

Asset Protection Products

Facility Explorer Asset Protection is a comprehensive control system consisting of security products used to safeguard facilities, equipment, and people. It brings together all relevant capabilities—access control, video surveillance, and alarm monitoring and management—into a single, integrated, standards-based solution.

Facility Explorer Asset Protection is based on a modular, scalable architecture that allows you to start small and add components as needed. It was designed and built on open standards, allowing it to interoperate with a broad array of third-party security peripheral devices as well as to integrate into Building Automation Systems (BASs) and Information Technology (IT) networking infrastructures.



Figure 1: Facility Explorer Asset Protection

Features and Benefits	
<input type="checkbox"/> Modular, Scalable Architecture	Provides for customization and accommodates future expansion easily and cost effectively.
<input type="checkbox"/> Open and Interoperable	Allows incorporating best-of-breed card readers, cameras, locks and other security end devices.
<input type="checkbox"/> High Performance	Provides quick, automated responses to events.
<input type="checkbox"/> Internet Protocol (IP)-Based	Can take advantage of the facility's existing IT network infrastructure.
<input type="checkbox"/> Thin Client Architecture	Streamlines the deployment of applications and services.

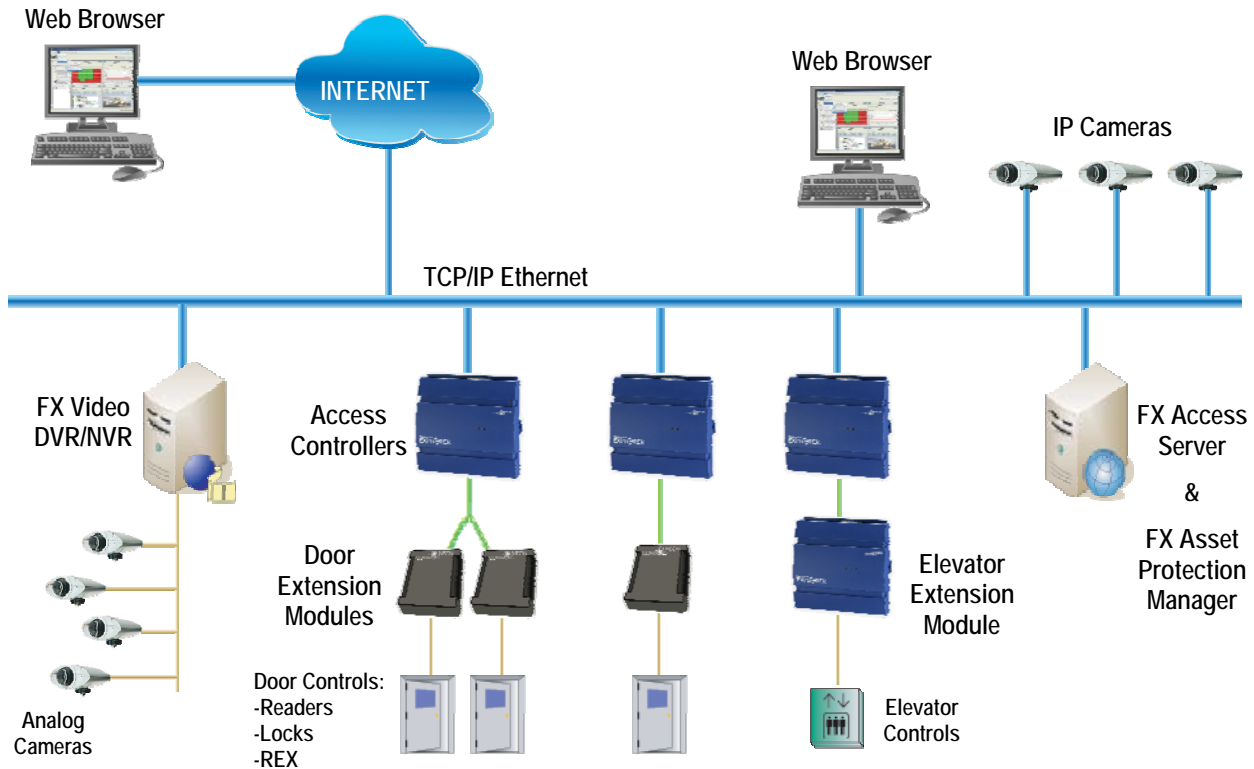


Figure 2: Facility Explorer Asset Protection Architecture

Overview

Facility Explorer Asset Protection comprises three major components:

