

FLEX-NET WITH INTEGRATED DIGITAL AUDIO (FX-MNS-6000)



Description

Mircom's Flex-Net with Integrated Digital Audio is a Fire Alarm and Emergency Communication System that features modular system design, making it easy to customize for a wide range of applications. This integrated fire alarm and audio system provides zoned emergency multi-channel audio with emergency paging and fire evacuation.

The new digital amplifiers feature a compact and lightweight design, delivering up to 100W per amplifier module, which is about 70% more powerful than the legacy QX-5000 audio amplifiers. This digital audio system offers great flexibility due to a wider range of audio wattage combinations, making it ideal for both new distributed audio systems and expansions/retrofits of existing installations.

Applications of the Flex-Net with Integrated Digital Audio

The Flex-Net with Integrated Digital Audio enhances the deployment of advanced integrated fire-audio solutions across a variety of Residential projects in addition to Industrial, Commercial, and Institutional (ICI) construction projects. Some examples are the following applications:

Distributed Vertical Buildings: Enables streamlined installations in high-rise or multi-tower structures, supporting integrated audio systems with distributed audio expansion cabinets up to 2,000 feet apart from each other.

Large Industrial and Open-Space Facilities: Supports wide-area notification through NACs and speaker systems commonly used in large open spaces.

High-Power Audio Installations: Accommodates high-wattage speakers, for environments with elevated power demands.

Retrofit Projects: Ideal for facilities where existing audio components are located remotely from the central fire alarm system.

Features

Fire Alarm Features

- Multi-protocol Support:
 - MGC Protocol supports up to 240 MIX-4000 devices (240 sensors and modules) per SLC
 - Advanced Protocol (AP) supports up to 318 devices per SLC (159 sensors & 159 modules)
- When using MGC protocol:
 - Compatible with MGC devices (MIX-4000 Series) including photoelectric duct smoke detector and multi-modules
 - Device sub-addressing which saves physical address space for multi modules, sounder bases, relay bases and dual input module
 - Compatible with conventional detectors using a conventional zone module
- Base system is expandable up to 24 SLCs
- 4 Class A/B Indicating Circuits (NACs) rated at 1.7 amperes each and expandable using NAC adder modules (SGM-1004S) with full synchronization support
 - Regulated 24VDC Power Supply Output and maximum 27 amps output
- Addressable SLC loops with built-in fault isolators, preventing the need for using an isolator module as the first device on the SLC loop
- Supports three access levels for different user permissions
- Four Alarm Queues with selector switches and LEDs for Alarm, Supervisory, Monitor and Trouble
- RS-232 printer or programming port
- RS-485 Interface for Remote Annunciators, Remote Annunciators do not occupy a node on the network, up to even annunciators can be connected per node
- Two Event History Logs; one for Alarm-related events (5000 events) and one for all events (5000 events)
- Built-in Ethernet port for OpenGN, BACNet and Webserver
- OpenGN, is a building monitoring/control software platform, which can be programmed to email system conditions such as alarm, trouble, supervisory, and detector status
- Boolean logic functions supported for achieving advanced logics and complex sequence of operations
- Listed to UL 864 Rev. 10, ULC S527 Ed. 4, CSFM and FDNY Standards
- UL listed for Smoke Control (UUKL)



