

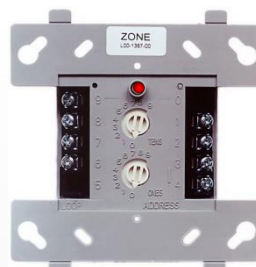
Mircom Group of Companies



Intelligent Analog Sensors & Addressable Modules



MRI-1251 Ion



MRI-M502M



MRM-710ADU



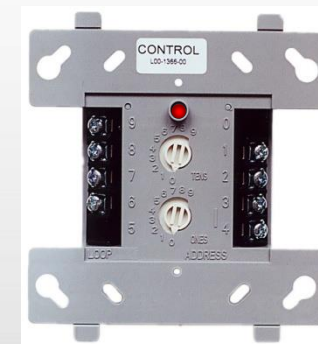
MRI-2251 Photo



MRI-M500S
Signal



MRI-7251
Pinnacle Laser



MRI-M500R
Relay



MRI-M500DM
Dual



MRI-2251TM
Acclimate Multi



MRI-M500M



COPTIR



MRI-M501M
Mini



M500X



MRI-5251
Thermal



2251B Low Profile Intelligent Photoelectric Smoke Sensor



- **Plug-in head (requires separate base)**
- **2-wire system addressable**
- **Rotary decimal switches for address setting**
- **Sensor is continuously supervised & reports sensitivity status regularly to Control Panel**
- **Monitors sensor sensitivity**
- **Two visible LED's blink every time the unit is addressed**



2251TMB “Acclimate” Intelligent Multi-Criteria Sensor



- First it incorporates both thermal and photoelectric technologies that interact to maximize detection.
- Second, an on-board microprocessor and advanced software focus on rejecting nuisance alarms.
- Rotary address switches for fast installations
- Dual electronic thermistor design eliminates directionality
- Dual LED indicators for 360° visibility
- Transmits signal to indicate maintenance required

5251B/5251RB Low Profile Intelligent Thermal Sensors



- **5251B - Fixed Temperature 135 F / 57C**
- **5251RB - R/R & Fixed Temperature 135 F / 57C**
- **5251H –Fixed Temperature 190 F 88 C**
- **Plug-in head (requires separate base)**
- **Rotary decimal switches for address setting**
- **2-wire system addressable**
- **Sensors are continuously monitored to measure any change in their sensitivity due to temperature**
- **Two visible LED's blink every time the unit is addressed**



7251 “Pinnacle” Intelligent Laser Smoke Detector



- **Ultra-high-sensitivity capability**
- **Environmental tracking**
- **Wide sensitivity range as low as 0.02%**
- **Rotary address switches**
- **Analog communications**
- **Sleek, low-profile design**
- **Microprocessor design**

Low Profile - Intelligent Analog Bases

- B501
- B224RB
- B200SR
- B5241EFT

Low Profile Base

Low Profile Relay Base

Sounder Base

Isolator Base



Beam Smoke Detectors



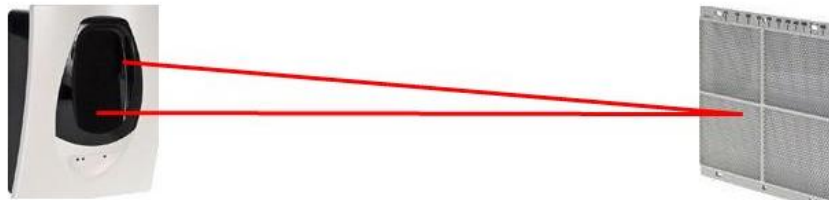
- The BEAM Detector is single-ended reflected beam smoke detectors are uniquely suited for protecting open areas with high ceilings where other methods of smoke detection are difficult to install and maintain.

- The BEAM smoke detector includes one wired transmitter/receiver unit and one reflector.

