

FIRE PROTECTION EQUIPMENT

This certificate is issued for the following [name] equipment:

Equipment Model Designations: FX-2003-12N/DS, FX-2017-12N/DS, FX-2009-12N/DS, FX-2000ND/S, FX-2000MNS, FX-4003-12N, FX-4017-12N, FX-4009-12N, FX-4000MNS

Approval Guide	Listing	Category:
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÷	Electrical Signaling	stems (Fire) ⊡Local Proted	ctive Signaling ⊡Local P	rotective Signaling
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Electrical Signaling
Signaling Systems (Fire)
Emergency Voice/Alarm Communication Systems

Mircom Technologies Ltd 25 Interchange Way Vaughan, ON L4K 5W3 Canada

This certifies that the equipment described has been found to comply with the applicable requirements, as stated in the Approval Report(s), of the following FM Approval Standards and other documents:

Approval Standards Other Standards

Class Number Date Organization, Designation Date

3010 2021 None

Original Approval Job Identification: 3043958 Approval Granted: 5 December 2022

Related Report: 3057791, 3061098, PR461669

Subsequent Revisions: RR235428

To verify the availability of the Approved product, please refer to www.approvalguide.com

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FM Approvals

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3 January 2023

Date







- Electrical Signaling → Signaling Systems (Fire) → Local Protective Signaling → Local Protective Signaling
- ∃ <u>Electrical Signaling</u> ∃Signaling Systems (Fire) ∃Central Station Signaling Systems
- Electrical Signaling → Signaling Systems (Fire) → Emergency Voice/Alarm Communication Systems

FleX-Net Mass Notification Network Fire Alarm and Audio System

The FleX-Net Mass Notification and Network Fire Alarm control panel, Input power 120/240 VAC, Output 24V DC, 10A and standby battery 24VDC up to 65AH. Provides 4 notification appliance circuits (NACs) which may be configured Class B, [prior NFPA 72 2013] Style Y or Class A, [prior NFPA 72 2013] Style Z. Signaling line circuits may be configured as Class A, [prior NFPA 72 2013] Style 6 or 7, or Class B, [prior NFPA 72 2013] Style 4 with firmware part number SO-206 Version 12.2.29, consists of models:

Model	Description
FX-2003-12N/DS	Fire Alarm control panel
FX-2017-12N/DS	Fire Alarm control panel
FX-2009-12N/DS	Fire Alarm control panel
FX-2000ND/S	Fire Alarm control panel
FX-2000MNS	Fire Alarm control panel
FX-4003-12N	Fire Alarm control panel
FX-4017-12N	Fire Alarm control panel
FX-4009-12N	Fire Alarm control panel
FX-4000MNS	Fire Alarm control panel

Optional modules:





Model	Description
ALCN-792M/MISO	Quad Loop Main board
ALCN-960MISO	Quad Loop Main board
ALCN-4792MISO	Quad Loop Main board
ALCN-792D	Quad Loop Daughter board
ALCN-960D	Quad Loop Daughter board
DSPL-420/DS	Narrow Display board
DSPL-2440/DS	Graphic Display board
PR-300	Polarity Reversal and City module
UDACT-300A	Digital Communicator module used for transmitting alarm, trouble and supervisory information to an external receiver (DACR).

Compatible DACR Receiver Model	Protocols
SurGard MLR2	SIA-DCS and Ademco Contact ID
SurGard SLR	SIA-DCS and Ademco Contact ID
Osborne-Hoffman Quickalert! II	SIA-DCS and Ademco Contact ID
Osborne-Hoffman OH-2000	SIA-DCS and Ademco Contact ID





Silent Knight Model 9500	SIA-DCS and Ademco Contact ID
Radionics Model D6500	Ademco Contact ID
Radionics Model D6600	SIA-DCS and Ademco Contact ID

Adder modules:

Model	Description
DM-1008A	8 Initiating Circuits
SGM-1004A	4 NAC
RM-1008A	8 Programmable Relays
IPS-2424/DS	Programmable Input Switches
FDG-008	Graphic Driver Fan/Damper module
FDS-008	Fan/Damper module (configurable),
FDX-008	Fan/ Damper Module
FDX-008KI	Fan/Damper module with 1 keyswitch