- Access Control
- Video Surveillance
- Alarm Management and Event Monitoring

Access Control

The primary component of Facility Explorer Asset Protection is Access Control. The Facility Explorer Access Control system combines software and hardware components to form a fully integrated and comprehensive intrusion detection and prevention solution. Access Control comprises three major components:

- Access Controller
- Extension Modules
- FX Access Software

Access Controllers



Figure 3: Access Controller

Access Controllers work in conjunction with Extension Modules to interact with a variety of inputs and outputs such as door contact switches, readers, Request-to-Exit (REX) switches, door locks, and elevator controls. The Access Controller runs software that allows it to make output decisions based on inputs and its configuration strategy.

Access Controllers support Transmission Control Protocol/Internal Protocol (TCP/IP) and 10-Base T Ethernet connectivity, allowing multiple controllers to be easily networked together.

Modular and scalable, the FX Access Controller provides the flexibility to activate only the functions that are relevant to your requirements, and then to add functionality as needed. Open architecture and direct network connectivity make it easy to scale up from one door to thousands by simply adding controllers to your network.

Each Access Controller contains 4 MB of flash memory and 1.5 MB of RAM and supports up to:

- 90,000 keys
- 36,000 buffered events
- 2 doors
- 2 readers
- 2 door strikes
- 2 door switches
- 2 request-to-exit switches
- 250 schedules/2,500 entries

Extension Modules



Figure 4: Elevator, Input, and Output Extension Module

Extension Modules are specialized input/output devices that connect to Access Controllers to extend their reach and versatility.

Extension Modules are designed for quick, efficient, and cost-effective deployment. The Extension Modules can be installed at remote entry points near the controlled device (for example, door, elevator, and so on) and wired back to the Access Controller via RS-485 bus.

Four types of Extension Modules are available to handle a broad range of access control needs:

- Door Extension Module
- Input Extension Module
- Output Extension Module
- Elevator Extension Module

Door Extension Module

The Door Extension Module is a small, potted circuit board with a series of colored wires embedded in the potting material. The Door Extension Module provides inputs and outputs for door access control and accommodates reader, locking mechanism, door contact, request-to-exit, reader lights, and tamper detection functions. Up to two Door Extension Modules can be connected to an Access Controller.



Figure 5: Door Extension Module

Input Extension Module

The Input Extension Module supervises 12 binary inputs and 2 binary outputs. You can connect up to four Input Extension Modules to an Access Controller.

Output Extension Module

The Output Extension Module supervises eight binary outputs and three binary inputs. You can connect up to four Output Extension Modules to an Access Controller.

Elevator Extension Module

The Elevator Extension Module connects to an elevator control panel to supervise eight elevator floor group control circuits. You can connect up to four Elevator Extension Modules to an Access Controller.

FX Access Software

FX Access software is a suite of applications that allow the installation, configuration, administration, and operation of the Access Control hardware. FX Access software runs on a dedicated server connected to an IP-based network shared with the Access Controllers. FX Access software provides door control (including user management and access scheduling), elevator control, and management of inputs and outputs.

FX Access software suite comprises the following applications and utilities:

- **Application Manager** provides an interface for setting optional application preferences and parameters.
- **Database Manager** provides an interface for configuring the location of the driver and can specify the IP of the database server.
- **FX Access Client** provides a browser-based interface for system administration, monitoring, and reporting.
- **Profile Manager** provides functionality to add, edit, and delete software login profiles that may be assigned to users. Profiles specify which software functionality a user may access.
- **Auto Upgrade** provides data migration functionality from a previous version database to the current version.
- **Controller Tool** provides configuration functionality for Access Controller and Extension Modules.
- **Alarm Configuration** provides configuration functionality for the Alarm Monitor.
- **Alarm Monitoring** provides real-time monitoring of events, alerts, and alarms generated by the Access Controllers.

Identity Readers, Cards, and Door Hardware

A wide variety of third-party security end devices are supported by Facility Explorer Asset Protection, allowing you to choose the reader, cards, locks and other peripheral devices best suited for your access control project.