- 6 user selectable sensitivity levels

- **CONVENTIONAL BEAM SMOKE DETECTORS (BEAM1224)**

- **ADDRESSABLE BEAM SMOKE DETECTORS (BEAM-200)**



Beam Smoke Detectors

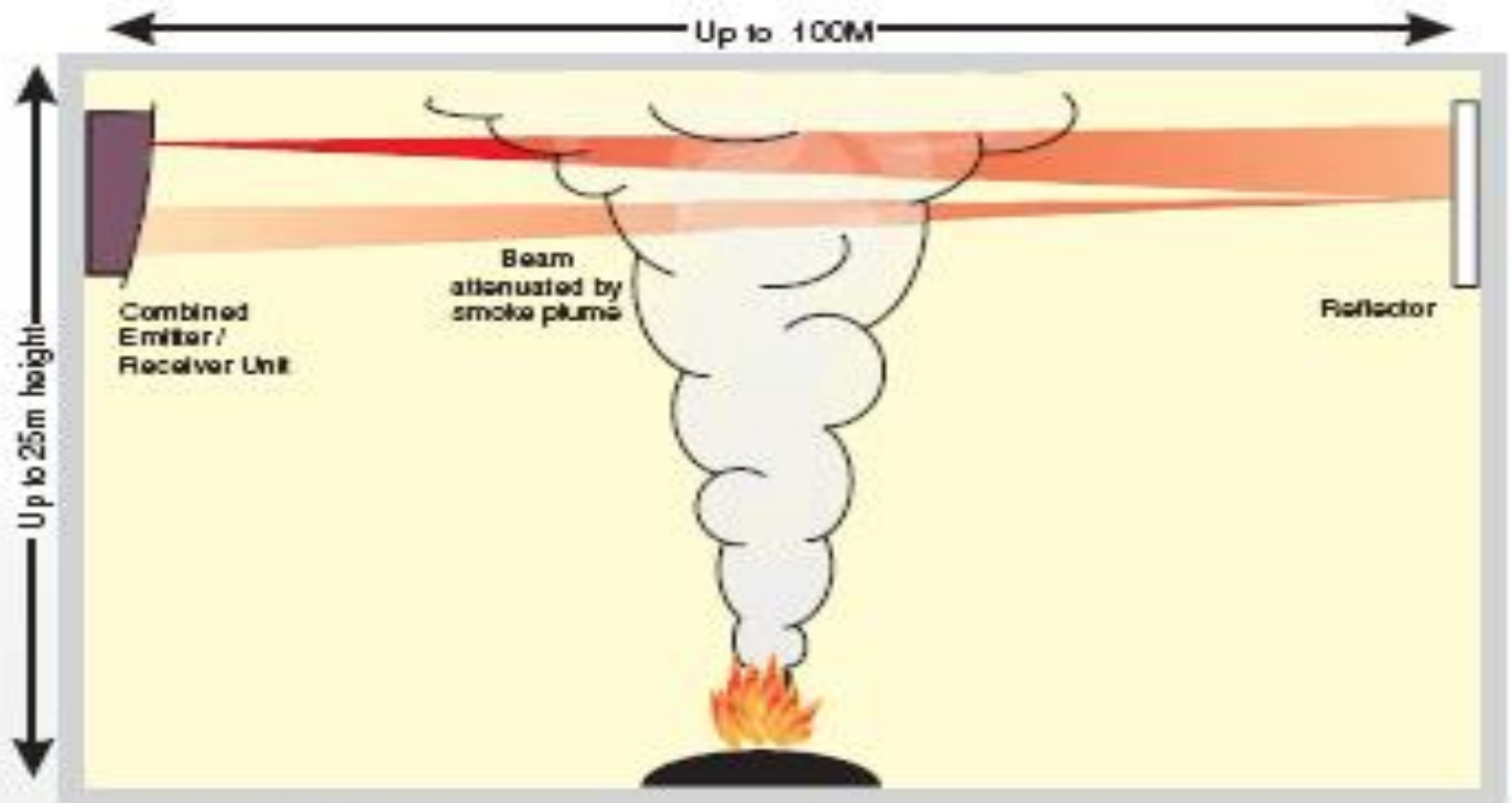
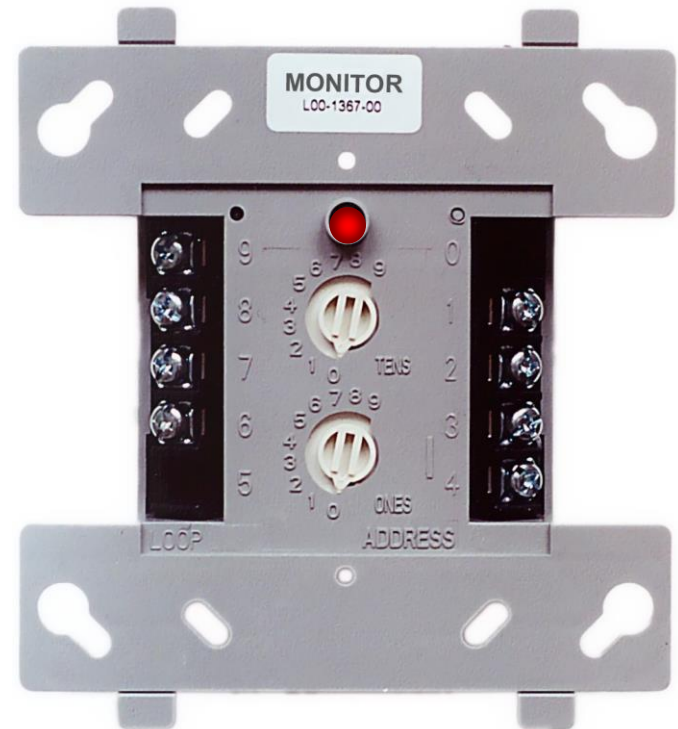