Backboxes and doors available for the FleX-Net and FX-2000 are:

	Model	Description
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BBX-2000/R	enclosure,
BBX- 1072A/R/DS/RDS	Enclosure
BB-5008	backbox
DOX-5008M/R	door
BB-5014	backbox
DOX-5014M/R	door
BBX-1024DS	enclosure
UB-1024DS	Backbox
DOX-1024DS/R	Door
FX-2003-12XT/DS	expanded Fire Alarm Chassis, used with backbox BBX-1024XT/DS and a DOX-1024DS/R door.
FX-4003-12XT	expanded Fire Alarm Chassis, used with backbox BBX-1024XT/DS and a DOX-1024DS/R door.

Model	Description
INX-10A	NAC expander and power supply.
INX-10ADS	NAC expander and power supply.





INX-10AC	firmware part number SO-229 Version 1.1.1, are NAC expander and power supply.
FX-MNS	consists of the BBX-FXMNS backbox and inner door, DOX-FXMNS/R outer door, QMB-5000N Audio Card Cage, FX-2000MNS or FX-4000MNS Main Fire Alarm board , and PS-2040 Power Supply. For proprietary service model FX-MNS must be used

Network modules include:

Model	Description
FNC-2000	Fire Alarm Network card
FOM-2000-UM	Fiber Optics card
FOM-2000-SP	Fiber Optics card
ANC-5000	Audio Network card
ANC-4000	Audio Network card
TNC-5000	Telephone Network card

QX-5000 Series audio system Audio Components include:

Model	Description
QBB-5001(R)	Audio Panel,
QPS-5000N	Power Supply
QBC-5000N	Battery Charger

Amplifiers mount into a QMB-5000B Audio Card Cage:





Model	Description
QAA-5415-70	Amplifier
QAA-5415-25	Amplifier
QAA-5160-70/25	Amplifier
QAA-5130-70/25	Amplifier
QAA-5130S-70/25	Amplifier

FX-MNS consists of:

Model	Description
QMP-5101N	Master Paging module
QMP-5101NV	Vertical Mount Master Paging module
QAZT-5302/DS	Paging Selector panel
QAZT-5348DS	Paging Selector panel

Telephone Components include:

Model	Description
QMT-5302N	Master Telephone module
QMT-5302NV	Vertical Mount Master Telephone module
QAZT-5302/DS	Telephone Selector panel





QAZT-5348DS	Telephone Selector panel

FX-LOC(R) Local Operating Console consists of:

Model	Description
RAXN-LCD	A Share Display Annunciator
FDS-008	Selection Control Panel
MIX-M500DMA	Dual Monitor Module
MIX-M500DMAPA	Dual Monitor Module
IM-10	Input Monitor Module
QMP-5101N	Master Microphone module

annunciators available are:

Model	Description
RAXN-LCDG	graphic display annunciator module
OPEN GN	graphic display annunciator software package for fire detection management

Other annunciators available are:

Model	Description
RTI-1	Annunciator
RAM-208	Annunciator
RAM-1016TZ/DS	Main Annunciator Chassis;





RAM- 1032/TZ/TZDS	Main Annunciator Chassis
RAX- 1048/TZ/TZDS	Adder Annunciators
MGD-32	Master Graphic Driver Chassis
MGD-16/16	Main Display Annunciator Chassis
AGD-048	Adder Graphic Driver Chassis

Annunciator boxes:

Model	Description
BB-1001(R)	Annunciator boxes
BB-1002(R)	Annunciator boxes
BB-1003(R)	Annunciator boxes
BB-1008(R)	Annunciator boxes
BB-1012(R)	Annunciator boxes
BB-1001D	White Enclosure for one annunciator.
BB-1001DR	Red Enclosure for one annunciator.
BB-1001DS	Enclosure for one annunciator with stainless steel door.
BB-1001WPA	White enclosure for one annunciator rated for outdoor environment, wet location.
BB-1001WPRA	Red enclosure for one annunciator rated for outdoor environment, wet location.
BB-1002D	White Enclosure for two annunciators.
BB-1002DR	Red Enclosure for two annunciators.





