturers on the same system simultaneously provides enhanced flexibility and freedom of choice of manufacturer.

By simplifying video search and allowing Access Point control directly from the live video screen, AxiomLite provides a wide range of user friendly features.



Axiom Photo-ID & Badging

A fully integrated Photo ID module is designed to provide an easy to use and powerful tool for creating high quality personalized credentials. A sophisticated badge design tool allows for creation of professional looking template layouts. Features include...

- Dual sided badge design and printing
- Signature and fingerprint capture
- Proximity, Smart Card and Magstripe encoding
- Use of standard Windows compatible video and picture sources with direct access to native settings
- Multiple templates

Elevator Control

AxiomLite URC-2008 controllers provide an inexpensive, simple to install and configure, PC independent way to control access to up to 32 floors per elevator

HVAC & Lighting Control

The integrated I/O and Link capability of the AxiomLite controllers make integration with existing HVAC and building automation systems possible.








Alarm Panels

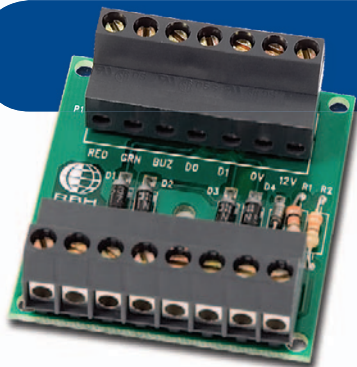
Our PC-100 Format Converter Gateway allows our dealers to provide Central Station monitoring of Integra32 inputs and events by mapping them to 3rd party burglar alarm panels. Linking alarm panel's keypad and expansion module bus with an RS-485 communications bus of the Integra32 network, PC-100 makes it possible to eliminate hardwired input duplication by representing them to a burglar alarm panel as another native expansion module. This connection functions whether or not AxiomLite software is running.

AxiomLite provides many additional Alarm Panel integration features including "Access Granted" initiated alarm point shunt and arming/disarming based on...

- Access control activity
- "Two Swipe" locking/unlocking feature
- Locked/Unlocked state of Access Point
- Code Reader Link actions • Schedules

AXIOMLITE CONTROLLERS

	IRC-2000 SERIES INTELLIGENT CONTROLLERS	URC-2000 SERIES UNIVERSAL CONTROLLERS	URC-2008 ELEVATOR CONTROLLER
	 <p>IRC-2000-TCP/IP... includes controller, enclosure, power supply, tamper switch and TCP/IP module</p> <p>FCC   Listed</p>	 <p>URC-2004... includes two URC-2000 controllers, enclosure, and power supply</p>  <p>URC-2005... includes two URC-2001 controllers mounted on a 19" rack mount plate</p>	 <p>URC-2008... includes controller, one ELEV8 module, enclosure, and power supply</p> <ul style="list-style-type: none">• Each ELEV8 module provides elevator control for 8 floors.• Add up to three additional ELEV8 modules for control of up to 32 floors.
Panels per Network :	16		
Supervised Communications :	RS-232, TCP/IP Ethernet or RS-485	TCP/IP Ethernet or RS-485	
Communication Between Controllers :	Supervised RS-485		
Speed / Distance / Type :	Programmable 9.6 - 56 Kbps / 4,000ft (1,200m) / 18AWG, 2 conductor, twisted, shielded		
Cards per Panel - up to 10 digit card no's :	5,000 expandable to 8,000	3,000	
Access Levels per Panel - 1 per card per panel :	5,000 expandable to 8,000	3,000	
Site Codes per Panel :	10 (site code programming is not mandatory)		
Off-Line Transactions Buffer :	3,000 FIFO, command, and alarm priority		
Access Points (Readers/Keypads) :	2 with LED and Buzzer control		
Distance / Type :	Max 500ft (150m) / 20 - 22AWG, 6 or 8 conductor, stranded, shielded		
Simultaneous Card Formats per Panel :	5, Wiegand or Clock & Data	5, Wiegand	
Programmable Supervised Inputs :	8	4	
Input Supervision / Distance / Cable Type :	4 state monitoring (1 or 2 resistors) / Max 1,000ft (300m) / 20 - 22AWG, 2 conductor		
Programmable Outputs - Programmable Fail Safe/Fail Secure :	4 SPDT 2A @ 30VDC, dry contacts 4 Electronic drivers, 12VDC max, 100mA	2 SPDT 2A @ 30VDC, dry contacts 2 Electronic drivers, 12VDC max, 100mA Programmable Fail Safe/Fail Secure	
Power Requirements :	16.5VAC, 40VA transformer		
Recommended Back-up Battery :	12V, 7AH lead acid or gel cell		



EXITDR EXIT READER MODULE

EXITDR is a flexible, convenient, and inexpensive way to control and track cardholder access in both directions through a door.