Figure 2.3.3. Operation of Reflective Type Optical Beam Smoke Detector

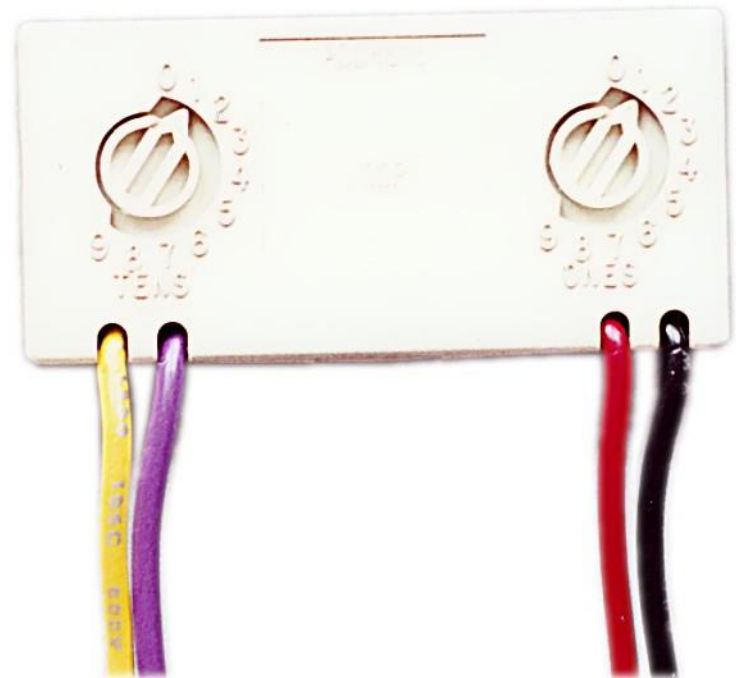
M500M Addressable Intelligent Monitor Module

- M500M provides an address for a conventional normally open (N.O) initiating device, or a collective address for a group of such devices
- Supervises any dry contact initiating device
- Wired in Class A, (Style D) or Class B, (Style B) initiating circuit
- Typically the monitor module is used to supervise devices such as: water flow switches, tamper switches, manual pull stations, etc.

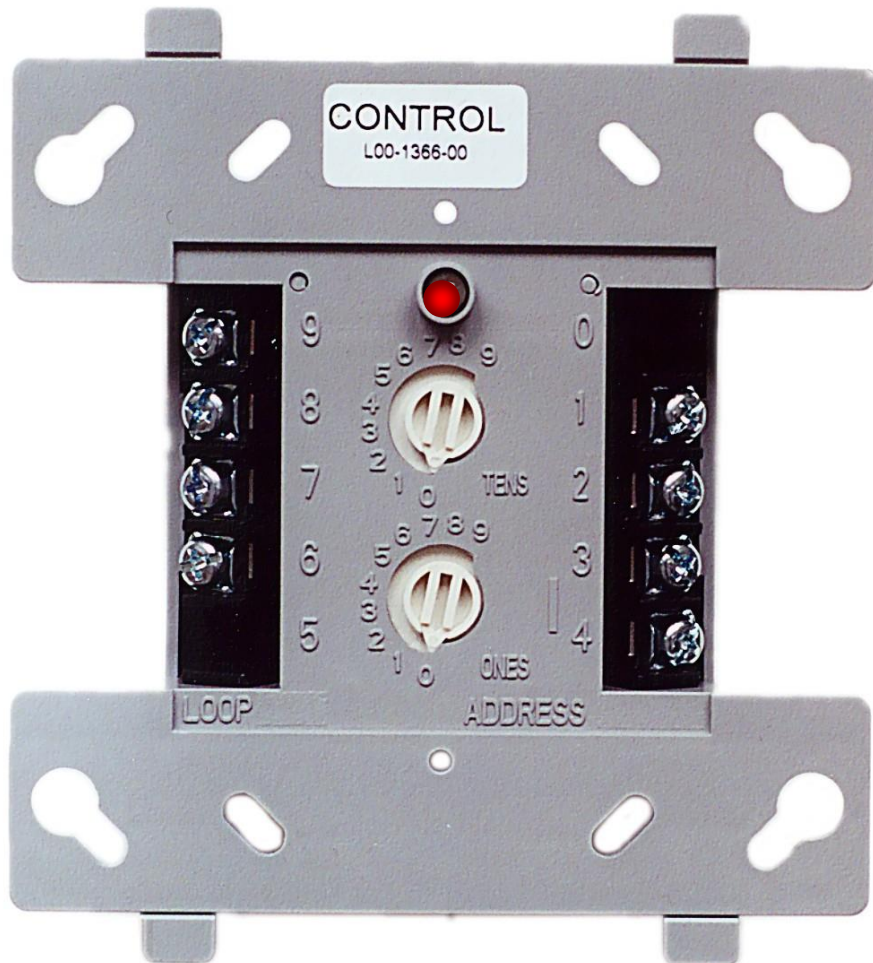


M501M Addressable Intelligent Mini-Monitor Module

- Provides an address for a conventional normally open (N.O) initiating device or a collective group of such devices
- Wired in Class B, Style B initiating circuit
- Typically the monitor module is used to supervise devices such as: water flow switches, tamper switches, manual pull stations, etc.



