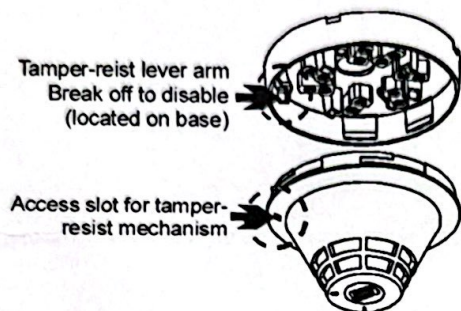


Product description



Description: The Intelligent Photoelectric Smoke Detector (ADT-PS) is a component of the Signature Series. This intelligent analog device uses an optical sensing chamber to detect smoke. The detector analyzes the sensor data to determine when an alarm is initiated.

The detector continuously monitors changes in sensitivity due to the environment (e.g. dirt, smoke, temperature, humidity) and notifies the loop controller of its condition. The ADT-PS issues a dirty sensor warning when it reaches its preset limit. This notifies the operator of the need for service while the detector is still operating within UL/ULC limits.

LEDs: The ADT-PS provides two LEDs that show its status:

- Normal: green LED flashes
- Alarm/active: red LED flashes
- Standalone alarm: both LEDs glow continuously

Electronic addressing: The loop controller automatically assigns addresses to the detectors. Custom addresses can be assigned to the detectors via laptop computer. No addressing switches are used.

Standalone operation: If unable to communicate with the loop controller, the detector alarms when smoke levels exceed its preset value. Refer to the applicable fire alarm control panel manual for verification of standalone capabilities.

Self-diagnostics: The ADT-PS contains a microprocessor capable of performing comprehensive self-diagnostics and storing the results. Details such as hours of operation, last maintenance date, sensitivity values, and number of alarms and troubles are stored in non-volatile memory. These can be retrieved and reviewed as desired.

Specifications

Operating voltage: 15.2 to 19.95 Vdc

Normal operating current: 45 μ A

Alarm current: 45 μ A

Standalone alarm current: 18 mA

Air velocity: 0 to 5,000 ft/min (0 to 25.39 m/s)

ULI/ULC smoke sensitivity range: 0.67 to 3.77% obs/ft (305 mm)

Operating environment

Temperature: 32 to 120° F (0 to 49° C)

Humidity: 93% RH, noncondensing

Environmental compensation: Automatic

Compatible bases

Standard: SIGA-SB, SIGA-SB4

Relay: SIGA-RB, SIGA-RB4

Isolator: SIGA-IB, SIGA-IB4

Audible: SIGA-AB4, SIGA-AB4G

Maximum distance from ceiling wall-mounted: 12 in (305 mm)

Construction and finish: High impact engineering polymer, white

Shipping weight: 7.7 oz (218 g)

Storage temperature: -4 to 140 °F (-20 to 60 °C)

Warnings

1. This detector will not operate without electrical power. As fires frequently cause power interruption, discuss further safeguards with your local fire protection specialist.
2. This detector will not sense fires in areas where smoke cannot reach the detector. Smoke from fires in walls, roofs, or on the opposite side of closed doors may not reach the detector.
3. Photoelectric detectors have a wide range of sensing capabilities, but are best suited for detecting slow, smoldering fires.
4. Maintenance (regular or selected) should be planned in accordance with the requirements of the authority having jurisdiction to ensure proper operation. Refer to NFPA 72 and ULC Standard CAN 536.
5. To ensure proper operation, store the detector within the recommended ranges. Allow the detector to stabilize to room temperature before applying power.
6. The bright orange-colored dust cover (supplied) must remain on the detector during installation, and then be removed prior to operation. The dust cover is not a substitute for removing the detector during new construction or heavy remodeling.
7. Under normal conditions this unit does not require calibration. If calibration is required, call Customer Service at 1-800-655-4497 to arrange for return to the factory.

Refer to Technical Bulletin P/N 3100228 for additional information and cleaning instructions.

8. Test the detector with Smoke Detector Tester and Model 1490 Adapter/Tube Accessory, manufactured by Home Safeguard, Inc. or SOLO A4 aerosol manufactured by SDI.

Installation instructions

1. Push a small screwdriver into the tamper-resist access slot while rotating the detector counterclockwise to remove the detector. Note: You can permanently disable the tamper-resist mechanism by breaking and removing the plastic lever arm from the base.
2. See the Technical Bulletin for installation guidelines.
3. Install and wire the base as described in the installation sheet supplied with the base.
4. Peel off the removable serial number label from the detector and apply it to the appropriate location in the serial number logbook.
5. Connect the detector to the base by rotating the detector clockwise until it snaps into the locked position.
6. NFPA code requires that a calibrated sensitivity test be performed upon completion of the original installation and following any modifications or additions to the system. The Signature Series can perform this test and generate a system sensitivity report.
7. In Canada your installation must meet the requirements of CAN/ULC-S524-M91: *Standard for the Installation of Fire Alarm Systems*, and the local authority having jurisdiction.
8. Before initial testing, remove the dust cover from the detector and notify the proper authorities that the fire alarm system is undergoing maintenance and will be temporarily out of service.