NYC
Fire Dept

City of Chicago,
High Rise, Class I
and Class II
Acceptable

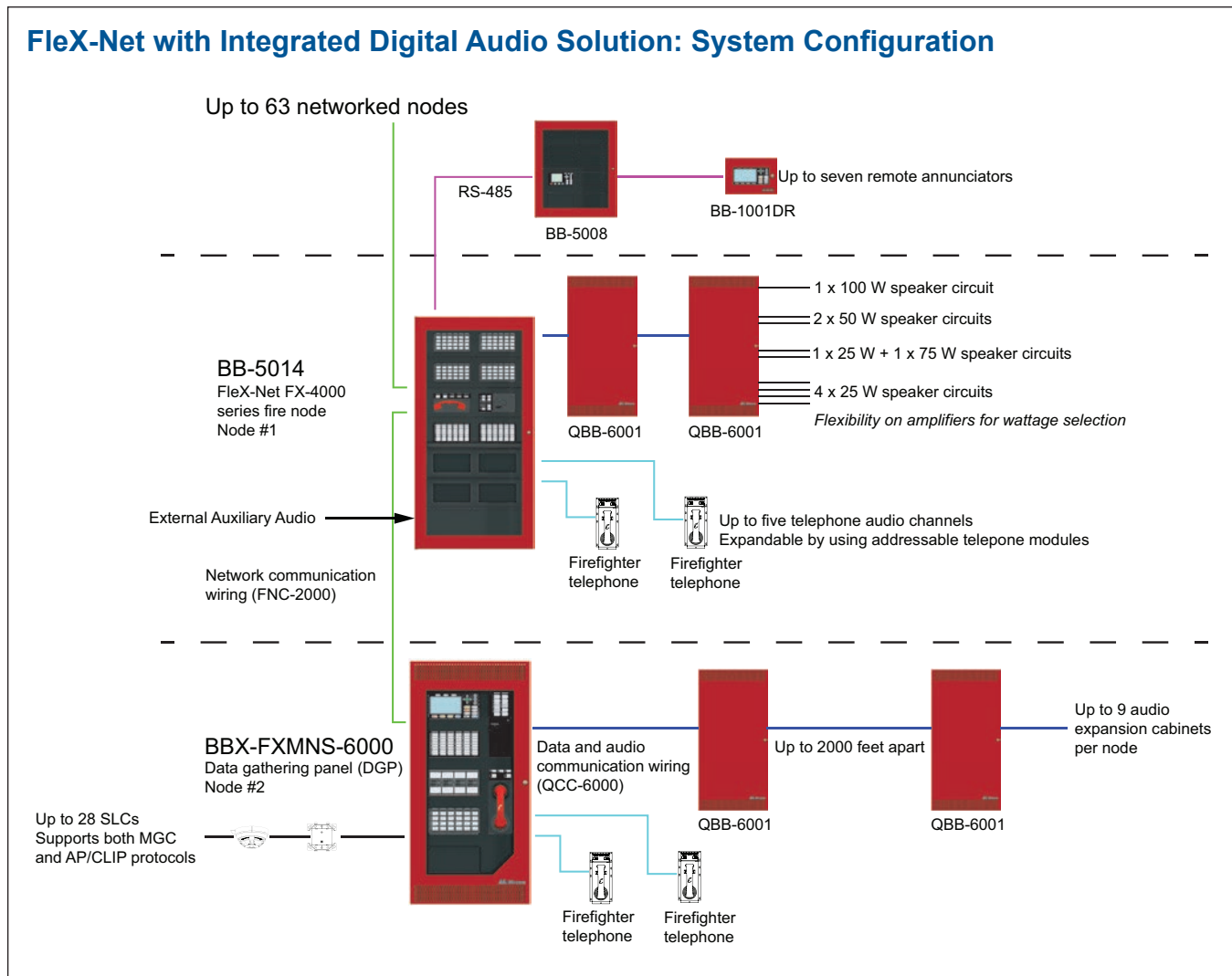
Network Features

- Provides peer-to-peer network communications
- Supports up to 63 nodes
- Fully integrated digital network audio and control over a single pair of copper wire or fiber optic cable
- Supports over 5,000 points per node
- Supports over 250,000 points on a single network
- Remote diagnostics via built in web server and standard Ethernet port in every node
- Style 4 (Class B) or Style 6 or 7 (Class A) wiring configuration
- Proprietary Arcnet Network Communications protocol

Audio Features

- Maximum of 400 watts per integrated Fire & Audio panel (BBX-FXMNS-6000 enclosure), and 575 watts per expansion audio cabinet (QBB-6001 enclosure)
- Up to 9 audio expansion cabinets can be connected to each main node allowing for up to 76 amplifiers per node, and 4788 amplifiers per network
- Supports 4 Audio Channels for Alert, Evacuation, Paging and Auxiliary Audio
- 24/7 Background Music: Auxiliary audio input available along with amplifier supervision during non-fire use
- Distributed audio support with expansion audio cabinets (QBB-6001), that can be placed up to 2000 feet apart for distributed audio
- Supports up to 5 fire fighter telephone channels per node, that can be expanded with addressable fire phone modules
- Flexibility for choosing wattage per circuit and number of speaker circuits
- Single power supply, powering both Fire and Audio components, while also serving as a battery charger
- Each amplifier output has the ability to be wired as Class A or Class B, without any external converter required
- Priority can be assigned to individual QMP-6101N(V) paging modules using rotary switch
- Self-resetting amplifiers for short detection, or current overload

FleX-Net with Integrated Digital Audio Solution: System Configuration



Fire-Digital Audio System Components



BBX-FXMNS-6000 Enclosure

BBX-FXMNS-6000 enclosure contains an audio portion including QMB-6000 card cage that holds up to 4 amplifiers and a QCC-6000 Communication Card. The fire alarm portion includes FX-6000MNS-CH Main Chassis, which holds the main fire alarm control board, an ANC-6000 Audio Network Controller Module, a TNC-5000 Telephone Network Controller Module, a QPS-6650 power supply, and batteries.

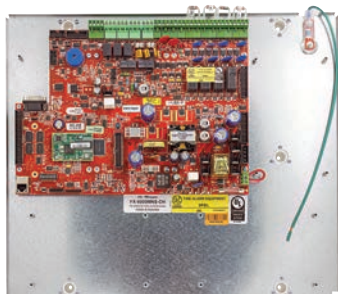
Enclosure dimensions 45.85"H x 22.4"W x 9.125"D



QBB-6001 Audio Expansion Enclosure

The QBB-6001 expansion audio cabinet (connected to a Flex-Net node) contains up to a maximum of two QMB-6000 card cages which holds up to 4 amplifiers each for a total of 8 amplifiers. The QBB-6001 also includes one QCC-6000 Communication Card, a QPS-6650 power supply and batteries.