- Door IN/OUT control & tracking
- Low cost full Anti-Passback
- One cable - two readers
- Low power consumption

Compatibility : IRC-2000-4 or later URC-2000

Power : 10mA @ 12VDC

Dimensions : 51 x 46 x 20 mm (fits in single gang electrical box)

AxiomVTM

ENTERPRISE SECURITY MANAGEMENT SYSTEM

UNLIMITED CAPACITY

MULTI-SERVER

MS-SQL DATABASE

INTERNET COMMUNICATIONS

TCP/IP ALARM MONITORING

AxiomV Enterprise Security Management System seamlessly integrates Access Control, Alarm Monitoring, and Video Surveillance into an elegant and versatile building management and security system.

Harnessing the power of the Microsoft SQL Server[™] and powerful MS .NET[™] framework, AxiomV is positioned on the cutting edge of the modern security technology.

AxiomV provides a sophisticated and affordable solution for systems of all sizes. Its highly customizable and flexible user interface provides powerful tools for Enterprise Security management.



...For Large Multi-Site/Multi-Tenant Systems

AxiomVTM

AxiomLinksTM

All system events can be programmed and scheduled to initiate any other active event or combination of events anywhere on the system.



Access Control

Expand existing sites without throwing away past investments. AxiomV's advanced technology allows you to mix existing readers with new advanced reader technologies...

- **Multiple card technologies provide retrofit support for existing readers**
- **Up to 5 card formats can be used simultaneously on each reader**
- **Multiple facility codes per reader**
- **5 to 12 digit card numbers and user defined PINs**
- **Automatic door unlock by time schedule, by user defined group or individually**
- **Unlock schedule delay until First-Man-In**
- **User-defined scheduled keypad and/or reader access**
- **Pre-alarm output for door held open alarms**
- **Two-man rule enabled by schedule**
- **Man-trap – logical interlocking of up to 120 doors per group**
- **Anti-Passback...** global and local anti-passback with soft or hard enforcement and anti-tailgating. Includes door-not-opened interlock, scheduled area reset, live status monitoring, and timed anti-passback.
- **Alarm Acknowledgment...** alarms can be individually configured for a required acknowledgement selected by schedule with 99 priority levels and associated instructions. Action reporting requirement can be enabled by a schedule.
- **"Double Swipe"**... authorized cards can lock and unlock doors by presenting a card to a reader twice in a row - permanently or temporarily overriding schedules. Provides the ability to close up early locally, without access to a Security Workstation.
- **High Security Mode...** dynamically suspend and re-instate cardholder's access privileges while maintaining access for specially authorized cards. This mode can be activated by "Four Swipe", system link, or an operator command from any Security Workstation.
- **"Four Swipe"**... authorized cards can enable and disable High Security Mode on selected doors by presenting a card to a reader four times in a row.
- **Mustering and dynamic display of cardholder status...** system provides a dynamically updated list of card holders in specific areas, occupancy count as well as current status of selected cardholders, including time and location of last access.

Cardholder Administration

Cardholder data may be imported from other databases for quick startup from personnel records or easy takeover of existing systems. Ninety-nine user defined fields ensure that all necessary cardholder information is instantly available from a single database. Advanced features include...

- **"Stealth Mode"**... schedule activated suppression of access control messages from a specific card – for investigative auditing.
- **Card reader link...** execute any of the AxiomLinks when a specific card is used on a specific reader.
- **"Double Swipe"**... Lock/Unlock & "Four swipe" High Security on/off privileges granted to each cardholder on a door per door basis.
- **Handicapped Privileges...** handicapped cardholders can be accommodated with extended door unlock times and dedicated automatic door activation.
- **Easy to configure additional access privileges**
- **Card activation and de-activation can be set for a specific date, hour, minute, and second**
- **Full search and sort capabilities...** instant retrieval by cardholder name, access code, or any user defined field
- **Complete audit trail of all operator and system administrator activities**
- **Flagging of lost and stolen cards**
- **Vacation settings for each cardholder**
- **Visitor/Supervisor management features**
- **Optional third party database support**

Axiom Photo-ID & Badging

A fully integrated Photo ID module provides an easy to use and powerful tool for creating high quality personalized credentials. Features include...

- Dual sided badging
- Signature and fingerprint ID
- Magstripe, proximity, and Smart Card encoding
- Windows compatible video and picture sources
- Multiple templates

Interactive Guard Tour

This intuitive module allows for real-time tracking of security personnel throughout your facility. Automatic notification alerts security to begin tour and real time monitoring provides live status...

- Live tour status
- Unlimited tours
- Alarms upon deviation from tour
- Full tour reporting
- Camera integration with tour

AxiomV™

Control From Your Desktop...

