SINGLE LOOP NETWORKABLE FIRE ALARM PANEL   FX-240N

Description

The FX-240N is a networkable panel, with one enabled SLC which supports up to 240 Mircom devices (MIX-4000 Series) and is ideal for jobs which require multiple small/medium sized facilities or areas networked together for combined monitoring.

The FX-240N is shipped pre-assembled with mainboard, main display, power supply, black backbox, and red door enclosure.

The FX-240N is compatible with the QX-mini voice evacuation system, for instances when an integrated fire and audio solution is required.
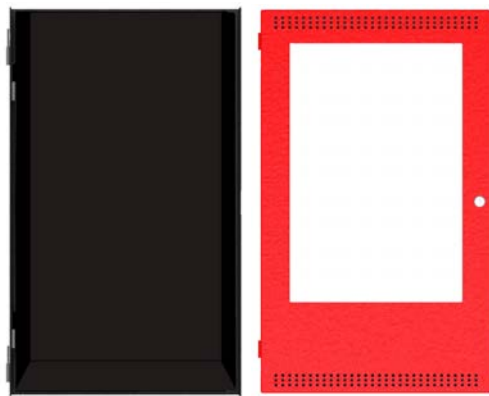
Features

- 4 x 20 LCD display
- Support for one SLC loop supporting MGC protocol with a maximum of 240 Mircom MIX-4000 Devices and Modules
- Each SLC current capability is 200mA in standby and 400mA in alarm. SLC Maximum line resistance 40 Ohms and maximum line capacitance 0.47uF
- Sub-addressing to optimize the number of devices in each loop
- Four Style Z/Y (Class A/B) Notification Appliance Circuits rated at 1.7 Amps each with built-in sync protocol
- Class A, Class X or Class B analog loop(s)
- Compatible with conventional detectors using DM-1008A Eight Initiating Circuit Module or MGC MIX-4042 Conventional Zone module, refer to document LT-1023 for compatible detectors
- User Interface Tags and Labels in English, French, Italian, Spanish, Portuguese, Arabic*, Hebrew*, Chinese*, Japanese*, Korean* and Russian* (*needs RAXN-4000LCDGC)
- Boolean Logic Engine for complex sequences of Operations
- Four Alarm Queues with selector switches and LEDs for Alarm, Supervisory, Monitor and Trouble
- RS-232 output for remote system printer or terminal
- RS-485 port for system expansion
- Integration with QX-Mini Audio Panels
- Two Event History Logs; one for Alarm-related events (5000 events) and one for all events (5000 events)
- Up to 7 remote annunciators per node

Networking Features

- Allows up to 24 nodes of FX-240N fire alarm control panels to be connected using supervised Class A/B circuits
- Peer-to-peer network communications
- Proprietary Arcnet Network Communications protocol

Dimensions	
Dimensions of Enclosure (minus built in trim ring)	14.5" W x 4.2" D x 26" H (36.83 cm x 10.67cm x 66.04cm)
Complete Dimensions of Enclosures	16.3" W x 5.5" D x 27.5" H (41.40xm x 13.97 x 69.85cm)
Electrical Specifications	
Primary Input Power	120VAC 60Hz / 240VAC 50Hz 3.1 Amp / 1.57 Amp (primary)
Battery Type	24VDC Gel Cell / Sealed lead acid
Temperature and Humidity Ranges	
Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity	0 to 93% relative humidity (noncondensing)

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Enclosures

UB-1024DS   DOX-1024DSR

UB-1024DS Universal Backbox

The UB-1024DS Universal backbox houses the FX-420N and provides space to mount up to 17 AH batteries. The FX-240N is supplied as a fully assembled unit, complete with an enclosure and red door.

Dimensions (minus built-in trim ring):
26" H x 14.5" W x 4.2" D

DOX-1024DSR Door

The DOX-1024DSR mounts on the UB-1024DS backbox. The door features the universal CAT-30 lock.

BB-1001WP(R)A – Outdoor Weather Protected Enclosure

The BB-1001WP(R)A is a complete enclosure that comes with either a RED or WHITE door, a black back-box, two keys and a durable lock at the top of the door. The door comes hinged to the bottom side of the box for added weather protection. The box is capable of handling one RAM-1032TZDS-CC Main Annunciator Chassis which provides up to 32 points of annunciation. RAM-1032TZDS-CC is ordered separately conform with the UL, ULC installation requirements.