To ease the estimation, ordering, and delivery of these types of devices, Johnson Controls provides direct order access for an assorted selection of third-party security devices, including:

- HID® 125 kHz Proximity readers and cards
- HID® 13.56 MHz iClass™ readers and cards
- Dallas Semiconductor® iButton® readers and buttons
- Security Door Controls 50 Series electric strikes, 7800 Selectric™ locksets, and Hi/Shear® electromagnetic door locks
- Securitron® electric strikes and electromagnetic door locks
- Various other devices such as door contact switches, request-to-exit sensors and switches, power supplies, alarm annunciators, and so on

Video Surveillance

By integrating Video Surveillance with Access Control, the Facility Explorer Asset Protection system is well equipped to proactively address the threat of unauthorized entry.

With a choice of analog or IP video capabilities, FX Video provides an additional means of controlling access to your valuable assets. With a synchronized record of access and critical events, you get a complete picture of what is happening in your facility, instead of just a video recording of what happened after the fact.

The FX Video software provides advanced capabilities to help security personnel efficiently manage the large amount of video saved to the hard disk. Video can be set up to record continuously, on demand, or when triggered by motion or by an alarm/event. Information can be attached to video clips so that they may be searched for and replayed at a later time.

The FX Video software also allows a wide range of flexibility in way the system is configured, including:

- type of system response (for example, record video, switch view, send notification, sound alarm, and so on)

- viewing preferences (for example, browser- or client-based, playback of multiple cameras simultaneously, video enhancement to brighten or darken images, and so on)
- access privileges (by group or user, different levels of access, password protection, and so on)

Three FX Video Digital Video Recorder (DVR)/ Network Video Recorder (NVR) configurations are available, allowing you to choose the level of video technology and performance that best matches your needs:

- Standard DVR/NVR: provides the flexibility to operate as a hybrid solution (combining analog and and/or network-based IP cameras) or as a purely analog solution
- Enterprise-Level DVR/NVR: provides hot-swappable drives for environments in which high availability is critical
- Enterprise-Level NVR (IP-based cameras only): provides increased fault tolerance including RAID five capabilities

Table 1: FX Video DVR/NVR Configurations

	Standard DVR/NVR	Enterprise DVR/NVR	Enterprise NVR
Profile	Rackmount	Rackmount	Rackmount
Processor	3.2 GHz Intel® Pentium® D Dual Core Processor	3.2 GHz Intel Pentium D Dual Core Processor	3.2 GHz Intel Pentium D Dual Core Processor
Hard Disk	300 GB expandable to 1.2 Tb	1.5 Tb RAID 5	1.5 Tb RAID 5
Memory	512 MB	512 MB	512 MB
Communication	NIC 10/100	NIC 10/100	NIC 10/100
Camera Inputs	4 to 16 analog/IP	4 to 32 analog/IP	1 to 64 IP only
Monitor Inputs	1 output to monitor SVGA color monitor	1 output to monitor SVGA color monitor	1 output to monitor SVGA color monitor
FPS	480	480	480
Video Resolution	1,2 and 4 CIF	1,2 and 4 CIF	1,2 and 4 CIF
Compression Engine	MPEG-4 or MJPEG	MPEG-4 or MJPEG	MPEG-4 or MJPEG
Watchdog	Yes	Yes	Yes
Operating System	Microsoft® Windows® XP	Microsoft Windows XP	Microsoft Windows XP
External I/O	16 expandable to 128	16 expandable to 128	16 expandable to 128
Hot-swappable Drives	No	Yes	Yes
RAID External Storage	No	Yes	Yes
Dimensions	4U	4U	1U

Alarm Management and Event Monitoring

Alarm Management and Event Monitoring comprise a software-only component called FX Asset Protection Manager. The FX Asset Protection Manager software delivers complete asset protection by providing the following capabilities:

- a single, integrated view of events
- one key point of control for monitoring and management
- usage of open standards to easily integrate industry-standard BAS and IT management consoles

This all-in-one, streamlined solution provides real-time views of events from any input without requiring users to leave the console. It also sends immediate alerts via user-defined media (pager or e-mail) to user-selected personnel for appropriate action.

The FX Asset Protection Manager software runs on an IP-enabled server, allowing monitoring from anywhere on the network using a standard Web browser. It also supports BACnet IP, Simple Network Management Protocol (SNMP), and Niagara^{AX} integrations, providing the ability to offer an integrated building automation and security console.