- Live Video CCTV Monitoring
- Cardholder Video Verification
- Access Control Management
- Alarm Monitoring & Response
- Dynamic Mapping
- Interactive Guard Tour
- Elevator Control
- Parking Control
- Building Systems Control
- Multi-Site / Multi-Tenant Management
- Management Reports
- Alphanumeric Paging
- Intercom Interface

Alarm Monitoring

Up to 250,000 unique alarm points can be monitored by an AxiomV system. Each point can be fully configured for type of annunciation, priority, customizable action messages, ASCII output, and executable link. Live graphic maps and color coded alarm handling instructions guide operators in efficient response to each alarm...



- 48,000 inputs or outputs per site
- 10,000 live graphic maps with automatic display on alarm
- 65,000 programmable action messages
- 10,000 programmable ASCII output messages
- 99 assignable alarm priority levels

Elevator Control

Designed with advanced features to support single or multi-tenant high-rise buildings...

- Up to 256 floors per cab
- Control individual elevators or banks of elevators
- Restrict access to specified floors and/or elevators during designated time periods

Complete CCTV and DVR Integration

Integration of AxiomV's sophisticated Access Control and Security Management Systems is extended through an open architecture interface with a wide range of Digital Video Recorders.

Supporting multiple DVRs from different manufacturers on the same system simultaneously provides enhanced flexibility and freedom of choice of manufacturer.

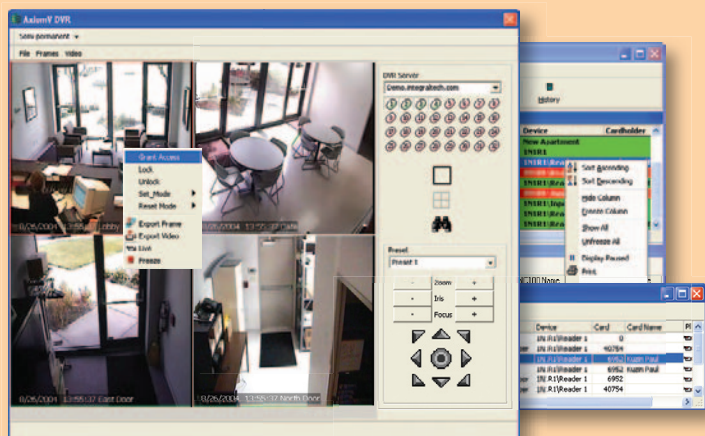
By simplifying video search and allowing Access Point control directly from the live video screen, AxiomV provides a wide range of user friendly features.

Over the Internet or office LAN, the system user has direct system-wide access to live video, event viewing, historical event based video search, and video export functionality.

Custom tailored assignments link individual Access and Monitoring Points to specific cameras across multiple DVRs, providing an ability to set pre- and post-alarm viewing preferences and PTZ shots.

Our system provides direct access to DVR features from the System Status screen, Event Log display, Interactive Maps, and History Report module.

As new DVR products come to market, AxiomV's open system architecture allows it to be quickly customized to provide integration with the new features in these products.



- LIVE VIDEO ON SCREEN
- PRE, POST EVENT VIEWING
- HISTORY EVENT VIEWING
- REPORT INTEGRATION
- SUPPORTS MULTIPLE MAKES
- CONTROL PTZ ON-SCREEN
- PTZ DOME CALL ASSIGNMENT
- TCP/IP CONNECTIONS

AxiomV™

Enterprise System Architecture

Ultimate in Scalability

Install the AxiomV Professional with an included Microsoft Database Engine (MSDE) and seamlessly upgrade it later to Microsoft SQL Server to power the AxiomV Enterprise edition. No data migration, virtually no down time.

Advanced system architecture allows AxiomV to grow from a small office to an enterprise wide security management system spanning multiple time zones and languages.

Database engine, clients, data and communication servers can be installed on a single Windows PC or spread over multiple computers within a corporate network. AxiomV Enterprise edition brings support for "Hot Stand-by" and other redundancy features.

Data and communication servers are encapsulated in Microsoft .NET based Windows services, allowing for continuous operation even while a user is logged off of Windows.

System Features

Utilizing Windows 2000 or XP for LAN applications, AxiomV provides a true multi-tasking, multi-user environment...