Note: there is no need for thermostat or heater. RAM-1032TZDS-CC must be ordered separately to match UL, ULC installation requirements.

BB-1002WP(R)A – Outdoor Weather Protected Enclosure

The BB-1002WP(R)A is a complete enclosure that comes with either a RED or WHITE door, a black back-box, two keys and a durable lock at the top of the door. The door comes hinged to the bottom side of the box for added weather protection. The box is capable of handling one RAM-1032TZDS-CC Main Annunciator Chassis which provides up to 32 points of annunciation and one RAX1048TZDS-CC Adder Annunciator, which provides up to 48 points of annunciation. RAM-1032TZDS-CC and RAX1048TZDS-CC are ordered separately to match the UL, ULC installation requirements.

Note: there is no need for thermostat or heater. RAM-1032TZDS-CC and RAX-1048TZDS-CC must be ordered separately to match UL, ULC installation requirements.

BB-1001 / 2 / 3 / 8 / 12 – Remote Annunciator Enclosures

The BB-1000 Series comes complete with a backbox, door and hinge. The enclosures doors come with Lexan windows, two keys and a durable lock. The enclosures can handle the RAM-1032TZDS, RAX-1048TZDS, Main Annunciator Chassis.

BB-1001D / DR / DS / DB	9" H x 12.75" W x 1.85" D
BB-1002D / DR / DS / DB	18" H x 12.75" W x 1.85" D
BB-1003D / DR / DS / DB	26.4" H x 12.75" W x 1.85" D
BB-1008D / DR / DB	33" x 22.5" W x 1.85" D
BB-10012D / DR / DB	45" H x 22.5" W x 1.85" D

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Displays

DSPL-420DS Main Display Module

The DSPL-420DS Main Display Module provides the FX-240N with a 4-line by 20-character backlit LCD display, Common Controls buttons and Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor. The DSPL-420DS occupies one display position in the FX-240N inner door.
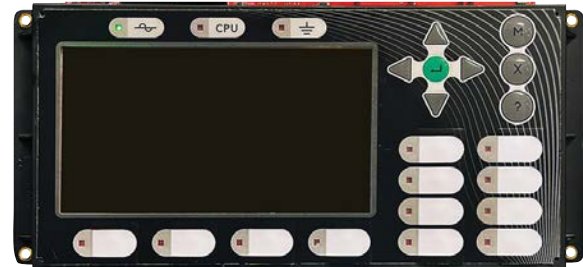

DSPL-2440DS Graphical Main Display Module

The DSPL-2440DS Graphical Main Display Module provides the FX-240N with a 24-line x 40-character backlit LCD display, common controls buttons and four status queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor. The DSPL-2440DS occupies one display position in the FX-240N inner door.

DSPL-420-16TZDS Main Display Module

The DSPL-420-16TZDS Main Display Module provides a 4-line by 20-character backlit LCD display, Common Control buttons and Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitoring with an additional 16 LED points of annunciation. The DSPL420-16TZDS occupies one display position in the FX-240N inner door.
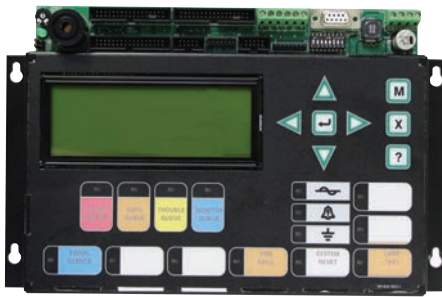