The software is easily configured, using drag-and-drop icon and alarm configuration. The intuitive, graphical user interface fully integrates views of devices and events. Changes in status are automatically and instantly reflected to the device icons. One-click access to graphical maps helps pinpoint event location. This provides the operator with a complete view of events and their relationship to activities.



Figure 6: Alarm Management Console View

Facility Explorer Asset Protection Ordering Information

Table 2: Access Controllers, Extension Modules, Software, and Accessories

Part Number	Description
LP-FXA-C-0	Access Controller
LP-FXA-EXTDR-0	Door Extension Module. Up to 2 Door Extension Modules can be connected to one Access Controller.
LP-FXA-EXTLC-0	Elevator Extension Module. Supports up to 8 elevator floor group control circuits. Up to 4 Elevator Extension Modules can be connected to one Access Controller.
LP-FXA-EXTIC-0	Input Extension Module. Supports up to 12 Binary Inputs and 2 Binary Outputs. Up to 4 Input Extension Modules can be connected to one Access Controller.
LP-FXA-EXTOC-0	Output Extension Module. Supports up to 8 Binary Outputs and 3 Binary Inputs. Up to 4 Output Extension Modules can be connected to one Access Controller.
LP-FXA-KITN1-0	Installation Kit: Includes FX Access software and iButton programming hardware (one required per site).
LP-FXA-SW-0	FX Access Software (included with Installation Kit)
NE-EDG-PS-1	Access Controller Power Supply
NE-IDC-DIN-1	Enclosure: DIN rail enclosure
NE-IDC-ENC-1x1	Enclosure: UL steel enclosure (1' x 1')
NE-IDC-ENC-1x2	Enclosure: UL steel enclosure (1' x 2')

Table 3: Identity Readers and Keys - HID 13.56 MHz iClass Readers and Cards

Part Number	Description
R10	iClass Reader: Mullion mount, Wiegand® output, black
R40	iClass Reader: Back box mount, Wiegand output, black
R90	iClass Long Range Reader: Wiegand output, black
S74	iClass Smart Card: not programmed, min. order qty. = 100
S74-M	iClass Smart Card with magnetic stripe: not programmed, min. order qty. = 100
S74-0C-BLANK	iClass Smart Card: 2k bit with 2 application areas, Corporate 1000 format programmed, front and back glossy video graphics quality finish, no logo, min. order qty. = 100
S74-0C5-BLANK	iClass Smart Card: 2k bit with 2 application areas, Corporate 1000 format programmed, front and back glossy video graphics quality finish, no logo, with end slot, min. order qty. = 100
S74-0CM-BLANK	iClass Smart Card with magnetic stripe: 2k bit with 2 application areas, Corporate 1000 format programmed, front and back glossy video graphics quality finish, no logo, min. order qty. = 100
S74-0CM5-BLANK	iClass Smart Card with magnetic stripe: 2k bit with 2 application areas, Corporate 1000 format programmed, front and back glossy video graphics quality finish, no logo, with end slot, min. order qty. = 100
S74-0H-BLANK	iClass Smart Card: 2k bit with 2 application areas, 34 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, min. order qty. = 100
S74-0H5-BLANK	iClass Smart Card: 2k bit with 2 application areas, 34 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, with end slot, min. order qty. = 100
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Part Number (Cont.)	Description
S74-0HM-BLANK	iClass Smart Card with magnetic stripe: 2k bit with 2 application areas, 34 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, min. order qty. = 100
S74-0HM5-BLANK	iClass Smart Card with magnetic stripe: 2k bit with 2 application areas, 34 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, with end slot, min. order qty. = 100
S74-0S-BLANK	iClass Smart Card: 2k bit with 2 application areas, 26 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, min. order qty. = 100
S74-0S5-BLANK	iClass Smart Card: 2k bit with 2 application areas, 26 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, with end slot, min. order qty. = 100
S74-0SM-BLANK	iClass Smart Card with magnetic stripe: 2k bit with 2 application areas, 26 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, min. order qty. = 100
S74-0SM5-BLANK	iClass Smart Card with magnetic stripe: 2k bit with 2 application areas, 26 bit Wiegand format programmed, front and back glossy video graphics quality finish, no logo, with end slot, min. order qty. = 100