M500S Addressable Intelligent Signal Module

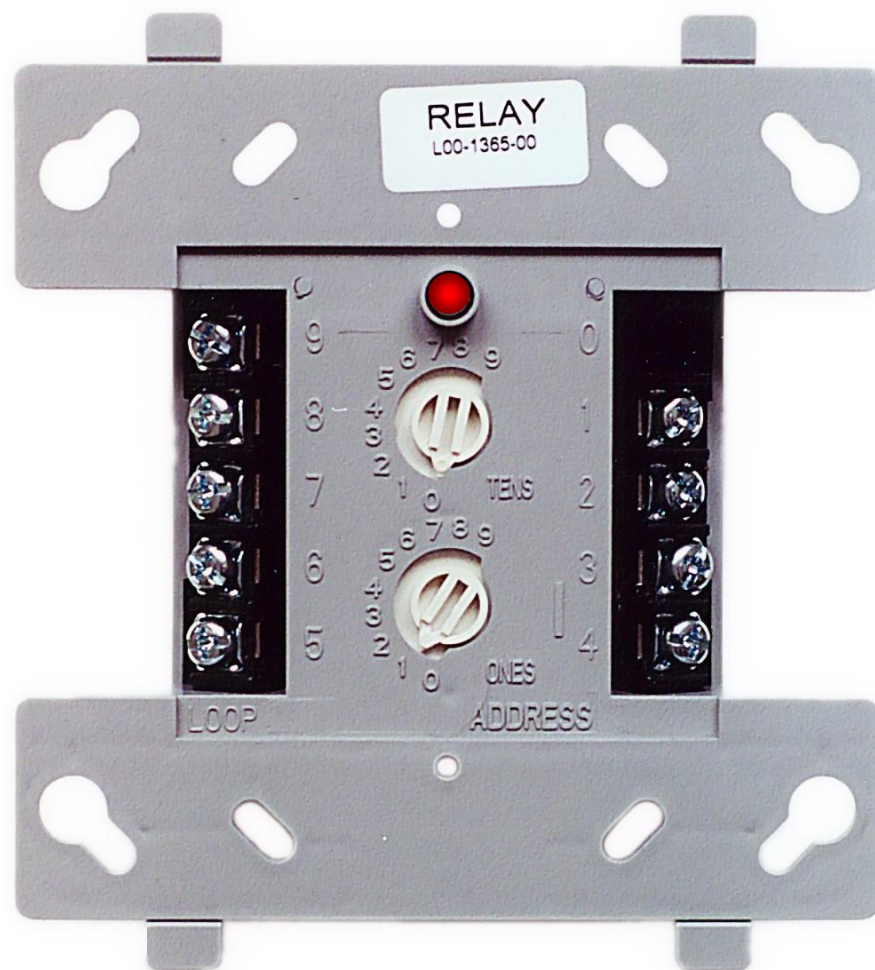


- Provides an addressable notification appliance circuit that can be programmed to respond to any alarm or any combination of alarms from input (addressable or hardwired) points
- External 24 VDC power source is required when module is used as a signal or strobe



M500R Addressable Intelligent Relay Module

- Provides an addressable auxiliary relay output that can be programmed to respond to any alarm or any combination of inputs (addressable or hardwired) points
- Form “C” relay output may be programmed for either trouble or alarm



M500X Fault Isolator Module

- Enables part of the signaling line circuit (addressable loop) to continue operating when a short circuit occurs on it
- Module automatically restores the entire circuit to normal condition when the short circuit is removed
- Maximum load of 25 addressable devices can be connected



710ADU Addressable Pull Stations

- UL, ULC approval
- Single Action manual alarm
- Permanently attached addressable module
- Rotary decimal switches for address setting
- **710ADU Double Action Pull Station**
- **710ADU Single Action Pull Station**
- **Manual Call Point – MCP5A(NON UL)**



MRM-710ADU
Intelligent Addressable
Dual Action Pull Station



MRM-701ADU
Intelligent Addressable
Single Action Pull Station



MCP5A Manual Call Point (NON UL)



WALL MOUNT LED HORN/STROBES



- Mircom FHS-400 notification appliance for wall /Ceiling mount applications
- Six field selectable settings of 15, 15/75, 30, 75, 110, 185 candela/Horn
- Advanced LED technology with Lower power consumption
- Compliance with UL,ULC & NFPA 72 2016 Edition
- FH – Horn,
FS – Strobe,
FHS – Horn cum Strobe,



WALL MOUNT LED HORN/STROBES – System Sensor



- System Sensor SYS-HS notification appliance for wall /Ceiling mount applications
- Field-selectable candela settings on wall units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, and 185
- Rotary switch for horn tone and three volume selections



SPEAKERS - SP-SERIES



- High dBA output (over 90 dBA at 10 feet @ 2watts)
- Multiple output taps. Selection for $\frac{1}{4}$, $\frac{1}{2}$, 1 or 2 watts
- Round or square Designs
- Factory assembled and tested
- FLUSH / SURFACE MOUNTING

Firefighters' Telephone Handsets



- Red handset with coiled cord and male phone plug
- Remote Handsets consist of:
 - FH-100 Portable Handset
 - FJ-100 Telephone Jack on a single gang stainless steel plate
- Optional FHC-300 Handset Storage Cabinet which holds up to six portable handsets (FH-100)



Firefighters' Telephone Handsets



- Red finish
- Heavy-duty construction
- Telephone handsets consist of:
 - FT-300 Telephone Chassis Assembly
 - TC-330 Flush Enclosure Cover or TC-331 Surface Enclosure Cover
 - BB-330 Backbox
- Key-locked door
- Rugged ABS plastic handset with coiled cord
- Supervised lines



MR - 2100/2200

Fire Alarm Control Panel



The MR-2100/MR-2200 includes the following features:

- **MR-2100:** One (1) Addressable Input (SLC) circuit, Class A (Style 6) or Class B (Style 4).
- **MR-2200:** Two (2) Addressable Input (SLC) circuits, Class A (Style 6) or Class B (Style 4).
- **Two (2) Notification Appliance Circuits (NAC),** Class A (Style Z) or Class B (Style Y).
- **Expandable to eight (8) NAC circuits with optional module MRNC2 (groups of 2).**
- **Four (4) Programmable function relays, Form C. Expandable to sixteen (16) relays with optional module MRRL4 (groups of 4).**