Enclosure dimensions 45.85"H x 22.4"W x 9.125"D



FX-6000MNS-CH

Consists of a backplate with the main fire alarm control board. The FX-6000MNS-CH can be mounted into the BBX-FXMNS-6000 backbox. This backplate can accommodate up to 10 adder modules (including 3 controller modules). The FX-6000MNS-CH fire alarm control board includes four Style Z/Y (Class A/B) indicating circuits.

Integrated Digital Audio Amplifiers



QAD-6425-70 & QA-6425-25

The QAD-6425 digital audio amplifier comes in two different voltages (70 V & 25V). Each amplifier supports a maximum of four speaker circuits (Configurable through jumper settings on the amplifiers). Each amplifier weighs 1.05 lbs and has a audio output to weight ratio of 95 watts per pound.

The 100 watt audio output on the digital amplifiers are flexible to be configured to the following distributions:

- Four 25 watt speaker circuits
- Two 50 watt speaker circuits
- One 100 watt speaker circuit
- One 75 watt plus one 25 watt speaker circuit

QMB-6000 Amplifier Card Cage



QMB-6000

The QMB-6000 can mount in both the BBX-FXMNS-6000 and QBB-6001 backboxes. Each QMB-6000 holds up to four digital amplifiers (QAD-6425-70/25) and one communication card (QCC-6000). The QMB-6000 supports pre-wiring without requiring amplifier installation, as the card cage backplane is equipped with connectors. This design streamlines installation and commissioning while reducing labor costs.



QPS-6650

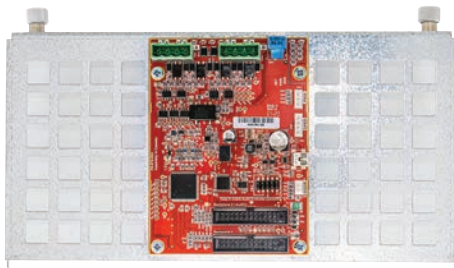
When installed in the main cabinet (BBX-FXMNS-6000), the QPS-6650 supplies power to the main board and a QMB-6000 module (4 amplifiers). When installed in the expansion cabinet (QBB-6001), it powers up to 2 QMB-6000 modules (8 amplifiers). Regulated 24VDC Output, 27 A output maximum from the power supply.

Network Controller Modules



ANC-6000

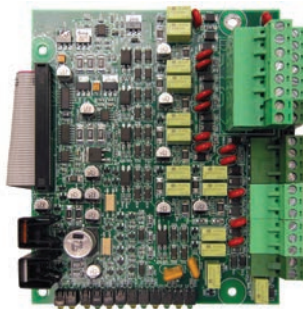
The ANC-6000 Audio Network Controller module is mounted in a BBX-FXMNS-6000 backbox over the main fire alarm board. The ANC-6000 Audio Network Controller provides audio interface microphone and control on the network system and provides access to four channels for Alert, Evacuation, Paging and external audio. One ANC-6000 is required in each node of a distributed 6000 audio system.



QCC-6000

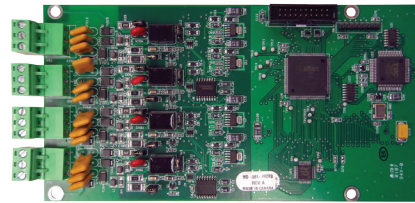
Communication Card is required for audio system expansion. It mounts on the right side of the QMB-6000 backplane. The QCC-6000 can also mount in BB-5000 Series backbox, using the CH-001608 plate that comes as part of the QCC-6000 package.

It allows for remote audio cabinet expansion up to 2000 feet (suitable wire gauge is 18 AWG). It supports up to 9 expansion cabinets on each Flex-Net main node.



TNC-5000

Telephone Network Controller module. This module is mounted over the ANC-6000 module. The recommended mounting of the TNC-5000 is sideways with LEDs across the top. The TNC-5000 can also be mounted on the bottom-right position of the FX-MNS6000-CH using the CH-001608 plate that comes as a part of the TNC-5000 package.



FNC-2000 Fire Network Controller Module

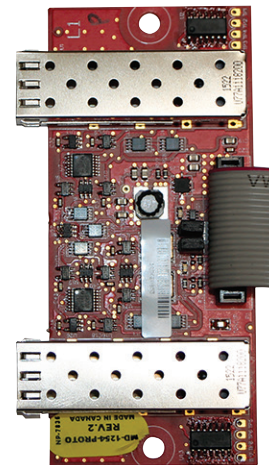
The FNC-2000 provides network capability to the system. One Fire Network Controller Module is required per network node panel. In addition the FNC-2000 provides an interface for adding an optional FOM-2000-UM Fiber Optic Network Adder Module. The FNC-2000 mounts in the FLEXNET-MNS.