Table 4: Identity Readers and Keys - HID Corp. 125 kHz Proximity Readers and Cards

Part Number	Description
L73-BG-2W	ProxPro® Reader: Beep on, Light-Emitting Diode (LED) normally red, flashes green on tag read, terminal strip, beige
L73-G-2W	ProxPro Reader: Beep on, LED normally red, flashes green on tag read, terminal strip, gray
D73-BG-2W-HWD	ProxPro Reader with S Keypad: Requires separate 7 conductor keypad cable (control panel processes keystrokes), beep on, LED normally red, flashes green on tag read, terminal strip, beige
D73-BG-2W-WGD	ProxPro Reader with K Keypad: Keypad data is outputted over shared Wiegand cable (reader processes keystrokes), beep on, LED normally red, flashes green on tag read, terminal strip, beige
D73-G-2W-HWD	ProxPro Reader with S Keypad: Requires separate 7 conductor keypad cable (control panel processes keystrokes), beep on, LED normally red, flashes green on tag read, terminal strip, gray
D73-G-2W-WGD	ProxPro Reader with K Keypad: Keypad data is outputted over shared Wiegand cable (reader processes keystrokes), beep on, LED normally red, flashes green on tag read, terminal strip, gray
L71-BG-2W	MiniProx® Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, beige
L71-G-2W	MiniProx Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, gray
L74-BGE-2W	ProxPoint® Plus Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, beige
L74-BLK-2W	ProxPoint Plus Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, black
L74-CHAR-2W	ProxPoint Plus Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, gray
L74-W-2W	ProxPoint Plus Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, white
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Part Number (Cont.)	Description
L75-G-2W	MaxiProx® Long Range Reader: Beep on, LED normally red, flashes green on tag read, gray
L77-B-2W	ThinLine™ II Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, black
L77-BGE-2W	ThinLine II Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, beige
L77-G-2W	ThinLine II Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, gray
L77-W-2W	ThinLine II Reader: Beep on, LED normally red, flashes green on tag read, 18 in. pigtail, white
K71-C-BLANK	ProxCard® II Proximity Card: Matte finish, no logo, with end slot, min. order qty. = 100
K78-C-WG	IsoProx® II Card Proximity Card with photo ID capability: Glossy finish, no logo, min. order qty = 100
K75-C-BLANK	DuoProx® II Proximity Card with magnetic stripe and photo ID capability: No logo, min. order qty. = 100
K79-K	Proximity Key Tag: Gray, min. order qty. = 100

Table 5: Identity Readers and Keys - Dallas Semiconductor iButton Technology Readers and Buttons

Part Number	Description
NE-RDR-IB-01	iButton Reader
NE-BTN-1990A	IButton Computer Chip
NE-FOB-1990A	iButton with Key Fob
NE-SUP-ROLL-DOT	Adhesive Dots (pack of 500 pcs.)