Remote Annunciator MR-2644



- n Designed to meet the requirements of NFPA 72
- n 80-character (4 x 20) backlit LCD (Liquid Crystal Display)
- n Six common system status lights: Alarm (red), Supervisory (yellow), Trouble (yellow), Monitor (yellow), AC On (green), and Ground Fault (yellow)
- n Four system hotkeys for Ack, Silence, Reset, and Lamp Test
- n Access-controlled Silence and Reset hotkeys – require the keyswitch to be in the "enable" position
- n Four sets of scroll keys for Alarm, Supervisory, Trouble, and Monitor
- n Up to eight MR-2644 can be connected to the MR-2100/2200, MR-2400, or MR-2900 Fire Alarm Control Panels



MIRCOM®

Advanced Life Safety Solutions

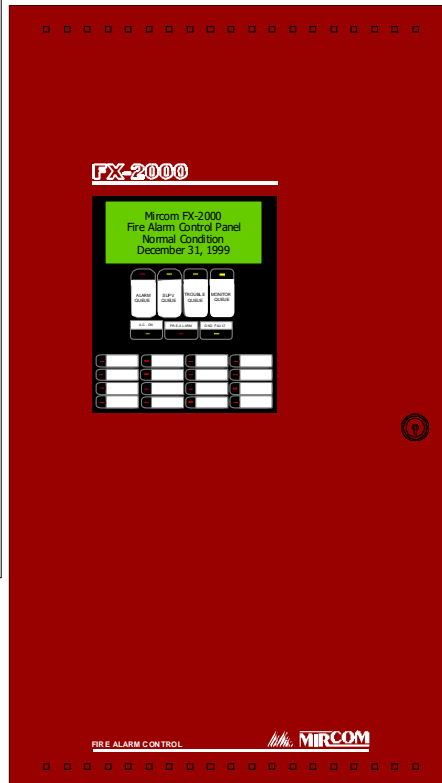


FX-2000 Intelligent Analog Fire Alarm Control Panel

Training

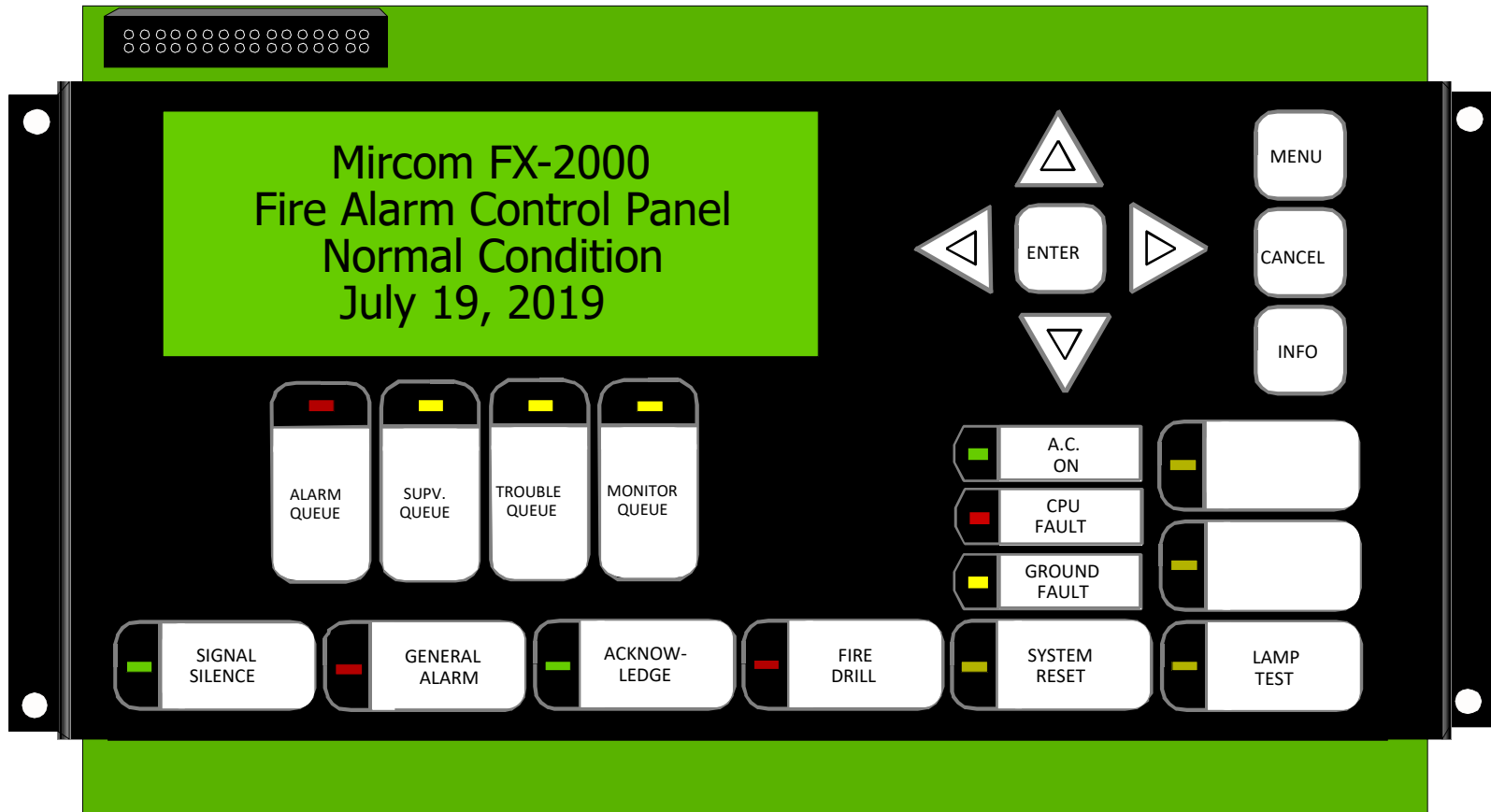


BBX-1024 Enclosure



- BBX-1024 enclosure will house either one ***FX-2003-6*** or one ***FX-2003-12*** Main Chassis
- Cabinet will support up to 17 AH batteries
- Semi-flush mount optional with FA-1024TR trim ring
- Enclosure comes equipped with removable door and universal CAT-30 lock & key
- Available in a beige or red exterior

RAX-LCD Remote Shared Display



RAX-LCD Remote Shared Display

- Remote Annunciator which provides the same functions as the main display on the fire alarm panel.
- The system alarm & trouble points can be programmed different than the main display.

Addressable Fire Alarm and with Integrated FFT & Voice Evac System



Compact Chassis



Mid-Size Chassis



MNS



Key Features

- Mircom™ main board is equipped with 1 Signaling Line Circuit (SLC), 2 conventional loops and 4 Notification Appliance Circuits (NAC)
