

# 200 Series Intelligent Low Profile Plug-in Detectors



## Models Available

2251(A)	Photoelectric Smoke Detector
2251T(A)	Photoelectric with Thermal
2251TM(A)	Acclimate™ Multicriteria Smoke Detector
1251(A)	Ionization Smoke Detector
5251P(A)	Fixed Temperature Thermal Detector
5251RP(A)	Rate-of-Rise Thermal Detector

## 200 Series Bases

B501(A)	Flangeless Mounting Base
B210LP(A)	Flanged Mounting Base
B501BH(A)	Standard Sounder Base
B501BHT(A)	Temporal Tone Sounder Base
B224RB(A)	Relay Base
B224BI(A)	Isolator Base
RMK400	Recessed Mounting Kit
SMK400	Flangeless Surface Mounting Kit
SMB600	Flanged Surface Mounting Kit

## 200 Series Accessories

F110	B501B/B524 Retrofit Flange
RA400Z(A)	Remote LED Annunciator
M02-04-01	Detector Test Magnet
M02-09-00	Telescoping Test Magnet
XR-2	Detector Removal Tool
XP-4	Extension for XR-2 (5-15 ft.)
DUST12	Dust Cover

(A) suffix denotes ULC listed product



## Product Overview

**Sleek, low-profile design**

**Analog communications**

**Low standby current**

**Rotary address switches**

**Superior EMI protection**

**System Sensor 200 Series intelligent plug-in smoke detectors with integral communication provide features that surpass conventional detectors. Detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the 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.**

**Model 2251** photoelectric detector's unique optical sensing chamber is designed with superior signal to noise ratio. It's engineered to sense smoke produced by a wide range of combustion sources. Dual electronic thermistors add 135°F fixed temperature thermal sensing on the 2251T.

**Model 2251TM** is a photoelectric smoke detector with supplementary 135°F thermal. Also known as Acclimate™, it uses advanced on-board software to combine the signals from the photo and thermal elements, creating a true multicriteria detector capable of rejecting nuisance sources, but still responding quickly to real fires. Acclimate has the capability of adjusting its sensitivity according to the type of environment that it is installed in.

**Model 1251** ionization detector incorporates a unique single source, dual chamber design to respond quickly and dependably to a broad range of fires.

**Models 5251P and 5251RP** offer 135°F fixed and rate-of-rise thermal detection in a low profile package. These thermal detectors provide cost effective, intelligent property protection in a variety of applications.



## Specifications

### Height

Ion/Photo: 1.66" (4.2 cm)

Thermal: 2.0" (5.1 cm)

### Diameter

4.0" (10.2 cm)

### Shipping Weight

3.6 oz. (104 g)

### Operating Temperature Range

Ion/Photo: 32° to 120°F (0° to 49°C)

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

Thermal: -4° to 100°F (-20° to 38°C)

### UL Listed Velocity Range

Ion: 0 – 500 fpm

Photo/Photo with Thermal:

0 – 4000 fpm  
(suitable for installation in ducts)

### Relative Humidity

10% – 93% noncondensing

### Thermal Ratings

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

Rate of Rise Detection:  
15°F/min. (9.4°C/min.)

### Voltage Range

15 – 32 volts DC peak

### Standby Current (max. avg.)

Ion/Thermal: 200  $\mu$ A @ 24 VDC  
(without communication),  
300  $\mu$ A @ 24 VDC (one communication  
every 5 sec. with LED enabled)

Photo/Photo with Thermal: 250  $\mu$ A @  
24 VDC (without communication),  
360  $\mu$ A @ 24 VDC (one communication  
every 5 sec. with LED enabled)

### LED Current (max.)

6.5 mA @ 24 VDC (on)

## Accessories



M02-09-00 Test Magnet with Telescoping Handle

## System Sensor Sales and Service

### System Sensor Headquarters

3825 Ohio Avenue  
St. Charles, IL 60174  
Ph: 800-SENSOR2  
Fx: 630/377-6495  
Documents On Demand  
1-800-736-7672 x3  
www.systemsensor.com

### System Sensor Canada

Ph: 905.812.0767  
Fx: 905.812.0771

### System Sensor UK

Ph: 44.1403.276500  
Fx: 44.1403.276501

### System Sensor in China

Ph: 86.29.524.6253  
Fx: 86.29.524.6259

### System Sensor in Singapore

Ph: 65.273.2230  
Fx: 65.273.2610

### System Sensor- Far East

Ph: 852.2191.9003  
Fx: 852.2736.6580

### System Sensor- Australia

Ph: 613.54.281.142  
Fx: 613.54.281.172