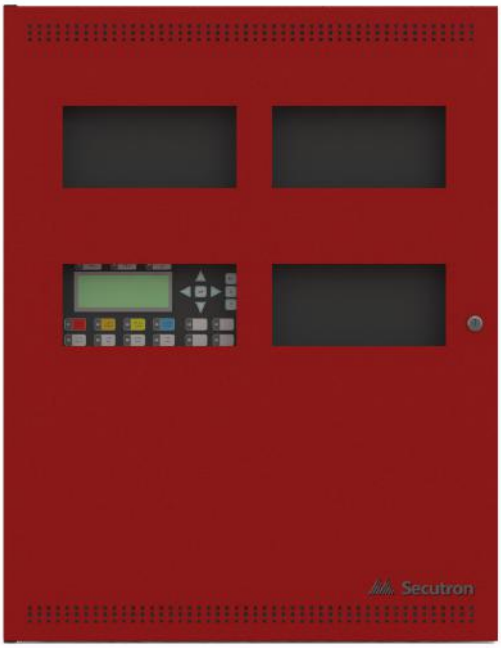
MMX-2017-12NDS

Intelligent Network Fire Alarm Control Unit



Description

Secutron's MMX-2017-12NDS Network Fire Alarm Control Unit offers modular components to meet a wide variety of applications. Designed for peer-to-peer network communications, the MMX-2017-12NDS allows for a maximum of 63 nodes, while providing reliability, flexibility and expandability.

The MMX-2017-12NDS base unit consists of one intelligent signaling line circuit (SLC) capable of supporting 159 analog sensors and 159 addressable modules. In addition the base unit also consists of Four Style Z/Y (Class A/B) Notification Appliance Circuits rated at 1.7 Amps each and a large 4 x 20 back-lit alphanumeric LCD display.

The MMX-2017-12NDS network configuration allows the control unit to be connected to a Secutron network to provide additional input circuits, visual zones, programmable notification appliance circuits, and relays. The network interface module allows the control units to communicate on a peer-to-peer network.

The network capabilities allow site specific customization and the ability to meet local and national requirements.

Features

Fire Alarm Control

- One expandable to seventeen Intelligent Signaling Line Circuits (SLC)
- Modular design
- Each SLC Loop is capable of supporting 159 Analog Sensors and 159 Addressable Modules which can be wired in Style 6 or 7 (Class A) or Style 4 (Class B)
- Four Style Z/Y (Class A/B) Notification Appliance Circuits rated at 1.7 Amps each
- Large 4 by 20 character Back-lit LCD Display with user friendly menu
- Supported languages: English, French, Arabic* and Hebrew* (*960 character back-lit LCD display only)
- Panel Security to protect site configurations
- Correlatable Switch Inputs which allows for multi-functional outputs
- Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor
- Auxiliary relay contacts for Common Alarm, Common Supervisory and Common Trouble
- Group bypass with built-in false alarm prevention technology
- RS-232 output for remote system printer or CRT
- Two Event History Logs comprised of a 6000 Alarm History Log for alarm related events and a 6000 Event Log for all events
- Supports three configuration files (current, previous and next configuration) with "hot swap" support
- Supports Conventional Hardwire Adder Modules
- Built-in One Man Walk Test operation
- Configurable for Canadian Two Stage operation
- Configurable for Coded Operation
- Real time 3D graphical monitoring and control using Open Graphic Navigator™
- BACnet support
- Supports Boolean logic functions
- Built-in Ethernet port
- Remote diagnostics via a built-in web server
- UL listed for Smoke Control

Network Features

- Up to 63 nodes
- Peer-to-peer network communications
- Style 4 (Class B) or Style 6 or 7 (Class A) wiring configuration
- Proprietary Arcnet Network Communications protocol
- Supports copper and/or fiber optic network cable

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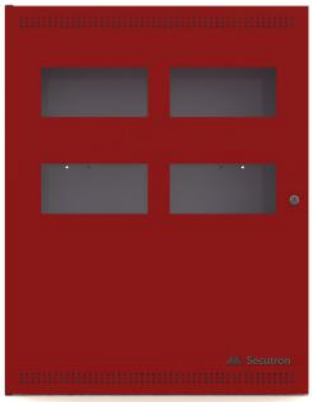
U.S.A. 4575 Witmer Industrial Estates, Niagara Falls, NY 14305 Telephone: (888) 695-3545 Fax: (888) 660-4113 • **E-mail:** mail@secutron.com
Catalog Number 1028 • Not to be used for installation purposes.

