

MONITOR AFx[®] Elevator Control Package

- 120 Floors per Cab
- Maximum of 1920 Cabs
- Call Button Monitoring
- Filter Modules Included
- Modular Relay Design

The Elevator Control Package expands the MONITOR AFx™ family to include powerful floor access control supporting both Wiegand and magnetic stripe card technologies with a maximum of 64,000 cardholders. The package consists of three components. The Elevator Control Module is the main controller used to control the readers and send relay commands to the various relay modules. The Elevator Relay module controls up to 8 floors at a time and can monitor 8 call button inputs. The Elevator Filter Module is designed to provide clean data and power from the elevator cab to the Control Module for improved noise immunity.

The Elevator Control Unit is capable of controlling two cabs with up to 120 floors (stopping points) per cab. A valid card swipe will enable various dry contact relays to control the call buttons in the elevator cab for a short amount of time so the user can select a floor. If call button monitoring is enabled, the other call buttons can be disabled once one floor is selected. Floor capacity is expanded using Relay Modules as required.

A handy diagnostic mode is provided so a service technician can test all floor relays and call button inputs from the elevator control room. Standard MONITOR AFx™ fallback modes are available in case communications is severed to the host panel. The relays boards are designed to fully activate on communication failure. This allows for the elevator cab to either secure or de-secure on communication failure depending on the customer's requirements.



Call Button Monitoring

Each relay board contains 8 inputs for auditing of which call button was used after a valid card has been presented. This also allows for extra security by disabling all other floor buttons once one button has been selected. This prevents tail gating typical with most access control systems as the floors are active for a specified amount of time, allowing any buttons to be pushed during that time.

Filter Modules

Designed to provide noise immunity ensuring that the data is clean and intact from the reader in the elevator cab to the controller. Uses Opto-isolation for maximum effect.

Modular Relay Design

Each Elevator Relay Board consists of 8 independent relays and input points. The relays are Form-C for maximum flexibility. To expand the system, you simply add more relay boards as needed within the 120-floor limit.

Specifications

Elevator Control Package

Elevator Control Module:

- 2 elevator cabs supported
- 30 Relay Boards Max. (15 per elevator cab)
- Auxiliary Fire, Bypass and Panic Inputs

Elevator Relay Module:

- 8 Form 'C' relays (Dry Contact)
- 8 Call Button Inputs Points (NC or NO)

Elevator Filter Module:

- Opto-Isolation for reader data, power and call button inputs for a single cab.
- 5v 200ma filtered power available for cab reader power

System Architecture:

RS485 (SNAPP) communications from Elevator Control Module to MONITOR AFx™ Main Panel. Each Elevator Control Module contains a unique electronic serial number to ease installation and troubleshooting.

Power Requirements:

Elevator Control Cabinet: One 12VDC 2.5A Power Supply included. Requires a 16VAC 37VA Transformer (not supplied).

Elevator Relay Cabinet: Two 12VDC 2.5A Power Supplies. Requires a 16VAC 37VA Transformer each (not supplied).

- Elevator Control Module: 12VDC, 300 ma (Cannot be powered directly from SNAPP bus).
- Elevator Relay Module: 12VDC 340ma
- Elevator Filter Module: 12VDC 60ma (Filtered Side) 12VDC 140ma (Un-filtered Side, does not include reader power consumption).

Cabinet Material:

Metal, Off-white, Hinged door. Knockout provided on Relay Cabinet for optional key lock installation.

Cable Requirements

- RS485: 4 Conductor Shielded (recommended) Twisted Pair (18 – 24 awg, depending on amount length of cable run, 12.5 pf/ft).
- Power: 2 Conductor 18 awg
- Inter-Module wiring 18 - 22 awg

Enclosures:

Elevator Control Cabinet: 256mm wide, 355mm high, 81mm deep (10.1" wide x 14.0" high x 3.2" deep)

Elevator Relay Cabinet: 445mm wide, 612mm high, 89mm deep (17.5" wide x 21.1" high x 3.5" deep)

Compatibility

The Elevator Control Package is compatible with MONITOR AFx™ Enterprise only.

Environmental

Temperature Range:

0°C to 50°C (32°F to 122°F), 10 to 90% Humidity

Warranty

MONITOR AFx™ Elevator Control Package and individual components are warranted against workmanship and material defects under normal use and operation for a period of one year. The warranty period commences from date of shipment .

Part Numbers

120-8150	Elevator Control Module - Dual Cab Capable, Includes small cabinet, board and 12v 2.5A power supply.
120-8152	Elevator Relay Expansion Cabinet - Large cabinet and 12v 2.5A power supply.
120-8153	Elevator Relay Module - 8 Floors Capable, Board only