- Each node supports up to 17 / 29 SLC loops and accommodates up to 7 LCD or LED repeater panel
- New Devices support for Pinnacle (Laser)/ COPTIR/ Acclimate (multi-criteria)/4-20 mA modules
- Supports three configuration files with “hot swap” support (if any mistake happen in new configuration or owner is not satisfied with new configuration in few seconds you go back for the previous configuration)
- Up to 63 Nodes
- Using the Advanced Protocol the panel supports up to 159 addressable sensors and 159 addressable modules per loop.
- Using the CLIP protocol the Panel supports up to 99 analog devices and 99 addressable modules per loop.



Key Features

- BACnet (We have got native BACnet option in our panels, whereas, we don't need a gate way box to provide the BACnet)
- Arabic/ English/ Hebrew/ French Display Options (Mircom Supported languages: English, French, Arabic* and Hebrew on 960 character LCD)
- Fully integrated UL listed fire alarm and voice evacuation mass notification system (Mircom package includes fully integrated Fire alarm and Voice Evacuation systems (Mass Notification); which is UL listed)
- Fan / damper display (which offer an integrated solution for automatic/ manual override control for smoke control system or the damper and pressurization fans control, etc.. ; which reduce the effort and cost for custom made panels)
- Panel always online even during loading the configuration (Panels remain online even during loading the configuration which could take some times in big sites; which is big value for owner as his building remain protected even during applying changes)



LCD Repeater Panel – RAXN-LCD

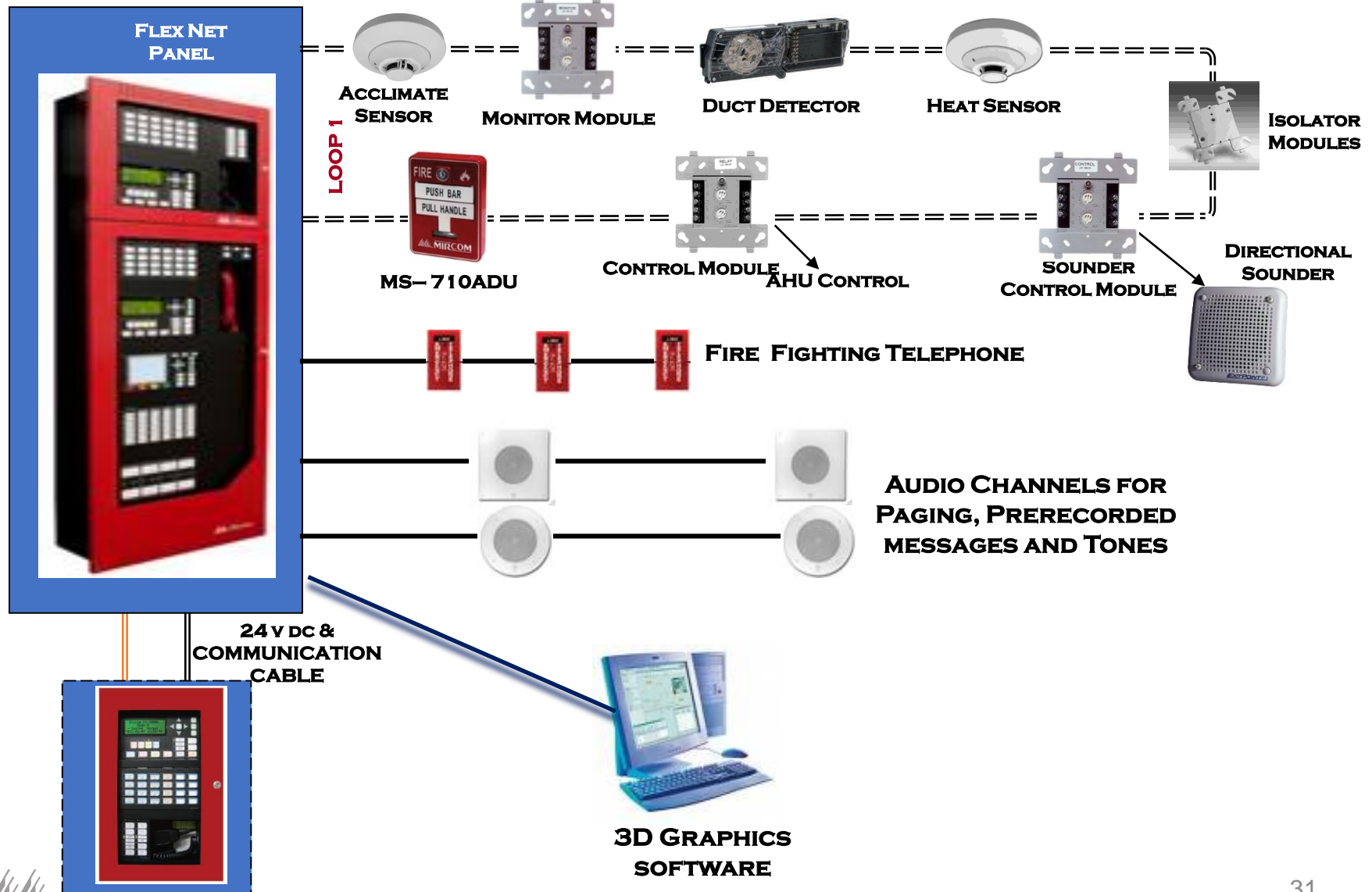
80 Character(4 x 20)