BB-1002DS	Enclosure for two annunciators with stainless steel door.
BB-1002WPA	White enclosure for two annunciators rated for outdoor environment, wet location.
BB-1002WPRA	Red enclosure for two annunciators rated for outdoor environment, wet location.
BB-1003D	White Enclosure for three annunciators.
BB-1003DR	Red Enclosure for three annunciators.
BB-1003DS	Enclosure for three annunciators with stainless steel door.
BB-1008D	White Enclosure for eight annunciators.
BB-1008DR	Red Enclosure for eight annunciators.
BB-1012D	White Enclosure for twelve annunciators.
BB-1001DR	Red Enclosure for one annunciator.
PTR-2000-1	Line Printer
DM-1008A	Eight Initiating Circuit Module
SGM-1004A	Four Indicating Circuit Module
RM-1008A	Eight Relay Circuit Module
IPS-2424/DS	Programmable Input Switches Modules
IPS-4848DS	Programmable Input Switches Modules
FDX-008W/KI	Fan Damper Module
PR-100	Polarity Reversal
PR-300	City Tie Module





MIX-FC351AP	module
MIX-FC351APA	module
MIX-2351AP	module
MIX-2351TAP	module
MIX-2351TAPA	module
MIX-2351RAP	module
MIX-2351RAPA	module
MIX-2351TIRAP	module
MIX-2351TIRAPA	module
MIX-5351AP	module
MIX-5351HAP	module
MIX-5351RAP	module
MIX-5351APA	module
MIX-5351HAPA	module
MIX-5351RAPA	module

Mircom Compatible devices:

Model	Description
MIX-1251/B	devices
MIX-2251/B/TB/BR	devices
MIX-2251TM/TMB	devices
MIX- 5251P/RP/B/RB/H	devices
MIX-M500M	devices
MIX-M500CH	devices





MIX-M501M	devices
MIX-M502M	devices
MIX-M500R	devices
MIX-M500S	devices
MIX-M500DM	devices
MIX-M500FP	devices
MIX-DH200PL	devices
MIX-DH200RPL	devices
MIX-210LP	devices
MIX-B501BH	devices
MIX-B501BHT	devices
MS-701ADU	devices
MS-710ADU	devices
MIX-501MAP	devices
MIX-501MAPA	devices
MS-402APU	PULL STATIONS
MS-401APU	PULL STATIONS
MS-401MPU	PULL STATIONS
MS-701APU	PULL STATIONS
MS-710APU	PULL STATIONS
MS-710MPU	PULL STATIONS
MS-810U	PULL STATIONS
MPS-810APU	PULL STATIONS
MPS-810MPU	PULL STATIONS
MIX-4040	Dual Input Module
MIX-4041	Mini Dual Input Module
MIX-4042	Conventional Zone Module
MIX-4045	Dual Relay Module





MIX-4046	Supervised Output Module
MIX-4070	Short Circuit Isolator Module

System Sensor Models

Model	Description
7251	module
2251-COPTIR	module
M500M-4-20	module
FTX-P1	module
M500X	module
M500MAP	module
M501MAP	module
M502MAP	module
M500DMAP	module
M500RAP	module
M500SAP	module
IM-10	module
CR-6	module
SC-6	module
B224BI	module
B224RB	module
B200SR	module
B501/B	module
B210LP	module
B501B-FTX	module
B501BH	module
B501BHT	module





CZ-6	module
BEAM200	module
BEAM200S	module
DNR	module
MIX-M500M(A)	monitor modules
MIX-M500MAP(A)	monitor modules
MIX-M501M	module
MIX-M501MAP(A)	module
MIX-M501M(A)	Mini-monitor modules
MIX-M502M(A)	module
MIX-M502MAP(A)	zone- interface module
MIX-M500R	module
MIX-M500RAP(A)	module
MIX-M500RA	relay control modules
MIX-M500S	module
MIX-M500SA	module
MIX-M500SAP(A)	Supervised Control Module
MIX- M500DMAP(A)	dual control module

duct smoke detectors:

