

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

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 Table 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 190°F. These thermal detectors provide cost effective, intelligent property protection in a variety of applications.

Agency Listings







200 Series Intelligent Detector Specifications

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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	lon/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	lon: 0 to 1200 fpm (0 to 6.1 m/sec) 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) 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 volts DC peak
Standby Current (max. avg.)	300 μ A @ 24VDC (one communication every 5 seconds with LED enabled) Photo/Photo with Thermal: 300 μ A @ 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



- * 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.



3825 Ohio Avenue • St. Charles, IL 60174 Phone: 800-SENSOR2 • Fax: 630-377-6495 $\label{eq:controller} \begin{tabular}{ll} $\emptyset 2009 System Sensor. \\ Product specifications subject to change without notice. Visit systemsensor.com for current product information, including the latest version of this data sheet. \\ $A05-0362-002-3/09+\#2125 \end{tabular}$