960 Character(24 x 40)



SCHEMATIC DIAGRAM – FIRE ALARM



3D Open Graphic Navigator (Open GN)



OPEN GRAPHIC™
NAVIGATOR



Dynamic 2D and 3D Graphics



06/06/2011 03:30:49 PM Mircom ES HQ

Total Evacuation
There are 3 active events

Building: Condo

Floor: Floor 4

OPEN GRAPHIC NAVIGATOR

ALL 0 Alarm 4 Superv 1 Trouble 1 Monitor 0 Silence

ID	Time	Device Description	Device Type	Event Type	Event Description	Building	Floor	Job	Node	CPU	Loop	Addr
1	05:27:26	N/A	Ign Module	State Change	ALARM LEVEL 0	Condo	Floor 4	Wired	Wired No.	Base I/O	Loop 2	105
2	05:27:26	N/A	Ign Module	State Change	ALARM LEVEL 0	Condo	Floor 4	Wired	Wired No.	Base I/O	Loop 2	106
3	05:27:26	Total Evacuation	SYSTEM STATUS	State Change	System Status is active	N/A	N/A	Wired	N/A	N/A	N/A	N/A
4	05:27:27	Total Evacuation	SYSTEM STATUS	State Change	System Status is active	N/A	N/A	Wired	N/A	N/A	N/A	N/A
5	05:27:26	N/A	Ign Module	State Change	ALARM LEVEL 0	Condo	Floor 4	Wired	Wired No.	Base I/O	Loop 2	130
6	05:27:26	N/A	1251 Ion Det	Trouble	Missing Device	Tower	Lobby	Wired	Wired No.	Base I/O	Loop 2	5

06/06/2011 03:52:25 PM Mircom ES HQ

Alarm Active
There are 5 active events

Building: Tower

Floor: Lobby

OPEN GRAPHIC NAVIGATOR

ALL 8 Alarm 5 Superv 0 Trouble 3 Monitor 0 Silence

ID	Time	Device Description	Device Type	Event Type	Event Description	Building	Floor	Job	Node	CPU	Loop	Addr
1	05:51:09	Total Evacuation	SYSTEM STATUS	State Change	System Status is active	N/A	N/A	Wired	N/A	N/A	N/A	N/A
2	05:51:10	N/A	Ign Module	State Change	NCFIRM STATE	Tower	Lobby	Wired	Wired No.	Base I/O	Loop 2	105
3	05:51:10	Total Evacuation	SYSTEM STATUS	State Change	System Status is inactive	N/A	N/A	Wired	N/A	N/A	N/A	N/A
4	05:51:25	N/A	Ign Module	State Change	ALARM LEVEL 0	Tower	Lobby	Wired	Wired No.	Base I/O	Loop 2	106
5	05:51:24	N/A	1251 Ion Det	Trouble	Missing Device	Tower	Lobby	Wired	Wired No.	Base I/O	Loop 2	5
6	05:51:10	Catch All CPU Status	CPU STATUS	Trouble	System reset in process	N/A	N/A	Wired	Wired No.	Base I/O	N/A	N/A
7	05:51:10	Catch All CPU Status	CPU STATUS	Trouble	System reset complete	N/A	N/A	Wired	Wired No.	Base I/O	N/A	N/A
8	05:51:21	Catch All CPU Status	CPU STATUS	Trouble	System reset	N/A	N/A	Wired	Wired No.	Base I/O	N/A	N/A