RAXN-4000LCDGC Main Color Display & Network Remote Annunciator

The RAXN-4000LCDGC, Main Color Display and Network Remote Annunciator is equipped with a 16 line x 40 character color graphical LCD display that is used to display eight 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-4000LCDGC occupies one display play position in the BBX-FXMNS, BB-1000 Series enclosures.
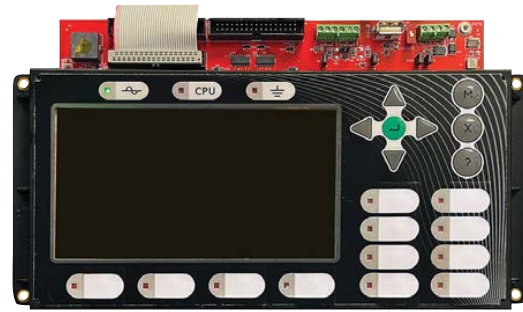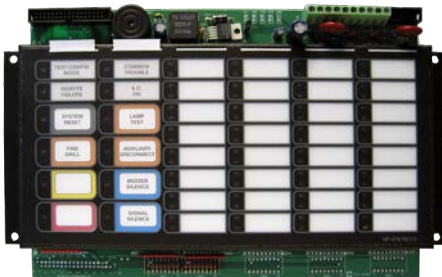
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Remote Annunciators

RAXN-4000LCD Remote LCD Annunciator

The RAXN-4000LCD Remote LCD Annunciator is equipped with a 4-line x 20-character back-lit alphanumeric LCD display that provides an exact replica of the main FleX-Net fire alarm control panel display. The RAXN-4000LCD occupies one display position in the BB-1000 Series enclosures.

RAXN-4000LCDGC Main Color Display & Network Remote Annunciator

The RAXN-4000LCDGC, Main Color Display and Network Remote Annunciator is equipped with a 16 line x 40 character color graphical LCD display that is used to display eight 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-4000LCDGC occupies one display position in the FX-240N enclosure.

CONFORMAL COATED PRODUCT

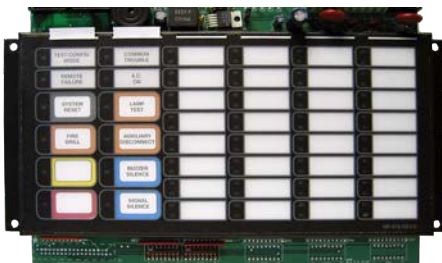## RAM-1032TZDS-CC Conformal Coated Main Remote LED Annunciator

The RAM-1032TZDS-CC Conformal Coated Main Remote LED Annunciator provides common annunciator functions and 32 points of LED annunciation. The RAM-1032TZDS-CC 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-CC occupies one display position in the BB-1001WP(R)A or BB-1002WP(R)A enclosures.

CONFORMAL COATED PRODUCT

RAX-1048TZDS-CC Conformal Coated Programmable LED Annunciator Module

The RAX-1048TZDS-CC Conformal Coated Programmable LED Annunciator Module provides 48 programmable bi-colored LEDs. The RAX-1048TZDSCC connects to the main panel or either the RAXN-4000LCD or RAM-1032TZDS when mounted remotely. The RAX-1048TZDS-CC occupies one display position in the BB-1002WP(R)A Series enclosures.

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 BB-1000 Series enclosures..

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 panel or either the RAXN-4000LCD or RAM-1032TZDS when mounted remotely. The RAX-1048TZDS occupies one display position in the FX-240N or BB-1000 Series enclosures.

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Programmable Modules

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 the main panel or the RAXN-4000LCD when mounted remotely. The IPS-2424DS occupies one display position in the FX-240N or BB-1000 Series enclosures.

FDX-008W/KI Fan Damper Module

The FDX-008W/FDX-008WKI Fan Damper Control Module provides individually programmed circuits which can be used for fan or damper control. The FDX-008W/FDX-008WKI connects to the main panel or the RAXN-4000LCD and occupies one display position in the FX-240N or BB-1000 Series enclosures.

IPS-4848DS Programmable Input Switches Module

The IPS-4848 provides 48 programmable switches that can be configured for ancillary functions such as zone bypass or added common control functions. The IPS-4848DS connects to main control unit or the RAXN-4000LCD when mounted remotely. The IPS-4848DS occupies one display position in the FX-240N or BB-1000 Series enclosures.

Graphic Annunciator Driver Modules
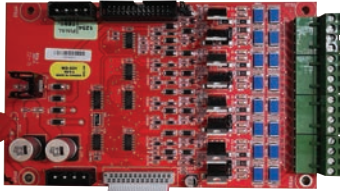

MGD-32 Master Graphic Driver Module

For use with FX-401, FX-1000, FX-2000 and FX-4000 Series Fire Alarm Control Panels. The MGD-32 Master Graphic Driver Module provides common control inputs for the switches such as System Reset, Signal Silence, Auxiliary Disconnect, Fire Drill, Lamp Test and Acknowledge

AGD-048 Adder Graphic Annunciator Adder Driver Board

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 wall box or in the BB-5000 enclosures.
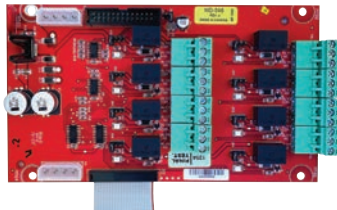
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Adder Hardwire Modules

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.

