# 200 Series Intelligent Low Profile Plug-in Detectors



*The System Sensor 200 Series intelligent plug-in smoke detectors with integral communication provide point location for alarm communication and selective maintenance.*

## Features

- Sleek, low-profile design
- Analog communications
- Low standby current
- Rotary address switches
- Superior EMI protection
- Dual LEDs for 360° visibility

## Agency Listings

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 address to be set with decade address switches to provide exact detector locations for selective maintenance when chamber contamination reaches an unacceptable level.

The **System Sensor 2251B** photoelectric detector's unique optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources. Dual electronic thermistors add 135°F fixed temperature thermal sensing on the 2251TB model.

The **Acclimate ™ 2251TMB** photoelectric detector includes thermal detection at 135 (degree sign)F. It uses advanced on-board software to combine the signals from the photo and thermal elements to create a true multicriteria detector. It is capable of rejecting nuisance sources, but still responds quickly to real fires. The Acclimate multicriteria detector has the capability of adjusting its sensitivity according to its environment.

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

Both the **5251B and 5251RB** detectors use an innovative thermistor sensing circuit to produce 135°F fixed and rate-of-rise thermal detection in a low profile package. The 5251H model provides fixed high temperature detection at 190ºF. These thermal detectors provide cost effective, intelligent property protection in a variety of applications.

# 200 Series Intelligent Detector Specifications

| Physical/Operating Specifications | |
|---|---|
| **Height** | 2.0 in (51 mm) |
| **Diameter** | 6.1 in (155 mm) installed in B210LP base; 4.1 in (104 mm) installed in B501 base |
| **Shipping Weight** | Heat: 4.8 oz (136 g); Photo/Photo with Heat: 5.2 oz (147 g); Ion: 5.4 oz (153 g) |
| **Operating Temperature Range** | Ion/Photo: 32°F to 120°F (0°C to 49°C)<br>Photo with Thermal: 32°F to 100°F (0°C to 38°C)<br>Thermal: –4°F to 100°F (–20°C to 38°C)<br>High Temperature: –4°F to 150°F (–20°C to 66°C) |
| **UL Listed Velocity Range** | Ion: 0 to 1200 fpm (0 to 6.1 m/sec)<br>Photo/Photo with Thermal: 0 – 4000 fpm (0 – 20 m/sec) (suitable for installation in ducts) |
| **Operating Humidity Range** | 10% to 93% noncondensing |
| **Thermal Ratings** | Fixed Temperature Setpoint: 135°F (57°C)<br>Rate of Rise Detection: 15°F/min. (8.3°C/min.)<br>High Temperature Heat: 190ºF (88ºC) |
| **Electrical Specifications** | |
| **Voltage Range** | 15 to 32 volts DC peak |
| **Standby Current (max. avg.)** | 300 μA @ 24VDC (one communication every 5 seconds with LED enabled)<br>Photo/Photo with Thermal: 300 μA @ 24 VDC (one communication every 5 seconds with LED enabled) |
| **LED Current (max.)** | 6.5 mA @ 24 VDC (on) |

# Ordering Information

| Part No. | Description |
|---|---|
| 2251B* | Photoelectric smoke detector |
| 2251TB* | Photoelectric smoke detector with thermal |
| 2251TMB* | Acclimate™ multicriteria smoke detector |
| 1251B* | Ionization smoke detector |
| 5251B* | Fixed temperature thermal detector |
| 5251RB* | Rate-of-rise thermal detector |
| 5251H* | High temperature thermal detector |
| **Bases** | |
| B501* | Flangeless mounting base |
| B210LP* | Flanged mounting base |
| B501BH* | Standard sounder base |
| B501BH-2* | Standard sounder base; complies with UL864 9th edition |
| B501BHT* | Temporal tone sounder base |
| B501BHT-2* | Temporal tone sounder base; complies with UL864 9th edition |
| B224RB* | Relay base |
| B224BI* | Isolator base |
| RMK400 | Recessed mounting kit |
| SMK400 | Flangeless surface mounting kit |
| SMB600 | Flanged surface mounting kit |
| **Accessories** | |
| F110 | Retrofit flange |
| RA400Z | Remote LED annunciator |
| M02-04-01 | Detector test magnet |
| M02-09-00 | Telescoping test magnet |
| XR2B | Detector removal tool (T55-127-000 included) |
| XP-4 | Extension for XR2 (5 to 15 ft) |
| T55-127-000 | Detector removal head |
| BCK-200B | Black detector kit (10 pack)** |
| WCK-2008 | White Detector Kit (10 pack)** |

## Accessories



**RA400Z**
Remote LED
Annunciator

Head also sold separately
(part no. **T55-127-000**)

**XR2B**
Detector
Removal Tool

* Add "A" for ULC listed product (e.g., 2251BA)

** The BCK-200B and WCK-200B are only applicable to the B210LP flanged style mounting base and may only be used with 2251B (photoelectric) and 1251B (ionization) smoke detectors.

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