MMX-2017-12NDS Network Series Fire Alarm Control Units

MMX-2017-12NDS Mid-Size Network Main Control Unit

The MMX-2017-12NDS Midsize Network Main Control Unit comes complete with one intelligent Signaling Line Circuit (SLC) Style 4, 6 or 7, Four Style Z/Y (Class A/B) NAC Circuits (1.7 Amps each), a 4 line by 20 character back-lit LCD display and a 12 Amp Power Supply. The MMX-2017-12NDS provides space for the FNC-2000 Network Controller Module, up to 16 adder modules/loop controllers and 3 internal annunciator adder display modules. The MMX-2017-12NDS mounts in the MMX-BBX-1072ARDS enclosure.



MMX-BBX-1072ARDS Enclosure

The MMX-BBX-1072ARDS enclosure supports one MMX-2017-12NDS and up to 40 AH Batteries. The enclosure features the universal CAT-30 lock and a removable red door for easy installation and servicing.
Dimensions: 32 1/2"H x 25"W x 6 1/2"D

Adder Loop Controller Modules

ALCN-792M Quad Loop Controller Module

The ALCN-792M Quad Loop Controller Module provides two Signaling Line Circuits (SLC) to the MMX system consisting of 159 Analog Sensors and 159 Addressable Modules per loop. The ALCN-792M can be expanded with the use of the ALCN-792D Daughter Board Module. The ALCN-792M occupies one module slot. The ALCN-792MISO module adds loop isolation.

ALCN-792D Daughter board for Quad Loop Controller Module

The ALCN-792D Daughter Board provides an additional two SLC when connected to the ALCN-792M Quad Loop Controller Module. The daughter board mounts on top of the ALCN-792M.

Dimensions for Annunciator Module Enclosures

Model	Dimensions
MMX-BB-1001DR	9"H x 12.75"W x 1.85"D
MMX-BB-1002DR	18"H x 12.75"W x 1.85"D
MMX-BB-1003DR	26.4"H x 12.75"W x 1.85"D
MMX-BB-1008DR	33"H x 22.5"W x 1.85"D
MMX-BB-1012DR	45"H x 22.5"W x 1.85"D

Fire Network Controller Modules

FNC-2000 Fire Network Controller Module

The FNC-2000 provides network capability to the MMX-2017-12NDS. One Fire Network Controller Module is required per network node. In addition the FNC-2000 provides an interface for adding an optional FOM-2000-SP Fiber Optic Network Adder Module. The FNC-2000 mounts in the MMX-2017-12NDS main chassis.

FOM-2000-SP Fiber Optic Network Adder Module

The FOM-2000-SP Fiber Optic Network Adder Module allows for the use of fiber optic cabling on the MMX-2017-12NDS. It seamlessly connects to the interface on the FNC-2000 Fire Alarm Network Controller Module.

Electrical Specifications

Primary Input Power	120V 60Hz / 240V, 50Hz 4 Amps / 2 Amp (primary)
Power Supply Ratings	12 Amps. max. (secondary)
For NAC Circuits	24VDC unfiltered, 10 Amps. max.
Battery Type	24VDC, Gel-Cell/Sealed Lead-Acid
Battery Charging Capability	17-65 AH batteries

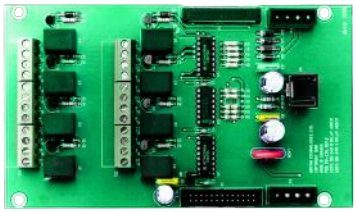
Adder Hardwire Modules

DM-1008A Eight Initiating Circuit Module

The DM-1008A provides 8 Style B (Class B) or 4 Style D (Class A) Initiating Circuits configurable for Alarm, Supervisory or Trouble zones. The DM-1008A occupies one module slot in the MMX-2017-12NDS main chassis.