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

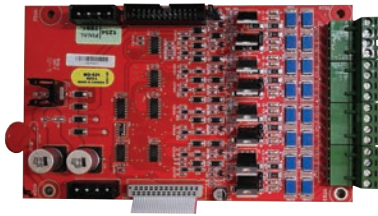
FOM-CONN-MM Fiber Optic Connector Multi-Mode

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

Adder Hardwire Modules



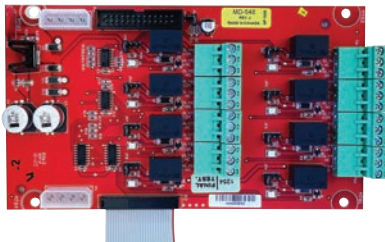
DM-1008A Eight Initiating Circuit Module

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

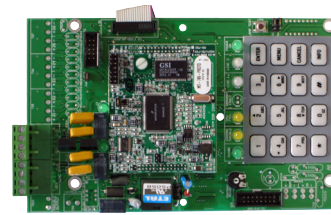
The SGM-1004S provides up to four indicating circuits each rated at regulated 24 VDC/FWR 1.7 Amps (5 Amps maximum per SGM-1004S) to signal devices such as strobes, bells, horns, etc., and for special applications it is rated at 33 VDC/FWR 2.1 Amps (5 Amps maximum per SGM-1004S). Each of the indicating 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

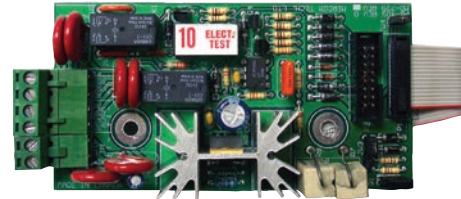
The RM-1008A provides eight individual configurable relays per module. Each relay provides one Form C contact rated at 28 VDC @1 Amp (resistive load) as well as a Green LED to indicate that the relay is active. The RM-1008A occupies one module slot.

Adder Auxiliary Modules



UDACT-300A Digital Alarm Communicator Module

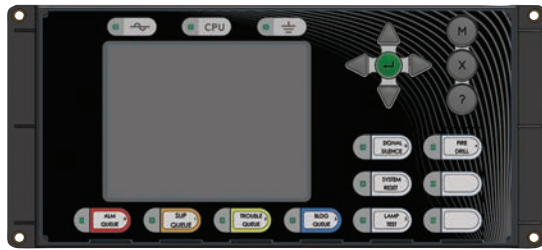
The UDACT-300A Digital Communicator allows the system to transmit addressable point information to a central station. The UDACT-300A occupies one module slot.



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.

Displays



The DSPL-2440DS Graphical Main Display Module

The DSPL-2440DS Graphical Main Display Module provides the Flex-Net panel 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 inner door of the BBX-FXMNS-6000 enclosure. The DSPL-2440DS buttons have tactile feedback and the display has high resolution and contrast to enable reading in different lighting conditions.



DSPL-420DS Main Display Module

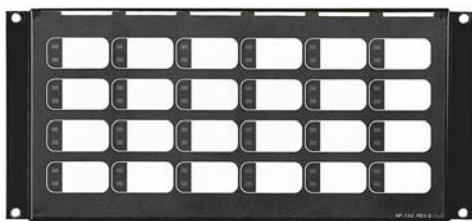
The DSPL-420DS Main Display Module provides the Flex-Net panel with a 4-line by 20-character backlit LCD display, Common Controls buttons and Four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor. The DSPL-420DS occupies one display position in the inner door of the BBX-FXMNS-6000 enclosure.



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 inner door of the BBX-FXMNS-6000 enclosure.

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-LCD when mounted remotely. The IPS-2424DS occupies one display position in the inner door of BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.



FDX-008W/KI Fan Damper Module

Fan Damper Module with white LEDs for AUTO switch position indication. FDX-008W provides switch operation of 8 fan damper zones and the FDX-008W/KI provides switch operation of 7 fan damper zones and one keyswitch operation of the 8th fan damper zone.

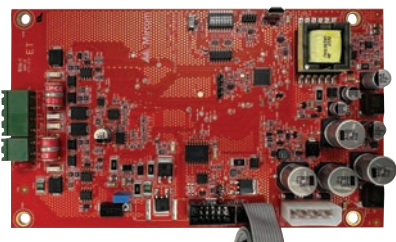
The FDX-008W/FDX-008W/KI connects to the main panel or the RAXN-4000LCD and occupies one display position in the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.



IPS-4848DS Programmable Input Switches Module

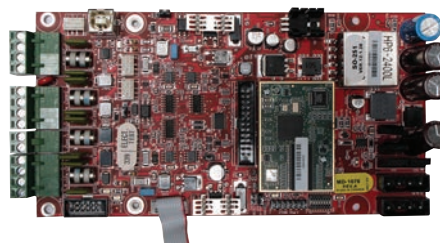
The IPS-4848DS provides 48 programmable switches that can be configured for ancillary functions such as zone bypass or added common control functions. The IPS-4848DS connects to the main panel or the RAXN-LCD when mounted remotely. The IPS-4848DS occupies one display position in the inner door of the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.