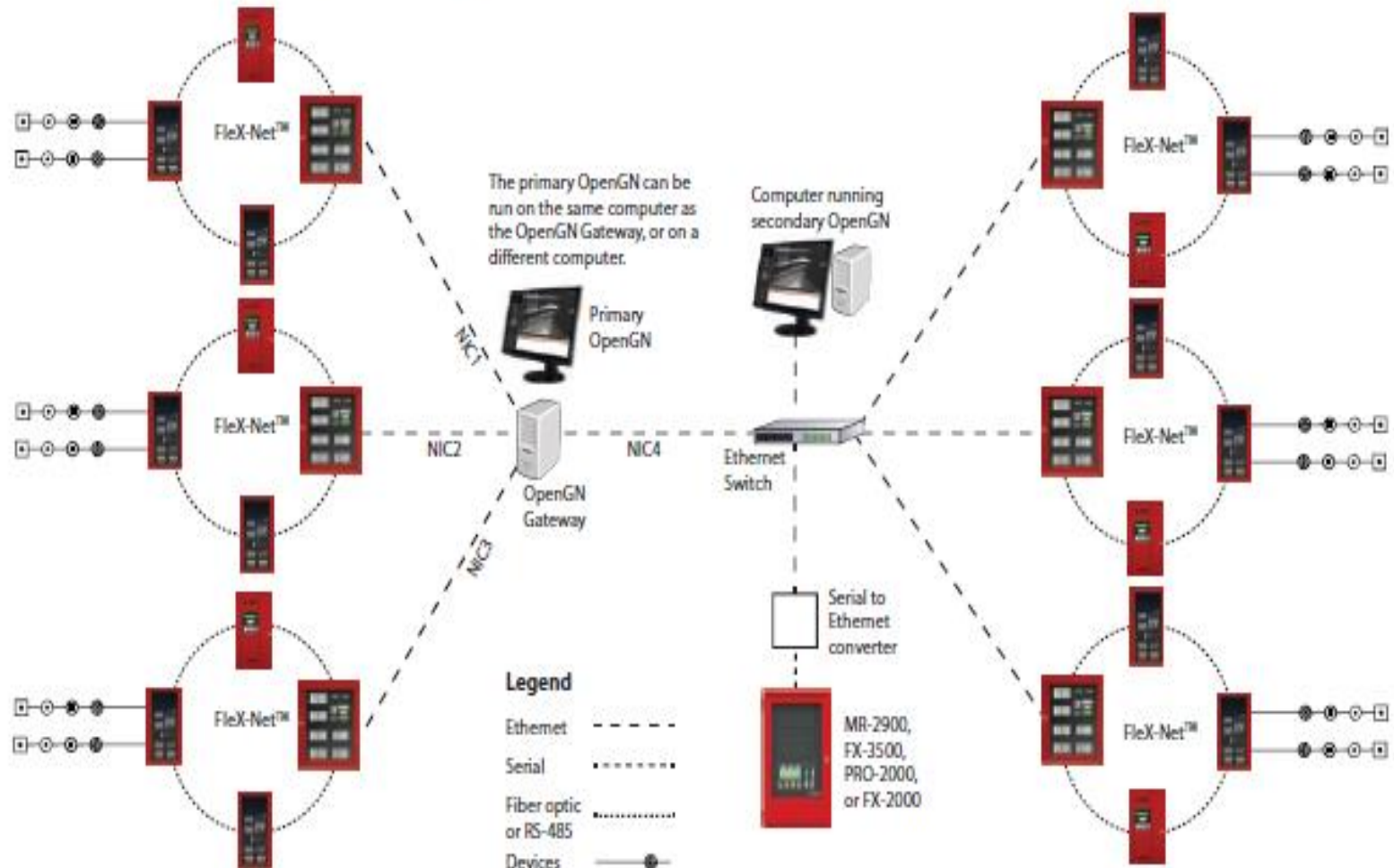
Open GN Delivers Specific Event Notifications in Real-Time for Any Issues Arising in Large Buildings, Malls or Campuses

ID	Time	Device Description	Device Type	Event Type	Event Description	Building	Floor	Room	Room No.	Room ID	Loop	Addr.
1	25.26.03	NA	Ign Module	Smoke Change	ALARM (LVL 0)	Condo	Floor 4	Valued	Valued No.	Room 10	Loop 2	205
2	25.26.03	NA	Ign Module	Smoke Change	ALARM (LVL 0)	Condo	Floor 4	Valued	Valued No.	Room 10	Loop 2	204
3	25.25.46	NA	Ign Module	Smoke Change	ALARM (LVL 0)	Condo	Floor 4	Valued	Valued No.	Room 10	Loop 2	203
4	25.25.22	NA	LSI Ice Det	Smoke	ALARM (LVL 0)	Tower	Lobby	Valued	Valued No.	Room 10	Loop 2	5
5	25.25.19	NA	Ign Module	Smoke Change	ALARM (LVL 0)	Tower	Lobby	Valued	Valued No.	Room 10	Loop 2	105
6	25.25.51	NA	Ign Module	Smoke Change	NORMAL STATE	Tower	Lobby	Valued	Valued No.	Room 10	Loop 2	105



NETWORK DIAGRAM

Mircom makes buildings safer, smarter, and more livable. OpenGN's centralized and integrated graphical interface between operators and monitored buildings allows operators to monitor remote sites from multiple workstations





THANK YOU