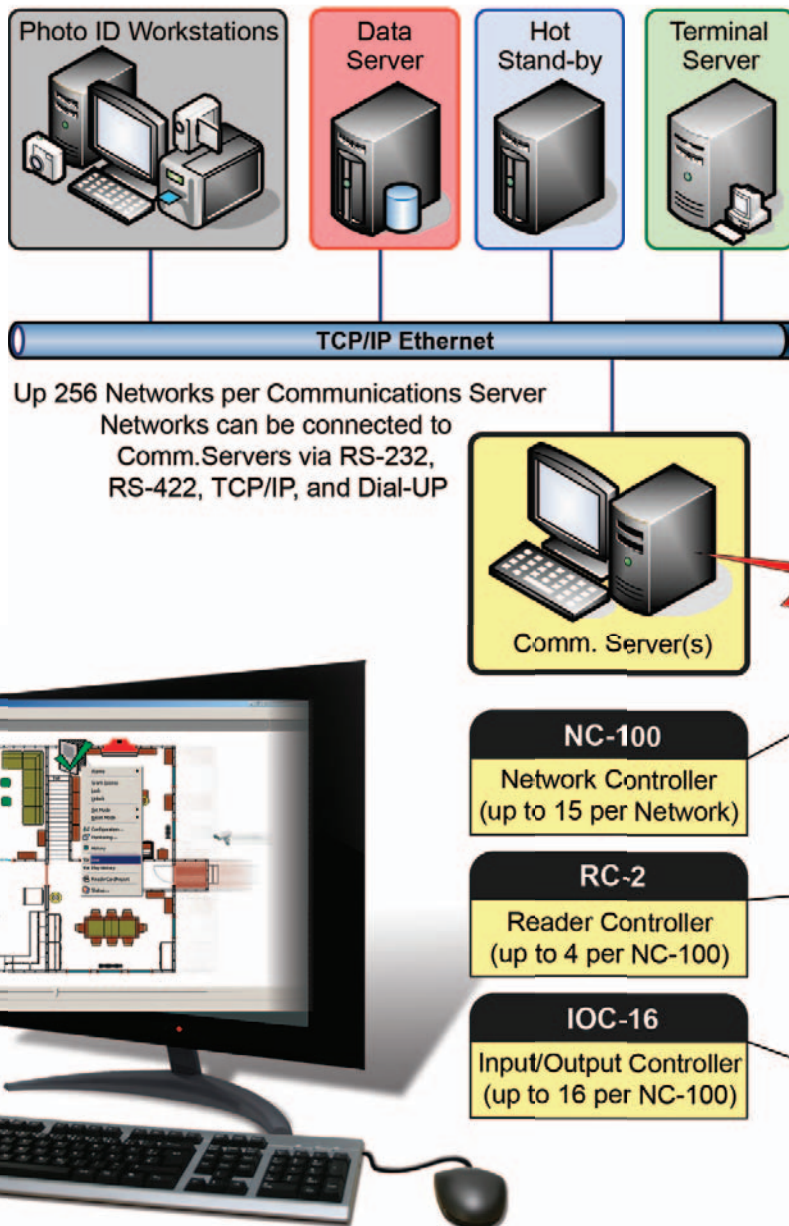
- **True multi-tasking capabilities enable multiple sites to be simultaneously monitored from the same AxiomV workstation**
- **Real-time alarm monitoring and concurrent database management from multiple workstations**
- **Workstations are fully secure with up to 999 operators and up to 999 operator profiles**
- **Database segregation on an individual operator level provides the ability to restrict items to be monitored, controlled, and edited**
- **256 time groups with 16 time zones each**
- **Multiple holiday schedules**
- **Automated scheduled database back-ups**
- **On-line HELP**
- **Multi-language support**

Dynamic Mapping

Control all system devices and view live status from a dynamic map with just the click of a mouse. The easy interface allows you to create your own map or import AutoCAD drawings. Complete with manual or automatic display on alarm, mapping is enhanced by integration with live video for each device.

Video Verification

Visually identify cardholders using a custom configured matrix to compare the person using a card to a picture in cardholder's profile.



Multi-Site

Remote sites are fully operational on a stand-alone basis without intervention from the host PC. In the event of an alarm condition, or overflow of the 100,000 event buffer, the remote site automatically dials the host computer...

- 1024 remote sites via modem
- TCP/IP direct or dial-up communications
- Maintains remote sites in their own time zones
- Call-back security
- Configure individual IP addresses & ports

SMS Messaging & Emails

Send messages to mobile patrols, guards and maintenance personnel. AxiomV is fully programmable to route selected alarms, events or system messages to a paging system or an e-mail account.