Table 6: Door Hardware and Other Accessories

Part Number	Description
2020-T	Door contact switch/magnet: flush mount, 3/8 in., with terminals
PA-75	Door contact switch adapter: 3/4 in. with 3/8 in. hole, for use with steel or thin frame doors. Min. order qty. = 100
2505A	Door contact switch/magnet with 3' armored cable
DS-160	Request to exit motion sensor, gray
CM-5085-E	Request to exit mushroom push button with spring return, 1-60 second pneumatic timer
MSB550-2V	Request to exit push bar
500GL-KIT	Kit to mount MSB550-2V on glass door
ES411-K1	Door alarm annunciator: 12-24 VDC, 80 dB @ 3 ft, NC dry contact input
SPS-33EAC18C	Power supply: 24 VDC, 3.3A, with circuit breaker protection for eight doors
SPS-65EAC18C	Power supply: 12 VDC, 6.5A, with circuit breaker protection for either doors
1562	Electromagnetic door lock: 2,000 lb holding force
M62	Electromagnetic door lock: 1,200 lb holding force
MUNL24	Electric door strike: 24 VDC, for mortise type locksets, fail secure
51A-24-U	Electric door strike: 24 VDC, stainless steel finish, for cylindrical locksets, fail secure
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Part Number (Cont.)	Description
51A-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for cylindrical locksets, fail safe
52 B-24-U	Electric door strike: 24 VDC, stainless steel finish, for mortise type locksets, with or without dead latch, fail secure
52B-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for mortise type locksets, with or without dead latch, fail safe
52C-24-U	Electric door strike: 24 VDC, stainless steel finish, for Schlage® mortise type locksets, fail secure
52C-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets, fail safe
53D-24-U	Electric door strike: 24 VDC, stainless steel finish, for mortise type locksets where the deadbolt is not released, fail secure
53D-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for mortise type locksets where the deadbolt is not released, fail safe
53E-24-U	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets where the deadbolt is not released, fail secure
53E-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets where the deadbolt is not released, fail safe
53F-24-U	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets where the deadbolt is not released, fail secure
53F-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets where the deadbolt is not released, fail safe
54D-24-U	Electric door strike: 24 VDC, stainless steel finish, for mortise type locksets where the deadbolt is released, fail secure
54D-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for mortise type locksets where the deadbolt is released, fail safe
54F-24-U	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets where the deadbolt is released, fail secure
54F-24-U-FS	Electric door strike: 24 VDC, stainless steel finish, for Schlage mortise type locksets where the deadbolt is released, fail safe
Z7850LUG	Electric mortise lockset: locked outside only, no options, left hand Galaxy handle, fail safe
Z7850LUE	Electric mortise lockset: locked outside only, no options, left hand Empire handle, fail safe
Z7850LUN	Electric mortise lockset: locked outside only, no options, left hand Nova handle, fail safe
Z7850RUG	Electric mortise lockset: locked outside only, no options, right hand Galaxy handle, fail safe
Z7850RUE	Electric mortise lockset: locked outside only, no options, right hand Empire handle, fail safe
Z7850RUN	Electric mortise lockset: locked outside only, no options, right hand Nova handle, fail safe
Z7852LUG	Electric mortise lockset: locked outside only, no options, left hand Galaxy handle, fail secure
Z7852LUE	Electric mortise lockset: locked outside only, no options, left hand Empire handle, fail secure
Z7852LUN	Electric mortise lockset: locked outside only, no options, left hand Nova handle, fail secure
Z7852RUG	Electric mortise lockset: locked outside only, no options, right hand Galaxy handle, fail secure
Z7852RUE	Electric mortise lockset: locked outside only, no options, right hand Empire handle, fail secure
Z7852RUN	Electric mortise lockset: locked outside only, no options, right hand Nova handle, fail secure
CC1-5	Cable: 5 ft with connectors for locks, without optional outputs
PTH-4Q	Door Hinge: 4.5 x 4.5 ft, 5 ft 4-wire cable, brushed chrome

Table 7: Video Surveillance Components

Part Number	Description
LP-FXV-4A03-0	DVR/NVR Hybrid with 4 AIs and 300 GB hard disk
LP-FXV-8A03-0	DVR/NVR Hybrid with 8 AIs and 300 GB hard disk
LP-FXV-8A06-0	DVR/NVR Hybrid with 8 AIs and 600 GB hard disk
LP-FXV-8A08-0	DVR/NVR Hybrid with 8 AIs and 800 GB hard disk
LP-FXV-16A03-0	DVR/NVR Hybrid with 16 AIs and 300 GB hard disk
LP-FXV-16A06-0	DVR/NVR Hybrid with 16 AIs and 600 GB hard disk
LP-FXV-16A08-0	DVR/NVR Hybrid with 16 AIs and 800 GB hard disk
LP-FXV-16A12-0	DVR/NVR Hybrid with 16 AIs and 1.2 Tb hard disk
LP-FXV-16A15-0	DVR/NVR Hybrid with 16 AIs and 1.5 Tb hard disk
LP-FXV-16P16-0	NVR Enterprise Version with 16 IP camera licenses expandable to 64 with inputs RAID 5 Hot Swappable 1.5 Tb hard disk
LP-FXV-IPLIC-0	IP Camera License

Table 8: Alarm Management and Event Monitoring Software

Part Number	Description
LP-FXAM-D16-0	FX Asset Protection Manager Software (1-16 Doors)
LP-FXAM-D32-0	FX Asset Protection Manager Software (1-32 Doors)
LP-FXAM-D1UPG-0	FX Asset Protection Manager Software Upgrade (Add 1 Door)
LP-FXV-INT-0	Video Integration License
LP-FXAM-SNMP-0	SNMP Driver License
LP-FXAM-WBI-0	Embedded End User Site Workbench License

