

## INTELLIGENT LOW PROFILE SENSORS

## MIX-200 SERIES

Mircom's MIX-200 Series intelligent plug-in smoke detectors with integral communication provide features that surpass conventional detectors. Detector sensitivity is continuously monitored and reported to the FX-2000 Fire Alarm Control

Panel. Point ID capability allows each detector's address to be set with decade address switches, providing exact detector locations for selective maintenance when chamber contamination reaches an unacceptable level.



### Intelligent Low Profile Ionization Smoke Sensor (MIX-1251B)

The Intelligent Ionization Smoke Sensor is constantly monitored to measure any change in its sensitivity due to the environment (dirt, aging, temperature, humidity, etc.) It can give an advance indication to the FX-2000 analog control panel of the need for maintenance and can be specific as to where the maintenance is needed. It can be mounted in a number of different bases. See the Ordering Information for a list of these bases and their descriptions.



### Intelligent Low Profile Photoelectronic Smoke Sensor (MIX-2251B)

The Intelligent Photoelectronic Smoke Sensor is constantly monitored to measure any change in its sensitivity due to the environment (dirt, aging, temperature, humidity, etc.) It can give an advance indication to the FX-2000 analog control panel of the need for maintenance and can be specific as to where the maintenance is needed. It can be mounted in a number of different bases. See the Ordering Information for a list of these bases and their descriptions.



### Intelligent Thermal Sensors (MIX-5251B/MIX-5251RB/MIX-5251H)

The Intelligent Thermal Sensors contain a dual thermistor sensing circuit for fast response. They provide open area protection with 50 foot spacing. The sensors rapid response characteristic virtually eliminates the thermal lag which is characteristic of conventional heat detectors and insures operation as soon as the temperature reaches its set point (MIX-5251B), or upon a temperature rise of 15°F per minute (MIX-5251RB). The MIX-5251H provides fixed high temperature detection at 190°F. These sensors can be mounted in a number of different bases. See the Ordering Information for a list of these bases and their descriptions.



### Intelligent Low Profile Photoelectronic Smoke Sensor with Thermal (MIX-2251TB)

The MIX-2251TB has the same features as the MIX-2251B and includes a 135°F thermal sensor. It can be mounted in a number of different bases. See the Ordering Information for a list of these bases and their descriptions.



S6295  
(MIX-1251B,  
MIX-2251B &  
MIX-2251TB)



S6965  
(MIX-1251B,  
MIX-2251B &  
MIX-2251TB)



7271-1477:122  
(MIX-1251B)  
7271-1477:117  
(MIX-2251B/TB)  
7271-1477:114  
(MIX-5251B/RB/H)



148-03-E  
(MIX-1251B)  
219-02-E  
(MIX-2251B/TB)  
390-02-E  
(MIX-5251B/RB/H)



2151  
(MIX-1251B)  
2131  
(MIX-2251B/TB)



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## Specifications

### Height

2.0 inches (51 mm)

### Diameter

6.1 inches (155 mm) Installed in B210LP Base

4.1 inches (104 mm) Installed in B501 Base

### Shipping Weight

Heat: 4.8 oz. (137 g)

Photo/Photo with Heat: 5.2 oz. (147 g)

Ion: 5.4 oz. (154 g)

### Operating Temperature Range

Ion/Photo: 32°F to 120°F (0°C to 49°C)

Photo with Thermal: 32°F to 100°F (0°C to 38°C)

Thermal: -4°F to 100°F (-20°C to 38°C)

High Temperature: -4°F to 100°F (-20°C to 66°C)

### UL Listed Velocity Range

Ion: 0 - 1200 fpm (0 - 5.1 m/sec)

Photo/Photo with Thermal: 0 - 4000 fpm (0 - 20 m/sec)

### Relative Humidity

10% - 93% noncondensing

### Insect Screen Hole Size

Photo: 0.016 inch (0.41mm) nominal

Ion: 0.035 inch (0.89mm) nominal

### Thermal Ratings

Fixed Temperature Setpoint: 135°F (57°C)

Rate of Rise Detection: 15°F/min. (8.3°C/min.)

High Temperature: 190°F (88°C)

### Voltage Range

15 - 32 volts DC peak

### Standby Current

#### Ion/Thermal:

150  $\mu$ A @ 24 VDC (without communication, LED off)

200  $\mu$ A @ 24 VDC (one communication every 5 sec. with LED enabled)

#### Photo/Photo with Thermal:

250  $\mu$ A @ 24 VDC (without communication, LED off)

300  $\mu$ A @ 24 VDC (one communication every 5 sec. with LED enabled)

### LED Current (max.)

6.5 mA @ 24 VDC (on)

**Note:** Mounting sensors outside of the specified temperature ranges will cause sensor failures and erratic panel operation.

## Ordering Information

### Model

### Description

#### Intelligent Addressable Analog Sensors

MIX-1251B Intelligent Low Profile Ionization Smoke Sensor

MIX-2251B Intelligent Low Profile Photoelectronic Smoke Sensor

MIX-2251TB Intelligent Low Profile Photoelectronic Smoke Sensor c/w 135°F Fixed Temp. Thermal Sensor

MIX-5251B Intelligent Low Profile Fixed Temp. Thermal Sensor 135°F

MIX-5251RB Intelligent Low Profile Fixed Temp. and Rate of Rise Thermal Sensor 135°F

MIX-5251H Intelligent Low Profile High Temperature Thermal Sensor 190°F

#### Intelligent Analog Bases

B210LP Intelligent Flanged Mounting Base

B224BI Intelligent Isolator Base

B224RB Intelligent Relay Base\*

B501 Intelligent Flangeless Mounting Base

B501BH Intelligent Sounder Base

B501BHT Intelligent Temporal Tone Sounder Base

#### Accessories

RA-400Z Remote LED Annunciator

**Note:** For Canadian models add suffix "A".

\* When used with the M500X Fault Isolator Module, the number of relay bases between fault isolators is limited to 12.

NOT TO BE USED FOR INSTALLATION PURPOSES.



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