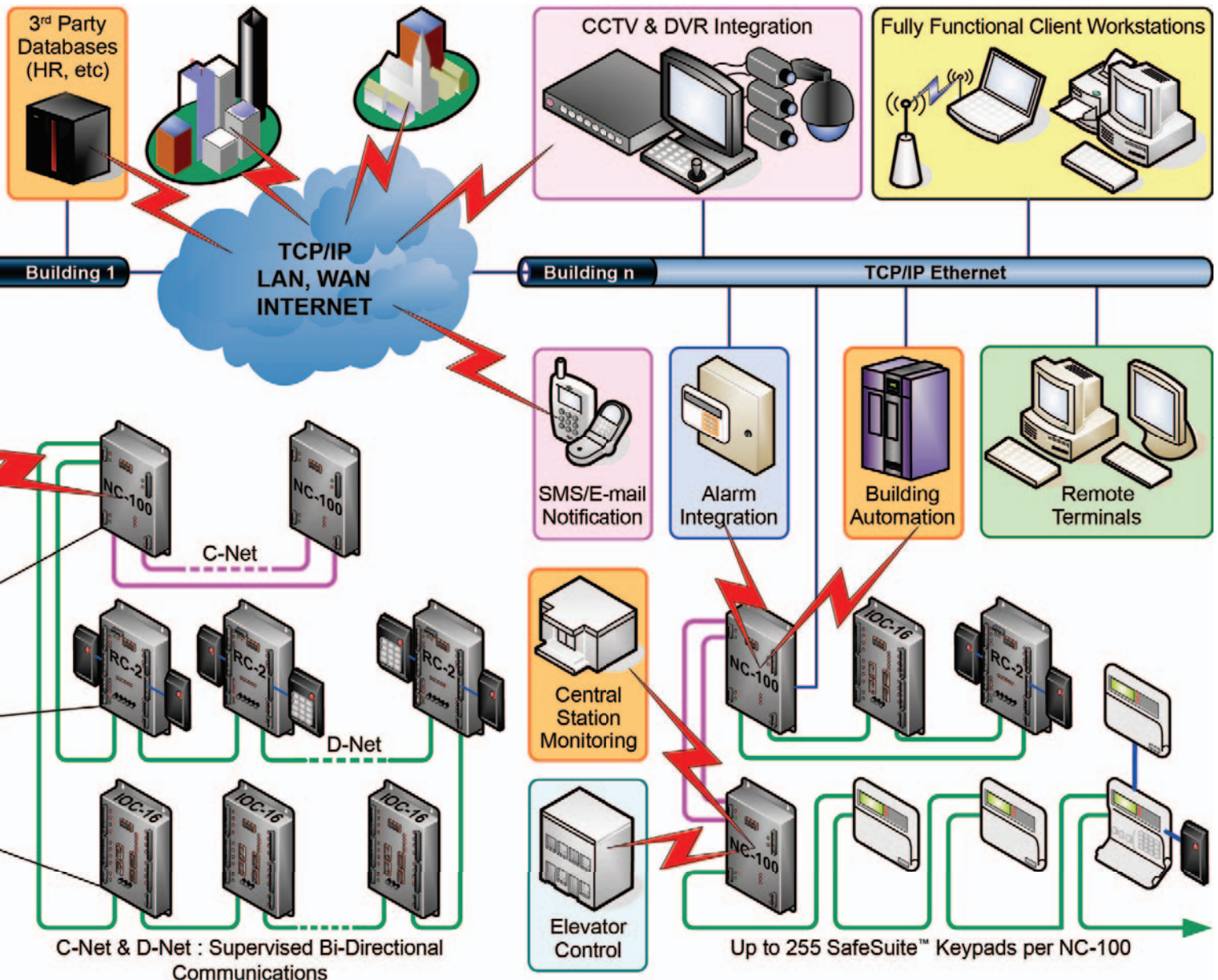
Management Reports

Powerful report generating capabilities allow users to program any report they require or choose one from the systems 10,000 pre-defined reports. Reports can be for specific ranges of dates, times, combinations of doors, event types, individual or groups of cardholders. Reports can be viewed on screen, printed, and saved to a file for later retrieval. Once defined, reports can be saved as template files and can be used to generate recurring reports of a similar type...

- Industry standard database structure
- Export in all popular data formats

Building Systems Integration

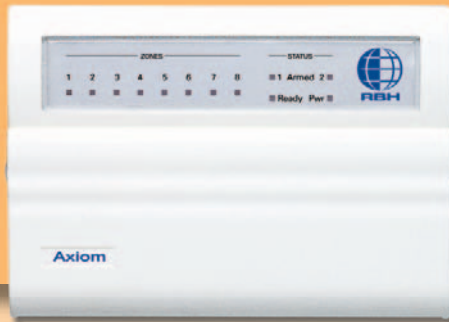
Powerful AxiomLinks can be used for any type of monitoring and control function. For example, lighting and environmental controls can be activated by pre-programmed timed events, or a card being used at a specific reader.



AxiomTM

SafeSuiteTM

CONDOMINIUM & HOTEL ALARM SYSTEM



Axiom SafeSuite has been specifically designed for condominium and hotel living to allow for flexible offsite notification and onsite interaction with the building's common or administration area, while maintaining individual suite control.