Adder Loop Controller Modules



ALCN-240ISO Isolated Single Loop Adder Module

For MIX-4000 devices, the ALCN-240ISO Isolated Single Loop Adder Module provides one Signaling Line Circuit (SLC) with ground fault detection to the system. The SLC on this loop card supports up to 240 MIX-4000 series devices. The ALCN-240ISO occupies one module slot.



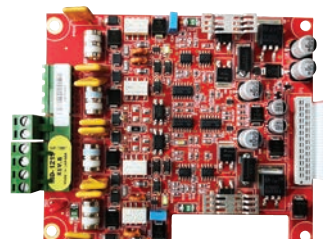
ALCN-4792MISO Isolated Quad Loop Adder Module

The ALCN-4792MISO Isolated Quad Loop Adder Module provides two Signaling Line Circuits (SLC) with ground fault detection to the system consisting of 159 Analog Sensors and 159 Addressable Modules per loop. The ALCN-4792MISO can be expanded with the use of the ALCN-792D Daughter Board Module. The ALCN-4792MISO occupies one module slot.



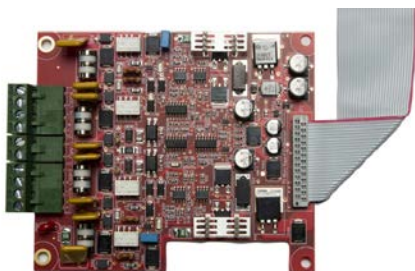
ALCN-960MISO Isolated Quad Loop Adder Module

For MIX-4000 devices, the ALCN-960MISO Isolated Quad Loop Adder Module provides two Signaling Line Circuits (SLC) with ground fault detection to the system consisting of 240 MIX-4000 devices per loop. The ALCN-960MISO can be expanded with the use of the ALCN-960D Daughter Board Module. The ALCN-960MISO occupies one module slot.



ALCN-792D Daughter Board for ALC-4792MISO

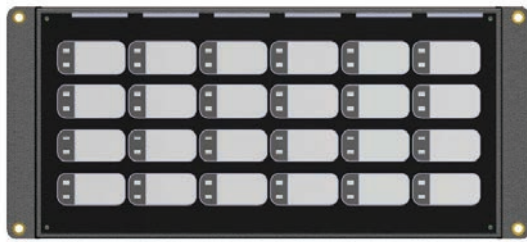
The ALCN-792D Daughter Board provides an additional two SLC loops when connected to the ALCN-4792MISO Isolated Quad Loop Controller Module. The daughter board mounts on top of the ALCN-4792MISO.



ALCN-960D Daughter Board for ALCN-960MISO

For MIX-4000 devices, the ALCN-960D Daughter Board provides an additional two SLC loops when connected to the ALCN-960MISO Isolated Quad Loop Adder Module. The daughter board mounts on top of the ALCN-960MISO.

Paging Control Modules



QAZT-5302DS

Addressable Telephone and Paging Selector Panel mounts in the BBX-FXMNS-6000 backbox.

Each QAZT-5302DS annunciates and controls up to 24 audio zones. There is one button and two LEDs per zone. The lower amber LED indicates Zone trouble. The upper green LED indicates whether that zone is selected for voice paging via the master microphone. Paging zone selection buttons toggle ON and OFF voice paging for that zone.



QAZT-5348DS

Addressable Telephone and Paging Selector Panel mounts in the BBX-FXMNS-6000 backbox.

Each QAZT-5348DS annunciates and controls up to 48 audio zones. There is one button and two LEDs per zone. The lower amber LED indicates Zone trouble. The upper green LED indicates whether that zone is selected for voice paging via the master microphone. Paging zone selection buttons toggle ON and OFF voice paging for that zone.

Network Paging Control Module



QMP-6101N



QMP-6101NV

QMP-6101N and QMP-6101NV

The QMP-6101 Network Master Paging Control Module includes the paging microphone and common control indicators. The QMP-6101 interconnects between other microphone modules in the Integrated Flex-Net & Digital Audio system. The QMP-6101 connects via a ribbon cable to the first QAZT-5348DS or QAZT-5302DS Zoned Selector Panel. The QMP-6101NV occupies one module space in the BBX-FXMNS-6000. The QMP-6101N occupies one module space in the BB-5000 series enclosures. The QMP-6101N(V) are driven off the RS485 wire and no display/remote annunciator ribbon cable connection is required.

Network Telephone Control Module



QMT-5302NV

Network Master Telephone Control Panel (Vertical Mount) mounts in the BBX-FXMNS-6000 backbox.

The QMT-5302NV includes the Master Telephone Handset and common control indicators. The QMT-5302NV supports the QAZT-5302DS and QAZT-5348DS Paging and Telephone selector modules.



QMT-5302N Network Master Firefighters' Telephone Control Module

The QMT-5302N includes the Master Telephone Handset and common control indicators. The QMT-5302N supports the QAZT-5302DS and QAZT-5348DS Paging and Telephone selector modules. The QMT-5302N occupies one module space in the BB-5000 Series enclosures.