Table 9: Assembled Kits

Part Number	Description
LP-FXA-KITC1-0	1 Door Kit: Includes 1 Installation Kit, 1 Access Controller, 1 Door Extension Module, and Plastic Enclosure
LP-FXA-KITCU-0	1 Door Upgrade: Includes 1 Door Extension Module and software for additional door
LP-FXA-KITC2-0	2 Door Kit: Includes 1 Installation Kit, 1 Access Controller, 2 Door Extension Modules, and Plastic Enclosure
LP-FXA-KITS1-0	1 Door Starter Kit: Includes 1 Installation Kit, 1 Access Controller, 1 Door Extension Module, 1 ProxPoint Plus Reader, 1 Mag Lock, 1 REX Push Button
LP-FXA-KITS2-0	2 Door Starter Kit: Includes 1 Installation Kit, 1 Access Controller, 2 Door Extension Modules, 2 ProxPoint Plus Readers, 2 Mag Locks, 2 REX Push Buttons
LP-FXA-KITS3-0	1 Door + 1 DVR Starter Kit: Includes 1 Installation Kit, 1 Access Controller, 1 Door Extension Module, 1 ProxPoint Plus Reader, 1 Mag Lock, 1 REX Push Button, 1 4-Channel DVR
LP-FXA-KITD1-0	2 Door Starter Kit with Alarm Management Integration AND Video Integration: Includes 1 Installation Kit, 1-16 Door Alarm Management Software, 1 Video Integration Software, 1 4-Channel DVR, 1 Access Controller, 2 Door Extension Modules, 2 ProxPoint Plus Readers, 2 Mag Locks, 2 REX Push Buttons
LP-FXA-KITD2-0	2 Door Starter Kit with Alarm Management Integration AND Video Integration: Includes 1 Installation Kit, 1-16 Door Alarm Management Software, 1 Video Integration Software, 1 4-Channel DVR

Technical Specifications

LP-FXA-C-0 Access Controller

Product	LP-FXA-C-0 Access Controller
Supply Voltage	24 VAC, 60 Hz at 40 VA 23-29 VDC at 1A
Ambient Operating Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Ambient Storage Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Electrical Terminations	Screw terminals. Each terminal accepts 16 AWG – 22 AWG (1.31 to 0.32 mm ²) maximum cable Molex: 4-pin Molex® connector for quick connection of RS-485 data bus between Access Controller and Extension Modules Ethernet: RJ45 RS-232
Housing	ABS plastic housing
Dimensions (H x W x D)	4-5/16 x 4-3/8 x 2 in. (109 x 111 x 51 mm)
Mounting	On flat surface (keyhole screw openings available) or 35 mm DIN rail
Shipping Weight	1 lb (0.45 kg)
Compliance	Canada - UL Listed, File S3250, CCN UEHX7, Miscellaneous Signal Appliances Certified for Canada, Industry Canada compliant to ICES-003 United States - UL Listed, File S3250, CCN ALVY, Access Control System Units FCC compliant to CFR 47, Part 15, Subpart B, Class A

LP-FXA-EXTDR-0 Door Extension Module

Product	LP-FXA-EXTDR-0 Door Extension Module
Supply Voltage	16-29 VDC at 1A (provided separately or by Access Controller)
Ambient Operating Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Ambient Storage Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Electrical Terminations	6 in. (15.2 cm) 22 AWG (0.32 mm ²) stripped wire leads extending from potted enclosure
Housing	Potting material
Dimensions (H x W x D)	2-11/16 x 2 x 13/16 in. (6.8 x 5.1 x 2.1 cm)
Mounting	On flat surface (keyhole screw openings available)
Shipping Weight	1 lb (0.45 kg)
Supported Reader Types	5-12 V Wiegand Reader 24 V Wiegand Reader iButton Key Reader
Electrical Outputs	1A for Strike 500 mA for Reader
Compliance	Canada - UL Listed, File S3250, CCN UEHX7, Miscellaneous Signal Appliances Certified for Canada, Industry Canada compliant to ICES-003 United States - UL Listed, File S3250, CCN ALVY, Access Control System Units FCC compliant to CFR 47, Part 15, Subpart B, Class A