SGM-1004S Four Notification Appliance Circuit Output Module with Built-in Synchronization

The SGM-1004S provides up to four indicating circuits each rated at regulated 24 VDC/FWR 1.7 Amps (5 Amps maximum per SGM-1004S) to signal devices such as strobes, bells, horns, etc., and for special applications it is rated at 33 VDC/ FWR 2.1 Amps (5 Amps maximum per SGM-1004S). Each of the indicating circuits can be configured as non-silenceable (steady) or silenceable. SGM-1004S enables the compatible fire alarm control panels to have synchronized NAC circuits.

RM-1008A Eight Relay Circuit Module

The RM-1008A provides the system 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

Network Controller Modules

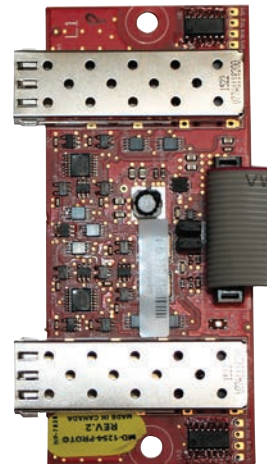## FNC-2000 Fire Network Controller Module

The FNC-2000 provides network capability to the system. One Fire Network Controller Module is required per network node panel. In addition the FNC-2000 provides an interface for adding an optional "FOM-2000-UM" Fiber Optic Network Adder Module. The FOM-2000- UM allows for single-mode or multi-mode fiber optic communication on a FleX-Net.

FOM-CONN-MM

FOM-CONN-SM

FOM-2000-UM

FOM-2000-UM Fiber Card Universal Mode

Allows for single-mode or multi-mode fibre optic communication on a Flex-Net network. Add FOM-CONN-SM and FOM-CONN-MM

FOM-CONN-MM Fiber Optic Connector Multi-Mode

Fibre Optic Module Connector Multi-mode (pack of 2). Must use a FOM-2000-UM

FOM-CONN-SM Fiber Optic Connector Single-Mode

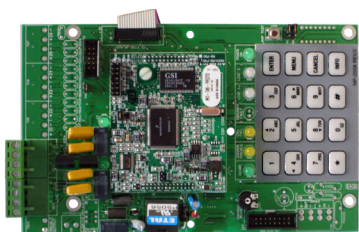Fibre Optic Connector Single Mode (pack of 2). Must use a FOM-2000-UM

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Power Supply Expansion

INX-10A Intelligent Booster Power Supply

Mircom's INX-10A is an Intelligent NAC expander/ power supply that works with listed compatible Intelligent fire alarm control panels. Available in a 10 Amp configuration, the INX-10A can extend the power capabilities of existing notification appliance circuits as well as provide power for other ancillary devices. In addition, the INX-10A has the ability to operate with any UL/ULC Listed 24 VDC fire alarm control panel to provide Notification Appliance Circuit expansion.

Adder Auxiliary Modules

UDACT-300A Digital Alarm Communicator Module

The UDACT-300A Digital Communicator allows the system to transmit addressable point information to a central station. The UDACT-300A occupies one module slot.

PR-300 Polarity Reversal/City Tie Module

The PR-300 provides outputs for city box and polarity reversal applications. As a city tie module, the PR300 provides an interface between the control panel indicating circuits and a master box. It provides off-premises signal transmission for systems that must comply with NFPA requirements for Auxiliary Protective Systems. As a polarity reversal module, the PR-300 provides an interface between the control panel and a reverse polarity receiver.

Accessories

UIMA4 – Interface for Configuring MGC Fire Panels

The UIMA4 is an interface for configuring FX-240N. The UIMA4's ribbon cable can be disconnected and replaced – the replacement part number is RPL-WC-25022 (it comes with 3 replacement cables). The UIMA4 interface has 3 connectors: 9 pin male serial connector, USB B female connector, and 10 pin female connector

RTI-1 – Trouble Remote Indicator

Mircom's Remote Trouble Indicator provides remote annunciation of fire alarm troubles. The RTI-1 mounts onto a standard single gang electrical box. The RTI-1 can be used with any of Mircom's fire alarm control panels.

