PINNACLE™

SYSTEM SENSOR®

Low-Profile Plug-in Intelligent Laser Smoke Detector

Models Available

7251
7251A

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
SMK400	Flangeless Surface Mounting Kit
SMB600	Flanged Surface Mounting Kit

200 Series Accessories

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 Canadian products

7251 with B210LP Flanged Mounting Base

7251 with B501 Flangeless Mounting Base

Product Overview

Ultra-high-sensitivity capability

On-board drift compensation

Transient rejection algorithms

Environmental tracking

Wide sensitivity range

Rotary address switches

Analog communications

Sleek, low-profile design

Low standby current

Microprocessor design

Superior EMI protection

Pinnacle™ model 7251 is an intelligent, laser-based photoelectric smoke detector featuring extensive on-board signal processing capabilities designed to improve smoke response. Pinnacle also features a patented smoke sensing chamber, designed to amplify signals from smoke, but diminish stray internal reflections. By using a laser diode instead of a standard LED light source into the sensing chamber, Pinnacle is able to achieve sensitivities from 0.02% to 2% per foot obscuration.

The detectors' extensive software processing includes multi-alert drift compensation, internal self diagnostics, and superior transient signal rejection algorithms to produce unprecedented stability at ultra high sensitivities, over the complete temperature range.

Because Pinnacle is base-compatible with all other 200 Series detectors, system designers can seamlessly mix it with other standard detection technologies thereby reducing overall cost. Other advantages of Pinnacle over other high sensitivity detection methods are:

- **Pinpoint identification of the fire location resulting from addressability.**
- **No delay in response because of smoke dilution or smoke transportation time as in aspirated systems.**
- **Complete supervision of wiring and detector**

Pinnacle is designed to protect valuable assets and operations where systems must remain on-line at all times. Many sensitive areas cannot tolerate even small amounts of smoke. Some ideal applications for Pinnacle include:

- **Telecommunications switching facilities**
- **Cellular telephone infrastructure**
- **Integrated circuit fabrication facilities**
- **Computer rooms**
- **Traffic control centers**
- **Clean rooms**

UL LISTED ULC FM APPROVED

Specifications

Voltage Range
15 – 32 volts DC peak

Standby Current (max. avg.)
230 μA @ 24 VDC
(without communication),
330 μA @ 24 VDC (one communication every 5 sec. with LED enabled)

LED Current (max.)
6.5 mA @ 24 VDC (on)

Height
1.66″ (4.2 cm)

Diameter
4.0″ (10.2 cm)

Shipping Weight
5.6 oz. (159 g)

Operating Temperature Range
32° to 100°F (0° to 38°C)

Velocity Range
0 – 4000 fpm (0 to 20.3 m/s)

Relative Humidity
10% – 93% noncondensing

Self Diagnostics
Initiated by control panel
Activated by test magnet

Smoke Sensitivity
9 levels:
0.02, 0.03, 0.05, 0.10, 0.20, 0.50, 1.00, 1.50, 2.00%/ft. obscuration
(0.06, 0.10, 0.16, 0.33, 0.66, 1.65, 3.24, 4.85, 6.41%/m obscuration)

Drift Compensation
High sensitivity maintenance alert signal
Low sensitivity maintenance alert signal
Maintenance urgent signal

Accessories


RA400Z Remote LED


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 Europe
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: 85.22.191.9003
Fx: 85.22.736.6580

System Sensor – Australia
Ph: 613.54.281.142
Fx: 613.54.281.172

System Sensor – India
Ph: 91.124.637.1770 x.2700
Fx: 91.124.637.3118

A05-0314-001•10/01•#835