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.

Batteries



BAT-12V18/26/33/42/55/75/80A

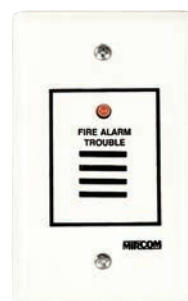
Batteries available from 18 to 80 AH. Batteries larger than 55AH will fit into a BC-160(R) battery cabinet.

Accessories



UIMA4 Interface for Configuring MGC Fire Panels

The UIMA4 is an interface for configuring Flex-Net, FA-300, FX-401, FX-2000, FX-3500, FX-3318, FX-4000, QX-5000, and UDACT-300. 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

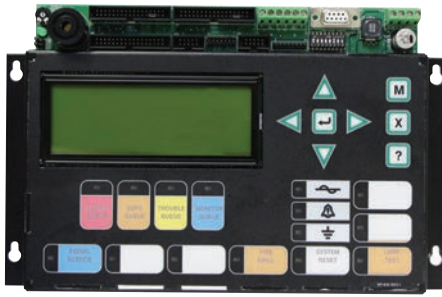
Mircom's Remote Trouble Indicator provides remote annunciation of fire alarm troubles. The RTI-1 mounts onto a standard single gang electrical box. The RTI-1 can be used with any of Mircom's fire alarm control panels.



MP-300 End of Line Plates

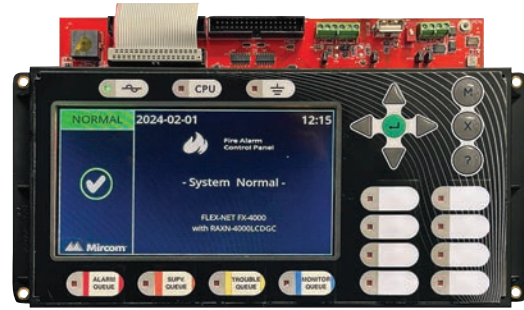
Mircom's MP-300 is a 3.9K End Of Line resistor for use with Mircom conventional panels and detection circuits.

Remote Annunciators



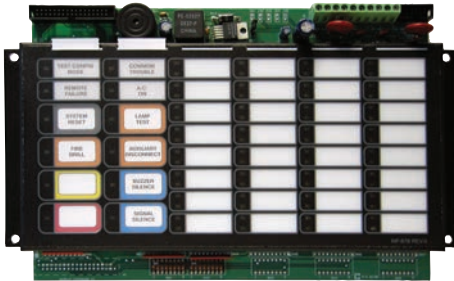
RAXN-4000LCD Remote LCD Annunciator

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 BBX-FXMNS-6000, BB-1000 or BB-5000 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 BBX-FXMNS-6000, BB-1000 or BB-5000 series enclosures.



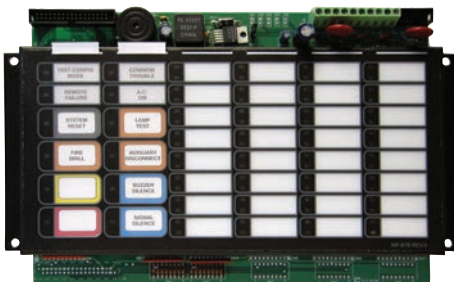
RAM-1032TZDS Main Remote LED Annunciator

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 or BB-5000 enclosures.



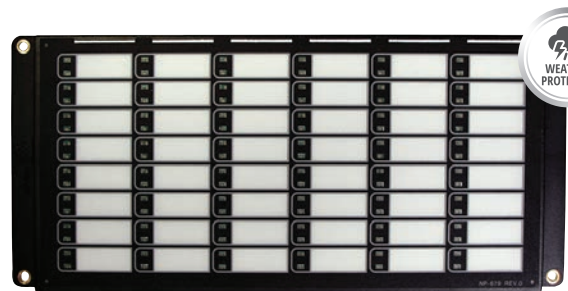
RAX-1048TZDS Programmable LED Annunciator Module

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-LCD or RAM-1032TZDS when mounted remotely. The RAX-1048TZDS occupies one display position in the inner door of the BBX-FXMNS-6000, BB-1000 or BB-5000 Series enclosures.



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.



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-1048TZDS-CC 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.

Enclosures



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	9" H x 12-3/4" W x 1-17/20" D (229mm x 324mm x 47mm)
BB-1002D	18" H x 12-3/4" W x 1-17/20" D (457mm x x 324mm x 47mm)
BB-1003D	26-2/5" H x 12-3/4" W x 1-17/20" D (671mm x 324mm x 47mm)
BB-1008D	33" x 22-1/2" W x 1-17/20" D (838mm x 572mm x 47mm)
BB-10012D	45" H x 22-1/2" W x 1-17/20" D (1143mm x 572mm x 47mm)



BB-5008 BB-5014
(Displays sold separately)

BB-5008 / BB-5014 Enclosures

The BB-5008 and BB-5014 lobby enclosures support the FX-4009-12N and provide space for internal lobby control modules. The cabinets hold up to 24 AH batteries. The door and chassis hardware are ordered separately.