System Features

- 8-zone, fully supervised alarm control panel
- 3 arming mode... AWAY, HOME, INSTANT
- User codes are programmable from suite
- User-selectable door chime
- User-selectable zone bypass
- Alarm memory and zone status
- Single press FIRE, AUXILIARY, PANIC buttons
- Fully functional without controller/computer
- Fully integrated with Axiom systems

Options

- Individual suite offsite monitoring
- Keyless entry/access control per suite
- Suite notification of family members entering the building via parking or entrance door
- Wireless (pet motion detectors etc.)

Specifications

- 19-button, tactile-operational, backlit keypad
- 16-character, 2-line LCD display
- Aesthetically designed slim-lined panel blends in with any background
- ABS plastic enclosure, available in off-white only
- Dimensions... 6.625"W x 4.5"H x 1.25"D (15.876 x 11.43 x 3.175 cm)
- Message display through LCD keypad

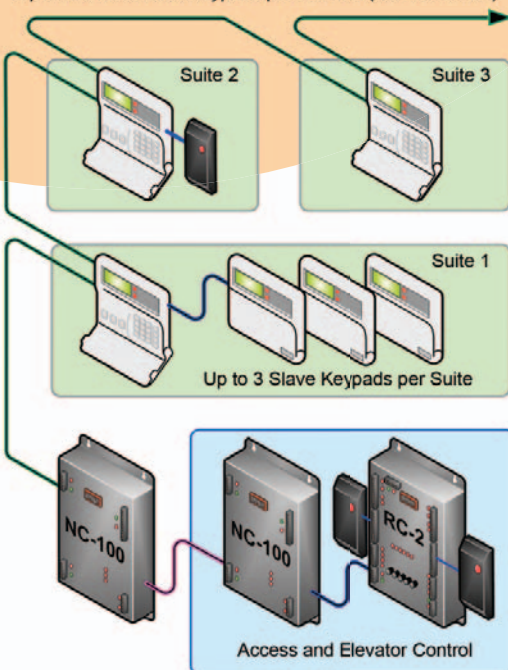
Output

- 2 programmable outputs, expandable to 8

Power Requirements

- Typical 50mA at 12VDC (maximum 200mA)

Up to 255 SafeSuite Keypads per NC-100 (RS-485 D-Net)



NC-100 NETWORK CONTROLLER



Available in Standard
and TCP/IP models

The NC-100 Network Controller is at the core of the family of access control products from RBH. The extremely fast 32-bit system architecture represents a significant leap forward in an industry where 8-bit technology is standard. AxiomV is the latest in a generation of products designed for the seamless integration of access control, video and alarm technology.

Its unparalleled communications capabilities make local and remote dial-up sites almost transparent to the operator.

The NC-100 is built to provide maximum flexibility without compromising safety, security, usability, or affordability.

- **Modular design allows maximum versatility for tailoring secure and dependable access control and security management solutions for any facility regardless of size.**
- **The NC-100 Controller is designed to operate on or off-line with full functionality through its embedded distributed processing power.**
- **Built-in high speed communications capabilities.**
- **All cardholder records, access levels, schedules, and configuration data are stored in the controller.**
- **Hardware design incorporates plug-and-play compatibility with future software enhancements.**
- **Expandable memory.**
- **Supports TCP/IP over local and wide area networks.**

Power Requirements :	9 -14VDC (available from RC-2 or IOC-16)
Current Consumption :	220mA (256k RAM version)
Processor :	32-Bit Motorola microcontroller
Memory :	256K expandable to 16 Mbytes
Max No. of Controllers per Network :	16
Max No. of Reader Controllers (RC-2) per NC-100 :	4 (8 card readers)
Max No. of I/O Controllers (IOC-16) per NC-100 :	16 (320 inputs or outputs)
Cardholder Database :	7,000 per controller expandable to 500,000; 5 – 12 digit card numbers
Event Log :	5,000 per controller expandable to 100,000

Communication Between Network

Controllers :	Designation :	C-NET
	Network Type :	ARCNET LAN
	Speed :	156K up to 2.5Mb/s
	Circuit Type :	Ring (short or open circuit protection)
	Cable Type :	Shielded, twisted pair, 20- 22AWG
	Cable Distance :	2,500ft (750m) between controllers 10,000ft (3,050m) total

Communication Between NC-100

& RC-2 & IOC-16 :	Designation :	D-NET
	Network Type :	RS-485 high speed network
	Speed :	38,400 bits/second
	Ports :	2 x RS-485 ports (fully supervised)
	Circuit Type :	Ring (short or open circuit protection)
	Cable Requirement :	Shielded, twisted pair, 20 - 22AWG
	Cable Distance :	3,000ft (900m) between devices 15,000ft (4,550m) total

Local PC & Remote Communications :

Type :	RS-232, TCP/IP Ethernet or RS-485 4-Wire
Speed :	Programmable, 1200 to 38,400 baud

Real Time Clock :	Built-in
Watchdog Circuit :	Built-in
Dimensions :	9.75" H x 6.875" W x 3.25" D (25 x18 x 10cm)
Operating Temperature :	0 to 70°C (35 -150°F)
Operating Humidity :	20 to 80% RH (Non-Condensing)

RC-2 READER CONTROLLER



The RC-2 Reader Controller is part of the Axiom line of access control products from RBH. Its versatile design features take care of present and future needs with ease and efficiency.