SGM-1004A Four Notification Appliance Circuit Module

The SGM-1004A provides 4 Style Z/Y (Class A/B) Notification Appliance Circuits configurable as Silenceable or Non-Silenceable. Each NAC circuit is rated at 1.7 Amps. The SGM-1004A occupies one module slot in the MMX-2017-12NDS main chassis.



RM-1008A Eight Relay Circuit Module

The RM-1008A provides the MMX-2017-12NDS with eight individual configurable relays per module. Each relay provides one Form C contact rated at 28 VDC @1 Amp (resistive load) as well as a Green LED to indicate that the relay is active. The RM-1008A occupies one module slot in the MMX-2017-12NDS main chassis.

Graphics Software

Open Graphic Navigator (OpenGN)

The Open Graphic Navigator (OpenGN) software is an advanced fire alarm management and warning system that provides building ready monitoring, control and software management solutions that allows a user to monitor remote sites from multiple operator workstations located anywhere in the world. The OpenGN software is available in two versions: Network (OPENGN-ENT) and Non-Network (OPENGN-MINI).

Adder Auxiliary Modules

UDACT-300A Digital Alarm Communicator Module

The UDACT-300A Digital Alarm Communicator Module allows the MMX-2017-12NDS to transmit addressable point information to a central station. The UDACT-300A occupies one module slot in the MMX-2017-12NDS main chassis.

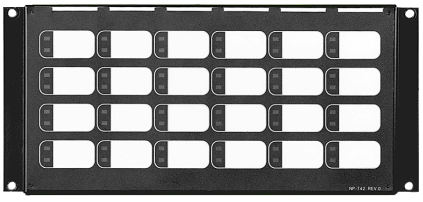
PR-300 Polarity Reversal/City Tie Module

The PR-300 Polarity Reversal/City Tie Module provides the system with a supervised City Tie (24 VDC/200 mA max.) and Polarity Reversal connection (24 VDC (open circuit), 8 mA max. (shorted)). The PR-300 occupies one module slot in the MMX-2017-12NDS main chassis.

Programmable Modules

FDX-008 Fan Damper Control Module

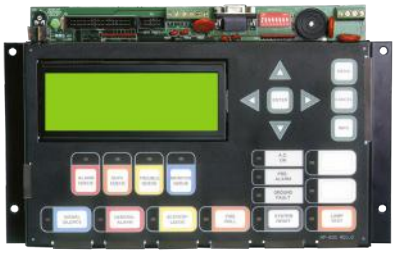
The FDX-008 Fan Damper Control Module provides individually programmed circuits which can be used for fan or damper control. The FDX-008 connects to the main control unit or the RAXN-LCD and occupies one display position in an MMX-BB-1000 or MMX-BB-5000 Series enclosure.



IPS-2424DS Programmable Input Switches Module

The IPS-2424DS provides 24 programmable switches that can be configured for ancillary functions such as zone bypass or added common control functions. The IPS-2424DS connects to main control unit or the RAXN-LCD when mounted remotely. The IPS-2424DS occupies one display position in an MMX-BB-1000 or MMX-BB-5000 Series enclosure.

Remote LCD Annunciators



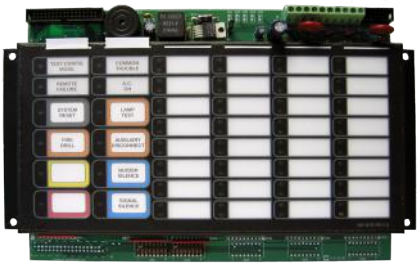
RAXN-LCD Remote LCD Annunciator

The RAXN-LCD Remote LCD Annunciator provides the same functions as the main display on the fire alarm control unit. The RAXN-LCD occupies one display position in the MMX-BB-1000 or MMX-BB-5000 Series enclosure.