LP-FXA-EXTOC-0 Output Extension Module

Product	LP-FXA-EXTOC-0 Output Extension Module
Supply Voltage	22-29 VDC at 300 mA (provided by Access Controller)
Ambient Operating Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Ambient Storage Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Electrical Terminations	Screw terminals. Each terminal accepts 16 AWG – 22 AWG (1.31 to 0.32 mm ²) maximum cable RS-485 Bus: 4-pin Molex connector for quick connection Ethernet: RJ45 RS-232:
Housing	ABS plastic housing
Dimensions (H x W x D)	4-5/16 x 4-3/8 x 2 in. (109 x 111 x 51 mm)
Mounting	On flat surface (keyhole screw openings available) or 35 mm DIN rail
Shipping Weight	1 lb (0.45 kg)
Binary Inputs	Three, limited to +5.2 to -0 V
Binary Outputs	Eight SPDT relays rated to 24 V AC/DC at 2A
Compliance	United States - FCC compliant to CFR 47, Part 15, Subpart B, Class A

LP-FXA-EXTIC-0 Input Extension Module

Product	LP-FXA-EXTIC-0 Input Extension Module
Supply Voltage	22-29 VDC (provided by Access Controller)
Power Consumption	100 mA
Ambient Operating Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Ambient Storage Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Electrical Terminations	Screw terminals. Each terminal accepts 16 AWG – 22 AWG (1.31 to 0.32 mm ²) maximum cable RS-485 Bus: 4-pin Molex connector for quick connection Ethernet: RJ45 RS-232
Housing	ABS plastic housing
Dimensions (H x W x D)	4-5/16 x 4-3/8 x 2 in. (109 x 111 x 51 mm)
Mounting	On flat surface (keyhole screw openings available) or 35 mm DIN rail
Shipping Weight	1 lb (0.45 kg)
Binary Inputs	Twelve, limited to +5.2 to -0 V
Binary Outputs	One SPDT and one SPST relay, both rated to 24 V AC/DC at 2 A
Compliance	United States - FCC compliant to CFR 47, Part 15, Subpart B, Class A

LP-FXA-EXTLC-0 Elevator Extension Module

Product	LP-FXA-EXTLC-0 Elevator Extension Module
Supply Voltage	22-29 VDC (provided by Access Controller)
Power Consumption	300 mA
Ambient Operating Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Ambient Storage Conditions	0 to 49°C (32 to 120°F), 5 to 85% RH noncondensing
Electrical Terminations	Screw terminals. Each terminal accepts 16 AWG – 22 AWG (1.31 to 0.32 mm ²) maximum cable RS-485 Bus: 4-pin Molex connector for quick connection Ethernet: RJ45 RS-232
Housing	ABS plastic housing
Dimensions (H x W x D)	4-5/16 x 4-3/8 x 2 in. (109 x 111 x 51 mm)
Mounting	On flat surface (keyhole screw openings available) or 35 mm DIN rail
Shipping Weight	1 lb (0.45 kg)
Binary Inputs	Three, limited to +5.2 to -0 V
Binary Outputs	Eight rated to 24 VAC at 2 A
Compliance	United States - FCC compliant to CFR 47, Part 15, Subpart B, Class A

Requirements for FX Access Software

Product	LP-FXA-SW-0
Processor	Intel Pentium III or higher
Hard Disk	Minimum 6 GB
Memory	Minimum 512 MB
Operating System	Microsoft Windows 2000, Windows 2003, Windows XP Professional
Communication	Network Interface Card (NIC) for Ethernet 10/100 Mb/s
Display Adapter	Minimum 800 x 600 x 64 colors (Recommend 1024 x 768)
Web Browser	Microsoft Internet Explorer Version 6.0

Platform Requirements for FX Asset Protection Manager Software

Product	LP-FXAM-Dxx-0
Processor	Intel Pentium 4 or higher
Hard Disk	Minimum 16 GB
Memory	Minimum 1 GB
Operating System	Microsoft Windows 2000, Windows 2003, Windows XP Professional
Communication	Network Interface Card (NIC) for Ethernet 10/100 Mb/s
Display Adapter	Minimum 1024 x 768
Web Browser	Internet Explorer Version 6.0

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, contact a Facility Explorer technical support resource. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Federal Communications Commission (FCC) Statement

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when this equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

Industry Canada (IC) Statement

This Class (A) digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la Classe (A) respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

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