The RC-2 is one of the most rugged and reliable reader controllers on the market, with a multitude of built-in features found only in high-end custom designed systems until now.

- **Multiple built-in, regulated power supplies...**
 - Independently fused electric lock, reader, auxiliary battery and AC Power, complete with fuse status indication and monitoring.
- **Supports fully supervised RS-485 communications...**
 - Dual RS-485 ports designed to ensure data communications integrity in the event of wiring short circuit or cut cable.
- **Supports eight independent inputs with multi-level supervision...**
 - All inputs are fully programmable and can be configured for one, two, or no end-of-line resistor supervision. This allows the inputs to be used for any level of high security.
- **Supports two readers of ANY technology...**
 - Compatible systems include Proximity, Magstripe, Bar Code, Barium Ferrite, RF, Wiegand & Biometric.
- **Built-in lightning protection**
- **Plug-in terminal connectors**
- **Silk screened terminal legend**
- **26 on-board diagnostic LEDs**
- **Field configurable I/Os**
- **Built-in fire signal supervision**
- **Built-in cabinet tamper**
- **Rugged metal case**

Power Requirements : 1 x 16.5VAC 40VA transfmr. - controller & aux

Door Lock Power : 1 x 12/18VAC 80VA transfmr. for up to 3A

Current Consumption : 400mA max (controller)

Battery Charging Output :

- Charging voltage 13.8V regulated
- Built-in deep discharge protection
- Dynamic load test

Recommended Back-up Battery : 12V, 7AH lead acid or gel cell

Power Output to Reader :

- 12V at 1A (fused)
- 5V at 1A (fused)
- Aux power: 12V at 1A (fused)

Fuses (Supervised)	Battery :	3A
	Reader Power :	1A
	Auxiliary Power :	1A
	AC Power :	3A
	Lock Power :	3A

Reader Connection :

- Supports up to 2 readers (multiple format)
- On-board reader tamper monitoring
- Supports red and green reader LED outputs
- Supports reader audible

Cable Type : 20 - 22AWG, 6 or 8 conductor, stranded, shielded

Cable Distance : Max 500ft (150m) (20AWG)

Outputs :

- 4 x Form C relays, SPDT, 2A @ 30VDC, dry contacts
- 4 x electronic drivers, (max 100mA)

Inputs :

- 8 x fully supervised circuits, 1, 2 or no EOL resistor (1K)
- 1 x dedicated Cabinet Tamper Switch Input
- 1 x dedicated Fire Alarm Input
- Analog loop resistance measurement and reporting

Input/Output	Cable Type :	20-22AWG, 2 conductor
	Cable Distance :	Max 1000ft (300m)

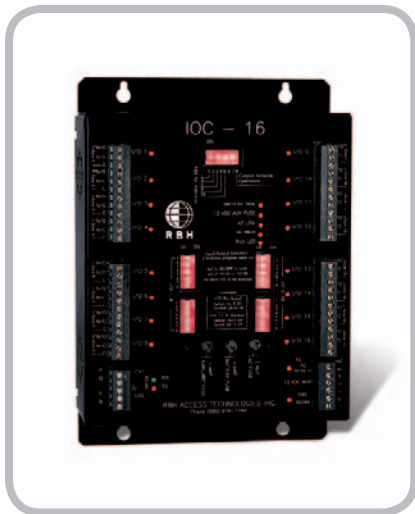
Communications	Designation :	D-NET
	Speed :	38,400 bits/second
	Ports :	2 x fully supervised RS-485 ports
	Circuit Type :	Ring (short or open circuit protection)
	Cable Type :	Shielded, twisted pair, 20 - 22AWG
	Cable Distance :	3,000ft (1,000m) between devices 15,000ft (4,550m) total

On-Board Diagnostics	Status :	<ul style="list-style-type: none"> • 8 x Output Status LEDs • 8 x Input Status LEDs • 1 x Fire Signal Status LED
	Comms. :	<ul style="list-style-type: none"> • 2 x RX, TX communication LEDs • 1 x Run LED
	Power :	4 x On/Off Status LEDs
	Fuses :	4 x Fuse Blown LEDs

Dimensions : 9.75"H x 6.875"W x 3.25"D (25 x 18 x 10cm)

Operating Temperature : 0 to 70°C (35 -150°F)

Operating Humidity : 20 to 80% RH (non-condensing)



The IOC-16 Input/Output Controller is a part of the Axiom line of access control products from RBH. Its powerful design features address present and future access and security management needs with ease and efficiency.