RAXN-LCDG Remote Graphic LCD Annunciator

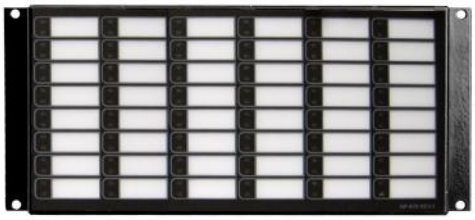
The RAXN-LCDG Remote Graphic LCD Annunciator is equipped with a 24 line x 40 character back-lit graphical LCD display that is used to display 9 events per page. Each event is displayed over 2 lines with 40 characters per line allowing emergency information to be displayed in an easy to read format. The RAXN-LCDG occupies one display position in the MMX-BB-1000 or MMX-BB-5000 Series enclosures.

Remote LED Annunciators



RAM-1032TZDS Main Remote LED Annunciator

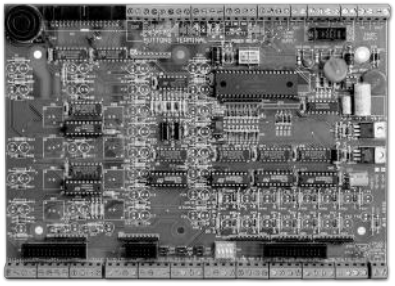
The RAM-1032TZDS Main Remote LED Annunciator provides common annunciator functions and 32 points of LED annunciation. The RAM-1032TZDS has indicators for A.C. On, Common Trouble and Signal Silence and controls for System Reset, Lamp Test, Fire Drill, Buzzer Silence and Signal Silence. The RAM-1032TZDS occupies one display position in the MMX-BB-1000 or MMX-BB-5000 Series enclosure.



RAX-1048TZDS Programmable LED Annunciator Module

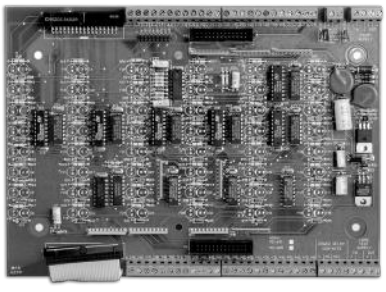
The RAX-1048TZDS Programmable LED Annunciator Module provides 48 programmable bi-colored LEDs. The RAX-1048TZDS connects to the main control unit or either the RAXN-LCD or RAM-1032TZDS when mounted remotely. The RAX-1048TZDS occupies one display position in the MMX-BB-1000 or MMX-BB-5000 Series enclosure.