Model	Description
MIX-DH200PR	duct smoke detectors
MIX-DH200PL	duct smoke detectors;





MIX-DH200RPL	duct smoke detectors;

Model	Description
MIX-1251	ionization smoke detectors
MIX-1251B(A)	ionization smoke detectors
MIX-1251A	ionization smoke detectors
MIX-1251AP(A)	ionization smoke detectors
MIR-1400A	ionization smoke detectors

Model	Description
Models MIR-2400A	photoelectric smoke detectors
MIX-2251	photoelectric smoke detectors
MIX-2251A	photoelectric smoke detectors
MIX-2251B(A)	photoelectric smoke detectors
MIX-2251AP(A)	photoelectric smoke detectors
MIX-2251BR(A)	photoelectric smoke detectors
MIX-2251TB(A)	photoelectric smoke detectors
MIX-2251TAP(A)	photoelectric smoke detectors
MIX-2251TMB(A)	photoelectric smoke detectors
MIX-2251TMAP(A)	photoelectric smoke detectors
MIX-2251T	photoelectric smoke detectors
MIX-FTX-P1A	photoelectric smoke detectors





Model	Description
MIX-5251B	heat detectors
MIX-5251BA	heat detectors
MIX-5251AP(A)	heat detectors
MIX-5251P	heat detectors
MIX-5251RB	heat detectors
MIX-5251H(A)	heat detectors
MIX-5251HAP(A)	heat detectors
MIX-5251RAP(A)	heat detectors
MIX-5251RBA	heat detectors
MIX-5251RPA	heat detectors
MIX-5251RP	heat detectors
MIX-5251PA 135°F	heat detectors

fixed heat detectors:

all heat detectors except 190°F fixed models are rated for 25 by 25 ft (7.6 by 7.6 m) maximum spacing. The 190°F fixed models are rated for 20 by 20 ft (6.1 m by 6.1 m) maximum spacing.

All the spot type analog detectors are used with model MIX-B224BI, MIX-B210LP mounting bases.

Model	Description
M500X	System Sensor Class A, [prior NFPA 72 2013] [prior NFPA 72 2013] Style 7 SLC operation uses M500X Isolator Modules.
M500M	System Sensor Class A, [prior NFPA 72 2013] [prior NFPA 72 2013] Style 7 SLC operation uses M500X Isolator Modules.





M500CH	System Sensor Class A, [prior NFPA 72 2013] [prior NFPA 72 2013] Style 7 SLC operation uses M500X Isolator Modules.

Compatible with the following two-wire initiating devices:

Model	Description
1151/B110LP	System Sensor models (detector/base)
B116LP	System Sensor models (detector/base)
1400	System Sensor models (detector/base)
1451/B401	System Sensor models (detector/base)
B406B	System Sensor models (detector/base)
2151/B110LP	System Sensor models (detector/base)
B116LP	System Sensor models (detector/base)
2400	System Sensor models (detector/base)
2400TH	System Sensor models (detector/base)
2451/B401	System Sensor models (detector/base)
B406B	System Sensor models (detector/base)
2451TH/B401	System Sensor models (detector/base)

GE Security (ESL) models (detector/base)

Model	Description
429C	GE Security (ESL) models (detector/base)
429CT	GE Security (ESL) models (detector/base)
429CST	GE Security (ESL) models (detector/base)





429CRT	GE Security (ESL) models (detector/base)
711U/701E	GE Security (ESL) models (detector/base)
701U	GE Security (ESL) models (detector/base)
702E	GE Security (ESL) models (detector/base)
702U	GE Security (ESL) models (detector/base)
721U/702E	GE Security (ESL) models (detector/base)
702U	GE Security (ESL) models (detector/base)
721UT/702E	GE Security (ESL) models (detector/base)
731U/702E	GE Security (ESL) models (detector/base)
702RE	GE Security (ESL) models (detector/base)
702RU	GE Security (ESL) models (detector/base)

