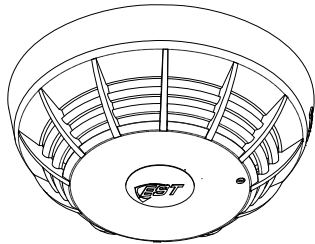




SIGA2-PS Intelligent Photoelectric Smoke Detector Installation Sheet



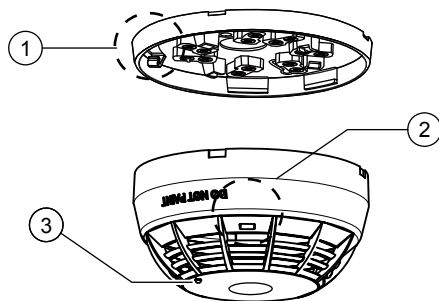
Description

The Signature Series model SIGA2-PS Intelligent Photoelectric Smoke Detector is an intelligent device that uses an optical sensing chamber to detect smoke. The detector analyzes the sensor data to determine whether to initiate an alarm.

LED indicator. The LED indicator (see Figure 1 below) displays the following states:

- Normal: Green LED indicator flashes, no action.
- Alarm/active: Red LED indicator flashes, evacuate the area.
- Stand-alone alarm: Red LED indicator turns on, evacuate the area.

Figure 1: SIGA2-PS features



1. Tamper-resist lever arm on base
2. Access slot for tamper-resist mechanism
3. LED indicator

Installation

Notes

- This detector does not operate without electrical power. As fires frequently cause power interruption, discuss further safeguards with the local fire protection specialist.
- This detector does 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.
- Photoelectric detectors have a wide range of fire-sensing capabilities and are best suited for detecting slow, smoldering fires.
- To ensure proper operation, store the detector within the recommended ranges. Allow the detector to stabilize to room temperature before applying power.
- The dust cover (supplied) must remain on the detector during installation and be removed prior to commissioning and service. The dust cover is not a substitute for removing the detector during new construction or heavy remodeling.
- In Canada, install according to CAN/ULC-S524 *Standard for the Installation of Fire Alarm Systems*, CSA C22.1 *Canadian Electrical Code*, and the local authority having jurisdiction.
- Upon completion of the original installation and following any modifications or additions to the system, perform a calibrated sensitivity test per NFPA code. The Signature Series devices can perform this test and the panel can generate a system sensitivity report.
- To permanently disable the tamper-resist mechanism prior to placing the detector in difficult to reach locations, break and remove the plastic lever arm from the base. See Figure 1, item 1.

To install the detector:

1. Install and wire the base, as described on the installation sheet supplied with the base.
2. Remove the serial number label from the detector and attach it to the project documentation.
3. Attach the detector to the base by rotating the detector clockwise until it snaps into the locked position.

Testing

Before testing, notify the proper authorities that the fire alarm system is undergoing maintenance and will be temporarily out of service.

In the following steps, xxx indicates a variable related only to marketplace.

Make sure the SIGA2 Testfire Adapter Assembly (model SIGA2-TSTSPACER) is installed in the Testfire detector tester before testing. Refer to the *SIGA2 Testfire Adapter Assembly Installation Sheet* (P/N 3101942) for further details.

To perform an initial installation test:

1. Remove the detector from its base and verify that the proper detector address, trouble signals, and messages are reported.
2. For SIGA2-PS detectors placed in the air ducts, verify that the airflow is within specifications. See "Specifications" below.
3. If wired for Class A operation, verify that the detector continues to operate first with SLC_IN disconnected, and then with SLC_OUT disconnected. (Refer to the installation sheet for the base.)
4. Place a momentary ground fault on the SLC circuit to verify operation of ground fault detection circuitry.
5. Run a system detector sensitivity report on all detectors and verify that the readings fall within acceptable limits.
6. Perform a sensor function test, as described below.

To perform a sensor function test:

1. If desired, use the fire alarm control panel to put the detector or zone into a service group for testing. (Refer to the panel technical reference manual for instructions.)
2. Activate the smoke sensor using No Climb Products model CHEK02-xxx smoke aerosol spray, a smoke generator, or the Testfire detector tester per the manufacturer's instructions.

Maintenance

To ensure proper operation, plan maintenance in accordance with the requirements of the authority having jurisdiction. Refer to CAN/ULC-S536 *Standard for the Inspection and Testing of Fire Alarm Systems* and NFPA 72 *National Fire Alarm and Signaling Code*.

Refer to Application Bulletin P/N 270145 REV 4.0 or later for additional information and cleaning instructions.

Smoke chamber replacement

Replace the smoke chamber whenever cleaning the detector does not restore the panel to normal conditions. Replace with model number 2-SPRC1 using installation sheet P/N 3101860.

Specifications

Operating voltage	15.20 to 19.95 VDC
Current	
Normal operating	45 μ A
Alarm	45 μ A
Stand-alone alarm	18.6 mA
Air velocity [1]	0 to 4,000 ft./min (0 to 20.32 m/s)
Wall mounting: distance from ceiling	12 in. (305 mm) max.
Compatible bases	
Standard	SIGA-SB, SIGA-SB4
Relay	SIGA-RB, SIGA-RB4
Isolator	SIGA-IB, SIGA-IB4
Audible	SIGA-AB4, SIGA-AB4G
Compatible detector testers [2]	Testfire 1000, Testfire 2000
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing
Storage temperature	-4 to 140°F (-20 to 60°C)
Environmental compensation	Automatic

[1] For duct installation, use a SIGA-DMP duct detector mounting plate and install per P/N 387053P.

[2] Requires the SIGA2-TSTSPACER Testfire adapter assembly.

Regulatory Information

Manufacturer	Edwards, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL 34202, USA
Year of manufacture	The first two digits of the date code (located on the product identification label) are the year of manufacture.
North American standards	CAN/ULC-S529-00, UL 268, UL 268A
UL/ULC smoke sensitivity range	0.85 to 4.00 %/ft. (2.7 to 12.5 %/m) obscuration
FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Industry Canada compliance	This Class A digital apparatus complies with Canadian ICES-003.

Contact information

For contact information, see www.utcfireandsecurity.com.