Graphic Annunciator Driver Modules



MGD-32 Master Graphic Driver Module

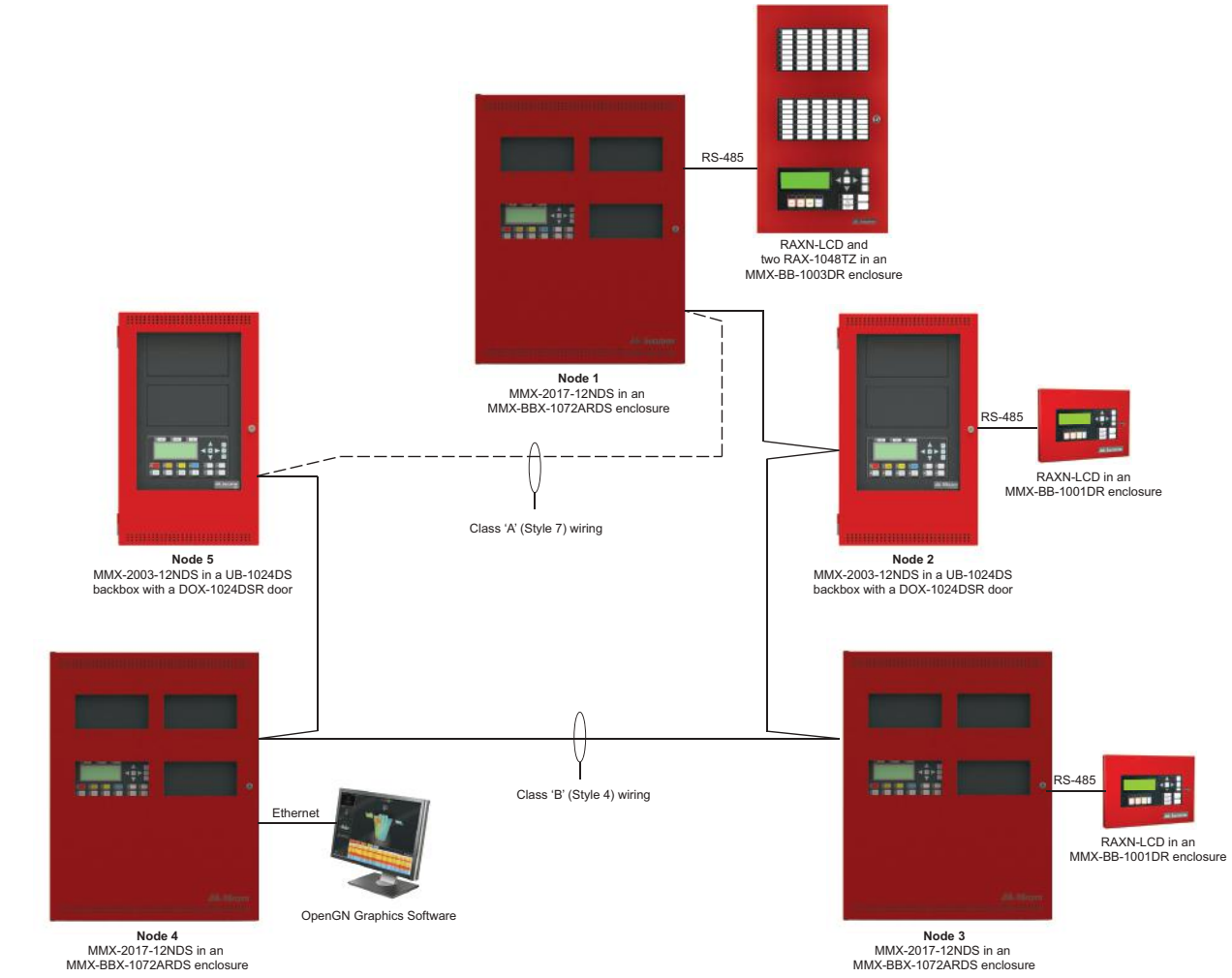
The MGD-32 Master Graphic Driver Module provides common control inputs for the common control switches such as System Reset, Signal Silence, Auxiliary Disconnect, Fire Drill, Lamp Test, Acknowledge and General Alarm. The MGD-32 can also drive up to 32 supervised outputs. These output points are capable of driving LEDs or incandescent lamps. The MGD-32 mounts in a graphic annunciator wallbox or in the MMX-BB-5000 enclosures. An external power supply is required for incandescent lamps and lamp test.



AGD-048 Adder Graphic Driver Module

The AGD-048 Adder Graphic Driver Module can be used with the MGD-32 to support an additional 48 supervised outputs. The AGD-048 mounts in a graphic annunciator wallbox or in the MMX-BB-5000 Series enclosure.

