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

200 Series smoke detectors are intelligent (addressable) detectors with point ID capability that enable each detector address to be set with decade address switches to provide exact detector locations. The sensitivity of 200 Series detectors can be programmed using the control panel software to suit the environment. In addition, detector sensitivity is continually monitored and reported to the panel.

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 **2251BR** is a remote test capable detector for use with DNR(W) duct smoke detectors.

The **Acclimate® 2251TMB** photoelectric detector includes thermal detection at 135°F. It uses advanced onboard software to combine the signals from the photo and thermal elements to create a true multi-criteria detector capable of rejecting nuisance sources, but still responding quickly to real fires. Separate photo and thermal elements also allow the Acclimate detector to provide different responses to smoke or heat. In addition, the Acclimate detector can adjust 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 low-profile packages. The **5251H** model provides fixed high-temperature detection at 190°F. These thermal detectors provide cost-effective, intelligent property protection in a variety of applications.

Agency Listings

UL LISTED · ULC · FM APPROVED · MSFM approved

For exact certification listings for each model, please reference the respective agency Web site.

200 Series Intelligent Detector Specifications

Physical/Operating 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 (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) 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 150°F (–20°C to 66°C)
UL-Listed Velocity Range	Ion: 0 to 1,200 fpm (0 to 6.1 m/sec) Photo/Photo with Thermal: 0 to 4,000 fpm (0 to 20 m/sec) (suitable for installation in ducts)
Operating Humidity Range	10% to 93% non-condensing
Thermal Ratings	Fixed Temperature Setpoint: 135°F (57°C) Rate-of-Rise Detection: 15°F/min. (8.3°C/min.) High Temperature Heat: 190°F (88°C)
Electrical Specifications	
Voltage Range	15 to 32 VDC peak
Standby Current (max. avg.)	300 μA @ 24 VDC (one communication every 5 seconds with LED enabled) 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
2251BR*	Photoelectric smoke detector, remote test capable, for use with DNR(W) duct smoke detectors
2251TB*	Photoelectric smoke detector with thermal
2251TMB*	Acclimate multi-criteria smoke detector
1251B*	Ionization smoke detector
5251B*	Fixed temperature thermal detector
5251RB*	Rate-of-rise thermal detector
5251H*	High temperature thermal detector
Bases	
B501*	4" Flangeless mounting base
B501BP*	4" Flangeless mounting base bulk pack
B210LP*	6" Flanged mounting base
B210LPBP*	6" Flanged mounting base bulk pack
B200SR*	Standard sounder base (compatible with B501BH series)
B200S*	Intelligent addressable sounder base
B224RB*	Relay base
B224BI*	Isolator base
Accessories	
SMB600	Surface Mounting Kit (flanged)
F110	Accessory Flange Ring for 6" Base
F110BP	Accessory Flange Ring for 6" Base Bulk Pack
F210	Accessory New Smaller Flange Ring for 6" Base
RA100Z	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 XR2B (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



* 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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