BB-5008	36" H x 30" W x 7" D (914mm x 762mm x 178mm)
BB-5014	60" H x 30" W x 7" D (1524mm x 762mm x 178mm)



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 to match 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.

Dimensions	11-5/32" H x 12-15/16" W x 3-1/2" D (283mm x 329mm x 89mm)
Rated for Outdoor Environment	+50°C to -40°C (-122°F to -40°F)
Wet Location	95% R.H. @60°C



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.

Dimensions	17-15/16" H x 12-15/16" W x 3-1/2" D (456mm x 329mm x 89mm)
Rated for Outdoor Environment	+50°C to -40°C (-122°F to -40°F)
Wet Location	95% R.H. @60°C

Graphics Software

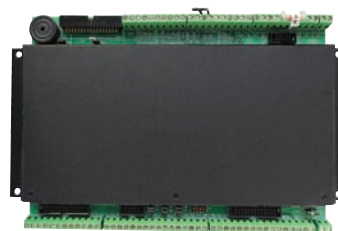


Open Graphic Navigator (OpenGN)

Open Graphic Navigator (OpenGN) is a centralized fire alarm management system that provides building or campus monitoring. As a powerful integration tool, OpenGN allows operators to monitor remote sites from multiple workstations located anywhere in the world. OpenGN displays monitored buildings and campuses in both 2D and 3D representations, and is highly customizable.

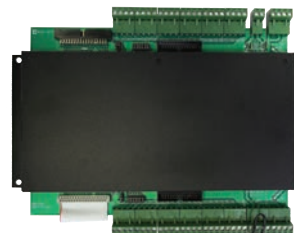
Model	Description
OGN-FLSLIC-ONE	Single Fire Alarm Control Panel License Requires: OGN-KEY (sold separately)
OGN-FLSLIC-EXP	Fire Alarm Control Panel License for 2-9 Connections Requires: OGN-KEY(sold separately)
OGN-FLSLIC-STD	Fire Alarm Control Panel License for 10-99 Connections Requires: OGN-KEY (sold separately)
OGN-FLSLIC-ENT	Fire Alarm Control Panel License for 100+ Connections Requires: OGN-KEY (sold separately)
OGN-KEY	OGN License Key Stick

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 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 BB-5000 enclosures.

Current Consumption

Model Number	Description	Standby (Amps)	Alarm (Amps)
Fire Alarm Components			
FX-6000MNS-CH	Main FlexNet Fire Alarm Control Board mounted on a backplate	0.357	0.506
ALCN-240MISO	Isolated Single Loop Controller Module (for MIX-4000 Devices)	0.059	0.080
ALCN-960MISO	Isolated Quad Loop Controller Module (for MIX-4000 Devices)	0.200	0.230
ALCN-960D	Daughter Board for ALCN-960MISO	0.200	0.230
ALCN-4792MISO	Isolated Quad Loop Controller Module (for CLIP & AP Devices)	0.130	0.145
ALCN-792D	Daughter Board for ALCN-4792MISO	0.130	0.145
FNC-2000	Fire Network Controller Module	0.190	0.190
FOM-2000-UM	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-1004S	4 Notification Appliance Circuit Module	0.031	0.096
RM-1008A	8 Relay Circuit Module	0.025	0.150
FDX-008W/KI	Fan Damper Control Module	0.015	0.035
DSPL-420DS	Narrow Display	0.025	0.025
DSPL-420-16TZDS	Narrow Display w/ 16 additional LED Zones	0.010	0.046
DSPL-2440DS	Graphic Display	0.025	0.025
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
MGD-32	Main Graphic Driver Module	0.035	1.6
AGD-048	Adder Graphic Driver Module	0.035	# of LEDs x 4mA
IPS-2424DS	Programmable Input Switches Module	0.005	0.022
IPS- 4848DS	Programmable Input Switches Module	0.010	0.022
Audio Components			
ANC-6000	Audio Network Controller Module	0.082	0.087
TNC-5000	Telephone Network Controller Module	0.195	0.215
QAD-6425-70	100W Amplifier	0.270	5.97
QAD-6425-25	100W Amplifier	0.314	5.62
QMP-6101N	Horizontal Master Paging Module	0.0205	0.0205
QMP-6101NV	Vertical Master Paging Module	0.0205	0.0205
QMT-5302N	Horizontal Master Telephone Module	0.003	0.013
QMT-5302NV	Vertical Master Telephone Module	0.003	0.013
QAZT-5302DS	Paging/Telephone Zone Module	0.005	0.022
QAZT-5348DS	Paging/Telephone Zone Module	0.010	0.022