Typical MMX-2017-12NDS Networked System Configuration



Current Consumption

Model Number	Description	Standby	Alarm
MMX-2017-12NDS	Main Chassis (12 Amp)	0.310	0.733
ALCN-792M	Dual Analog Loops	0.130	0.145
ALCN-792MISO	Isolated Quad Loop Controller Module	0.2	0.213
ALCN-792M with ALCN-792D	Quad Analog Loops	0.130	0.145
FNC-2000	Fire Network Controller Module	0.190	0.0190
FOM-2000-SP	Fiber Optics Module	0.015	0.015
DM-1008A	8 Initiating Circuit Module	0.080	1 zone active: 0.125 2 zone active: 0.170 4 zone active: 0.275 6 zone active: 0.370 8 zone active: 0.465
SGM-1004A	4 Notification Appliance Circuit Module	0.060	0.258
RM-1008A	8 Relay Circuit Module	0.025	0.150
FDX-008	Fan Damper Control Module	0.015	0.035
UDACT-300A	Dialer Module	0.045	0.120
PR-300	City Tie Module	0.035	0.300
RAX-1048TZDS	Adder Annunciator Chassis	0.022	1 zone active: 0.026 2 zone active: 0.030 3 zone active: 0.035 4 zone active: 0.039 48 zone active: 0.262
RAM-1032TZDS	Adder Annunciator Chassis	0.050	32 zone active: 0.300
AGD-048	Adder Graphic Driver Board	0.035	# of LEDs x 4mA
IPS-2424DS	Programmable Input Switches Module	0.010	0.015

Ordering Information

Model	Description
Network Fire Alarm Control Unit	
MMX-2017-12NDS	Network Main Chassis with 12 Amp power supply. Mounts in the MMX-BBX-1072ADS(ARDS) enclosure.
MMX-BBX-1072ARDS	Black backbox enclosure for MMX-2017-12NDS c/w red door.
Network Controller Modules	
FNC-2000	Fire Network Controller Module
FOM-2000-SP	Fiber Optic Network Adder Module
Adder Loop Controller Modules	
ALCN-792M	Network Quad Loop Controller Module
ALCN-792MISO	Isolated Quad Loop Controller Module
ALCN-792D	Daughter board for ALC-792M Quad Loop Controller Module
Adder Hardwire Modules	
DM-1008A	Eight Class B (Style B) or 4 Class A (Style D) Initiating Circuit Module
SGM-1004A	Four Class A/B (Style Z/Y) Notification Appliance Circuit Module (Rated at 1.7 Amps per circuit)
RM-1008A	Eight Relay Circuit Module c/w eight form C relays (Rated for 28 VDC @ 1 Amp max. per relay)
Adder Auxiliary Modules	
UDACT-300A	Digital Alarm Communicator Transmitter/Dialer Module
PR-300	Polarity Reversal and City Tie Module
Remote Annunciators	
RAXN-LCD	Remote LCD Annunciator
RAXN-LCDG	Remote Graphic LCD Annunciator
RAM-1032TZDS	Main Remote LED Annunciator c/w 32 Bi-Colored LEDs
RAX-1048TZDS	Programmable LED Annunciator Module c/w 48 Bi-Coloured LEDs and 48 Trouble LEDs
Programmable Modules	
IPS-2424DS	Programmable Input Switches Module c/w 24 selector switches and 24 bi-coloured LEDs
FDX-008	Fan Damper Control Module
Enclosures for Remote Annunciators / Programmable Modules	
MMX-BB-100D1	Remote Enclosure. Houses one module. Add suffix “R” for red door.
MMX-BB-100D2	Remote Enclosure. Houses two modules. Add suffix “R” for red door.
MMX-BB-100D3	Remote Enclosure. Houses three modules. Add suffix “R” for red door.
MMX-BB-100D8	Remote Enclosure. Houses eight modules. Add suffix “R” for red door.
MMX-BB-101D2	Remote Enclosure. Houses twelve modules. Add suffix “R” for red door.
Graphic Driver Modules	
MGD-32	Main Graphic Driver Module c/w 32 Supervised Outputs
AGD-048	Adder Graphic Driver Module c/w 48 Supervised Outputs
Graphics Software	
OPENGN-MINI	Open Graphic Navigator Software, Mini Edition for standalone MMX Systems
OPENGN-ENT	Open Graphic Navigator Software, Enterprise Edition for MMX Network Systems