MP-300 – End of Line Plates

Mircom's MP-300 is a 3.9K End Of Line resistor for use with Mircom conventional panels and detection circuits.

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Current Consumption

Model	Description	Standby (Amps)	Alarm (Amps)
FX-240N Single Loop Networkable Fire Alarm Control Panel			
FX-240N	Fully assembled panel which comes with 4 x 20 character main display, enclosure with red door and fire alarm panel mainboard which has one SLC loop enabled	0.310	0.733
Displays			
DSPL-420DS	4 x 20 Main LCD Display for FX-240N	0.024	0.025
DSPL-420-16TZDS	Alternate 4 x 20 Main LCD Display for FX-240N w/16 LEDs	0.010	0.046
DSPL-2440DS	Alternate Graphical Main Display for FX-240N	0.029	0.035
Adder Hardwire Modules			
DM-1008A	Eight Class B (Style B) or 4 Class A (Style D) Initiating	0.080	1 zone active: 0.125 2 zones active: 0.170 4 zones active: 0.275 6 zones active: 0.370 8 zones active: 0.465
SGM-1004S	Four Class A/B (Style Z/Y) Notification Appliance Circuit Module (Rated at 1.7 Amps per circuit)	0.031	0.096
RM-1008A	Eight Relay Circuit Module c/w eight form C relays (Rated for 28 VDC @ 1 Amp max. per relay)	0.025	0.150
Adder Auxiliary Modules			
UDACT-300A	Digital Alarm Communicator Transmitter/Dialer Module	0.045	0.120
PR-300	Polarity Reversal and City Tie Module	0.035	0.300
Programmable Modules			
IPS-2424DS	Programmable Input Switches Module c/w 24 selector switches and 24 bi-coloured LEDs	0.010	0.015
IPS-4848DS	Programmable Input Switches Module c/w 48 selector switches and 48 bi-coloured LEDs	0.010	0.022
FDX-008W	Fan Damper Control Module c/w 8 programmable switches	0.015	0.035
FDX-008WKI	Fan Damper Control Module	0.015	0.035
Remote Annunciators			
RAXN-4000LCD	Remote LCD Annunciator	0.139	0.164
RAXN-4000LCDGC	Main Color Display & Network Remote Annunciator	0.225	0.235
RAM-1032TZDS	Main Remote LED Annunciator c/w 32 Bi-Colored LEDs	0.050	32 zones active: 0.300
RAM-1032TZDS-CC	Conformal coated 32 zone remote LED annunciator with trouble LEDs	0.050	32 zones active: 0.300
RAX-1048TZDS	Adder Annunciator Chassis c/w 48 Bi-Colored LEDs	0.022	48 zones active: 0.262
RAX-1048TZDS-CC	Conformal coated Adder Annunciator Chassis c/w 48 Bi-Colored LEDs	0.022	48 zones active: 0.262
MGD-32	Graphic Annunciator	0.035	1.6
AGD-048	Graphic Annunciator Adder Driver Board	0.035	# of LEDs x 4mA
Network Controller Modules			
FNC-2000	Fire Network Controller Module	0.190	0.190
FOM-CONN-MM	Fibre Optic Module Connector Multi-mode (pack of 2). Must use a FOM-2000-UM	0.042	0.042
FOM-CONN-SM	Fibre Optic Connector Single Mode (pack of 2). Must use a FOM-2000-UM	0.016	0.016
Accessories			
RTI-1	Trouble Remote Indicator	0.035	0.035