Electrical Specifications

Power Supply Ratings	27 amps. max. (secondary)
For NAC Circuits	Regulated 24 VDC, 10 Amps. max.
Battery Type	24VDC, Gel-Cell/Sealed Lead-Acid
Battery Charging Capability	Up to 80 AH batteries
Primary Input Power (QPS-6650)	120 VAC, 60Hz / 230 VAC, 50Hz

Environmental

Operating Temperature	32°F to 120°F (0°C to 49°C)
Humidity	10% - 93% non-condensing

Ordering Information

Model	Description
Flex-Net with Integrated Digital Audio	
FX-6000MNS-CH	Main FlexNet Fire Alarm Control Board mounted on a backplate
QMB-6000	Amplifier Card Cage
QPS-6650	Flex-Net with Integrated Digital Audio Power Supply (120/240V)
Displays	
DSPL-420DS	4 x 20 Main LCD Display
DSPL-420-16TZDS	4 x 20 Main LCD Display w/ Additional 16 LED Zones
DSPL-2440DS	24 x 40 Graphical Main LCD Display
Enclosures	
BBX-FXMNS-6000	Flex-Net with Integrated Digital Audio Enclosure which includes backbox (black), inner door (black) and front door (red)
QBB-6001	Audio Expansion Enclosure, backbox (black) and front door (red)
QMB-6000	Audio Card Cage space for four amplifiers, QAD-6425-70/-25 and one communication card QCC-6000.
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 modules. "D" White, "DR" Red, "DS" Stainless Steel, or "DB" for Black Door
BB-1003D/DR/DS/DB	Remote Annunciator Enclosure Houses three modules. "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 Houses one module. BB-1001WPA for White. BB-1001WPRA for red.
BB-1002WP(R)A	Weather Protected Enclosure Houses two modules. BB-1002WPA for White. BB-1002WPRA for red
Integrated Digital Audio Amplifiers	
QAD-6425-25	25V Amplifier, maximum four speaker zones
QAD-6425-70	70V Amplifier, maximum four speaker zones
Paging/Telephone Modules	
QMP-6101N	Network Master Paging Control Module, Horizontal Mount, for use in BB-5000 series enclosures
QMP-6101NV	Network Master Paging Control Module, Vertical Mount, for use in BBX-FXMNS-6000
QMT-5302N	Network Master Telephone Control Module, Horizontal Mount, for use in BB-5000 series enclosures
QMT-5302NV	Network Master Telephone Control Module, Vertical Mount, for use in BBX-FXMNS-6000
QAZT-5348DS	Paging and Telephone Selector Module, 48 Switches
QAZT-5302DS	Paging and Telephone Selector Module, 24 Switches
Network Controller Modules	
FNC-2000	Fire Network Controller Module
QCC-6000	Communication Card Module
ANC-6000	Audio Network Controller Module
TNC-5000	Telephone Network Controller Module
FOM-2000-UM	Fiber Optic Network Adder Module
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
Adder Loop Controller Modules	
ALCN-240ISO	Isolated Single Loop Controller Module (for MIX-4000 Devices)
ALCN-960MISO	Isolated Quad Loop Controller Module (for MIX-4000 Devices)
ALCN-960D	Daughter Board for ALCN-960MISO
ALCN-4792MISO	Isolated Quad Loop Controller Module (for CLIP & AP Devices)
ALCN-792D	Daughter Board for ALCN-4792MISO

Adder Hardware Modules	
DM-1008A	Eight Class B (Style B) or 4 Class A (Style D) Initiating Circuit Module
SGM-1004S	Four Class A/B (Style Z/Y) Notification Appliance Circuit Module (Rated at 1.7 Amps per circuit) with built-in synchronization
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 Network LCD Annunciator c/w 4 x 20 LCD display
RAXN-4000LCDGC	Main Color Display & Network Remote Annunciator
RAM-1032TZDS	Main Remote LED Annunciator c/w 32 Bi-Colored LEDs
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 separately) 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 separately) 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 separately) 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 separately) Contact us for non-Mircom panel connections
OGN-KEY	OGN License Key Stick
Fire Alarm Network BACnet Single User License	
MGC-LIC-BACNET	Fire Alarm Network BACnet Single User License
Fire Alarm Network WEBSEVER Single User License	
MGC-LIC-WEBSEVER	Unlocks WEBSEVER port on one network node per license
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



Canada

25 Interchange Way Vaughan, ON L4K 5W3
Telephone: (905) 660-4655 | Fax: (905) 660-4113

U.S.A.

4575 Witmer Industrial Estates Niagara Falls, NY 14305
Toll Free: (888) 660-4655 | Fax Toll Free: (888) 660-4113

www.mircom.com

This document is provided by Mircom Technologies Ltd., MGC Systems Corp., or their affiliates, subsidiaries and brands, for convenience or marketing only and does not describe products or services technically. For technical information refer to technical manuals. We do not make representations or warranties regarding this information, including as to completeness or accuracy. We may change these contents at any time and reserve all rights in the contents, including copyrights, trademarks and other intellectual property. All other trademarks and registered trademarks are properties of their respective owners.

CAT. 5963

Page 16 of 16

Rev. 4