

### 2 & 4 WIRE IONIZATION SMOKE DETECTOR

1451B-A



# Description

The Mircom 1451B-A ionization smoke detectors respond quickly to both fast flaming and slow smouldering fires are required by UL268. Unipolar dual chamber sensor has the sensitivity needed to quickly detect smoke, and the stability needed to avoid false alarms.

### **Application**

Use for protection of life and property. Superior to photoelectric detectors in detecting fast flaming fires. Superior to bipolar detectors in avoiding false flames.

#### **Features**

- Unique dual unipolar sensor
- Provides exceptional stability
- Factory preset at 1.9% nominal sensitivity
- Stable operation up to 1,200 feet per minute (6 meters per second) air velocities
- Removable cover for field cleaning
- Two visible LED "blink" in standby
- Sealed against dirt, insects and back pressure
- 3 year Limited Warranty
- Field adjustable sensitivity
- Field metering of detector sensitivity
- Built-in test switch
- Low standby current
- Built-in tamper-resistant feature
- Designed for direct surface or electrical box mounting
- 360° field viewing angle of the visual alarm LEDs
- Insect-resistant screening (0.020"/0.508mm openings)
- Easy plug-in of the head to base
- SEMS screws for easy wiring
- Optional recess mounting

#### Installation

Maximum number of detectors per zone is listed in the installation manual for each control panel. Easy to install and maintain, this detector is designed for direct surface mounting (using one of the B400 Series bases listed below). Easy-to-wire screw terminals allow fast and simple field wiring of IN, OUT and remote annunciator connections.

Consult Mircom control panel specifications for the maximum allowable loop resistance for the particular control panel to be used.

To prevent wiring mistakes, observe polarities and make certain that each conductor is identifiable. A copy of Installation and Maintenance Instructions is packaged with each detector. For further information, refer to NFPA 72E "Standard on Automatic Fire Detectors."



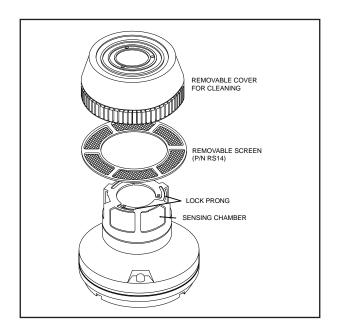








**CATALOG NUMBER** 



## **Architects/Engineer Specifications**

All 1451B-A ionization smoke detectors contain a unique dual source, dual unipolar chamber detection design which will sense the presence of smoke particles produced by fast combustion as well as slow smouldering fires. Additional key features include a blinking LED standby status indicator, an easily visible alarm indication and provision for convenient field test and metering

The back of the detector is sealed to block back pressure air flow. The chamber is protected by a fine mesh (0.20"/0.508mm) screen to minimize problems with dust, dirt and insects. If cleaning is required, it is easy to remove the cover (with a special tool) and obtain access to the screen and chamber to perform a thorough cleaning.

Base Model	Loop	Current	Contact	Standby	Current Draw
<u>Number</u>	<u>Version</u>	Type Limit Resistor	<u>Type</u>	<u>Voltage</u>	or Alarm
B401B-A	UL & ULC	2-wire No	-	8.5 to 35 VDC	10 to 100 mA*
B406B-A	UL & ULC	2-wire No	Form C	15 to 35 VDC	12 to 100*

<sup>\*</sup> Limited by control panel

Relay Contact Ratings on the B406B base: Resistive or Inductive (60% power factor) load.

Form A: 2.0 amps @ 30 VAC/DC

Form C: 0.6 amps @ 110 VAC, 2.0 amps @ 30 VDC. 1.0 amps @ 125 VAC, 2.0 amps @ 30 VAC.

### **General Specifications**

Operating Voltage: Mounting Base Dependent

Standby Current: 120 micro amps Sensitivity: 1.9% nominal

Weight: 0.5 pounds (277 grams)

Size: 2.4"/6 mm high

4.0"103 mm diameter

(6.2"/158 mm diameter with

(6.2 / 156 mm diameter with

flanged bases).

Construction: Flame retardant

white Noryl® plastic

Temperature: 32° to 120°F

(0 to 49°C)

Humidity Range: 10 to 93% R.H.

(non-condensing)

Maximum air 1,200 feet per minute velocity: (6 meters per second)

### **Ordering Information**

1451 Ionization detector. Must be mounted to one of the B400 Series Bases listed.

RA-400Z Remote annunciator for 2 or 4 wire applications. Use with any System Sensor 400 series plug-in

NOT TO BE USED FOR INSTALLATION PURPOSES.

detector. Fits standard single-gang electrical box.

MOD400R Field test module for all of the System Sensor 400 Series Smoke Detectors.



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