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Ordering Information

Model	Description
FX-240N Single Loop Networkable Fire Alarm Control Panel	
FX-240N	Fully assembled panel which comes with 4 x 20 character main display, enclosure with red door and fire alarm panel mainboard which has one SLC loop enabled
Displays	
DSPL-420DS	4 x 20 Main LCD Display for FX-240N
DSPL-420-16TZDS	Alternate 4 x 20 Main LCD Display for FX-240N w/16 LEDs
DSPL-2440DS	Alternate Graphical Main Display for FX-240N
Enclosures	
UB-1024DS	Universal Back Box for Compact Main Control Units
DOX-1024DSR/DSB	Universal Door for UB-1024-DS Back Box, Red
BB-1001D/DR/DS/DB	Remote Annunciator Enclosure Houses one module. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door.
BB-1002D/DR/DS/DB	Remote Annunciator Enclosure Houses two module. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door.
BB-1003D/DR/DS/DB	Remote Annunciator Enclosure Houses three module. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door.
BB-1008D/DR/DB	Remote Annunciator Enclosure Houses eight modules. "D" White, "DR" Red or "DB" for Black Door.
BB-1012D/DR/DB	Remote Annunciator Enclosure Houses twelve modules. "D" White, "DR" Red or "DB" for Black Door.
BB-1001WP(R)A	Weather Protected Enclosure Enclosure Houses one module. White. BB-1001WPRA for red.
BB-1002WP(R)A	Weather Protected Enclosure Enclosure Houses two module. White. BB-1002WPRA for red.
Adder Hardwire Modules	
DM-1008A	Eight Class B (Style B) or 4 Class A (Style D) Initiating
SGM-1004S	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
Programmable Modules	
IPS-2424DS	Programmable Input Switches Module c/w 24 selector switches and 24 bi-coloured LEDs
IPS-4848DS	Programmable Input Switches Module c/w 48 selector switches and 48 bi-coloured LEDs
FDX-008W	Fan Damper Control Module c/w 8 programmable switches
FDX-008WKI	Fan Damper Control Module
Power Supply Expansion	
INX-10A	Intelligent Booster Power Supply
Remote Annunciators	
RAXN-4000LCD	Remote LCD Annunciator
RAXN-4000LCDGC	Main Color Display & Network Remote Annunciator
RAM-1032TZDS	Main Remote LED Annunciator c/w 32 Bi-Colored LEDs
RAXN-UB-BRACKET	RAXN-4000LCDGC into FX-240N display window
RAM-1032TZDS-CC	Conformal coated 32 zone remote LED annunciator with trouble LEDs
RAX-1048TZDS	Adder Annunciator Chassis c/w 48 Bi-Colored LEDs
RAX-1048TZDS-CC	Conformal coated Adder Annunciator Chassis c/w 48 Bi-Colored LEDs
MGD-32	Graphic Annunciator
AGD-048	Graphic Annunciator Adder Driver Board
Graphic Annunciator Driver Modules	
OGN-FLSLIC-ONE	Single Fire Alarm Control Panel License (Price per connection) Requires: OGN-KEY (sold seperately) Contact us for non-Mircom panel connections
OGN-FLSLIC-EXP	Fire Alarm Control Panel License for 2-9 Connections (Price per connection) Requires: OGN-KEY(sold seperately) Contact us for non-Mircom panel connections
OGN-FLSLIC-STD	Fire Alarm Control Panel License for 10-99 Connections (Price per connection) Requires: OGN-KEY (sold seperately) Contact us for non-Mircom panel connections
OGN-FLSLIC-ENT	Fire Alarm Control Panel License for 100+ Connections (Price per connection) Requires: OGN-KEY (sold seperately) Contact us for non-Mircom panel connections
OGN-KEY	OGN License Key Stick

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Fire Alarm Network BACnet Single User License	
MGC-LIC-BACNET	Unlocks BACnet port on one network node per license
Fire Alarm Network WEBSERVER Single User License	
MGC-LIC-WEBSERVER	Unlocks WEBSERVER port on one network node per license
Network Controller Modules	
FNC-2000	Fire Network Controller Module
FOM-2000-UM	Allows for single-mode or multi-mode fibre optic communication on a Flex-Net FX-4000 Series network. Add FOM-CONN-SM and FOM-CONN-MM
FOM-CONN-MM	Fibre Optic Module Connector Multi-mode (pack of 2). Must use a FOM-2000-UM
FOM-CONN-SM	Fibre Optic Connector Single Mode (pack of 2). Must use a FOM-2000-UM
Accessories	
UIMA4	Interface for Configuring MGC Fire Panels
MGC-CONFIG-KIT4	Fire Panel Configuration KIT with UIMA4
RTI-1	Trouble Remote Indicator
MP-300	End of Line Plates

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