The IOC-16 has unmatched flexibility, monitoring, and control capabilities.

- **Fully field configurable...**
 - Allows any one of the 16 I/O ports to be used either as an input or an output. The flexible software options of the Axiom system allow any I/O port to be linked to any event, or programmed string of system-wide events, without any restriction.
- **Multiple levels of input supervision...**
 - All input points can be individually configured for one of seven levels of supervision, ranging from no supervision to maximum security, dual resistor supervision.
- **Built-in fire signal supervision...**
 - Designed to exceed all levels of safety considerations, the IOC-16 has an independent built-in fire signal safety release, together with an independent installer-selectable fail safe output release for mag-locks.
- **Built-in lightning protection**
- **Plug-in terminal connectors**
- **Silk screened terminal legend**
- **Twenty-eight on board diagnostic LED's**
- **Elevator control**
- **Built-in cabinet tamper**
- **Rugged metal case**

Axiom™

IOC-16 INPUT/OUTPUT CONTROLLER

Power Requirements :	16.5VAC 40VA transformer
Current Consumption :	500mA max (with all relays energized)
Battery Charging Output :	<ul style="list-style-type: none"> • Charging voltage 13.8V regulated • Built-in deep discharge protection • Dynamic load test
Back-up Battery :	12V, 7AH lead acid or gel cell
Auxiliary Power Output :	12V at 1A (fused)
Fuses (Supervised)	Battery : 3A Auxiliary Power : 1A AC Power : 3A
Inputs/Outputs :	16 I/O ports fully selectable as inputs or outputs
Output Types :	Up to 16 Form C relays, SPDT, 2A @ 30VDC, dry contacts
Input Types :	<ul style="list-style-type: none"> • Up to 16 supervised inputs • Fully programmable for 1, 2 or No End-of-Line Resistor (1K) • Analog Loop Resistance measurement and reporting • Dedicated Cabinet Tamper Switch input • Dedicated Fire Alarm input
I/O Cable :	Type : 20-22AWG, 2 conductor Distance : Max 1000ft (300m)
Communications :	Designation : D-NET Network Type : RS-485 high speed network Speed : 38,400 bits/second Ports : 2 x RS-485 ports (fully supervised) Circuit Type : Ring (short or open circuit protection) Cable Requirement : Shielded, twisted pair, 20 - 22AWG Cable Distance : 3,000ft (900m) between devices 15,000ft (4,550m) total
On-Board Diagnostics	Status : <ul style="list-style-type: none"> • 16 x Input/Output Status LEDs • 1 x Fire Signal Status LED Comms. : <ul style="list-style-type: none"> • 2 x RX, TX Communication LEDs • 1x Run LED Power : <ul style="list-style-type: none"> • 4 x On/Off Status LEDs Fuses : <ul style="list-style-type: none"> • 4 x Fuse Blown LEDs
Dimensions :	9.75" H x 6.875" W x 3.25" D (25 x 18 x 10cm)
Operating Temperature :	0 to 70°C (35 - 150°F)
Operating Humidity :	20 to 80% RH (non-condensing)

Technology Comparison

	AxiomLite	Axiom V Professional	Axiom V Enterprise
Data Storage	MS Access	MSDE	MS SQL Server 2000
Load Management, Hot Stand-by	No	No	Yes
Communication Servers	1	1	Multiple
Networks per Comm. Server	16	128	256
Full Function Clients (Included)	10 (10)	5 (5)	Unlimited (10)
System Operators	99	999	999
Database Segregation	Yes	Yes, by Operator	Yes, by Operator
Universal ASCII Interface	DVR Integration	Yes, Single Port (exp)	Yes, Multi-port
CCTV and DVR Integration	Yes	Yes	Yes
E-Mail Event Notification	No	Optional	Yes
SIA Format IP Monitoring	No	Optional	Optional
Access Points	64	64, 128, 256	256, 512, Unlimited
Cards per Panel	3,000-8,000	7,000-500,000	7,000-500,000
Panel's Event Buffer	3,000	10,000-500,000	10,000-500,000
Bi-Directional Communications	No	Yes	Yes
Supervised Communications	Yes	Yes	Yes
Anti-Passback Global, Local	Yes	Yes	Yes
Reader Links	Code	Card	Card
Elevator Control	No	Yes	Yes
Live Mapping	No	Yes	Yes
"Double Swipe"	Yes	Yes	Yes
"Four Swipe"	Yes	Yes	Yes
High Security Mode	Yes	Yes	Yes
1st Person Delay	Yes	Yes	Yes
3rd Party Alarm Integration	Yes	Yes	Yes
Building Automation	Yes	Yes	Yes
Photo ID System	Yes	Yes	Yes
Interactive Guard Tour	No	Yes	Yes



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