

Congratulations on purchasing your SMCSM01-Z Smoke Sensor.

The SMCSM01-Z Smoke Sensor is a low-profile wireless smoke detector designed to provide reliable smoke or fire detection. The SMCSM01-Z is ideal for difficult-to-wire residential or commercial applications. This user manual has all the information to get your SMCSM01-Z Smoke Sensor up and running quickly.

1 Unpacking

Your SMCSM01-Z package includes the following items:

- One SMCSM01-Z Smoke Sensor
- One dust cover
- Two CR123A batteries
- Mounting bracket
- This user manual

If any items are missing or damaged, contact your place of purchase. Keep the carton, including the original packing material, in case you need to store or return the product.

2 Specifications

The SMCSM01-Z specifications are:

- Voltage: 3VDC
- Battery type 1 3V Lithium, Duracell® 123, Sanyo®, and Panasonic® CR123A
- Sensitivity 2.25 % ± 1.35 %
- Drift compensation adjustment 0.5%/ft. max
- Operating temperature: 40° to 100° F (4.4° and 37.8° C)
- Compatible control panel: RB5701-Z SMA Gateway

The SMCSM01-Z specifications heat alarm specifications are:

- Rate-of-rise: 15° F/min >105° F (8.3° C/min > 40.6° C)
- Fixed: 135° F ± 5° F (57.2° C ± 2.8° C)

Note: Constant exposures to high or low temperatures or high humidity may reduce battery life.

3 NFPA Guidelines

- **NFPA 72, 2-1.4.2.1 Total (Complete) Coverage**
If required, total coverage shall include all rooms, halls, storage areas, basements, attics, lofts, spaces above suspended ceilings, and other subdivisions and accessible spaces; and the inside of all closets, elevator shafts, enclosed stairways, dumbwaiter shafts, and chutes. Inaccessible areas shall not be required to be protected by detectors. (For exceptions, refer to NFPA 72.)
- **NFPA 72, 2-1.4.2.2 Partial Coverage**
If required, partial detection systems shall be provided in all common areas and work spaces, such as corridors, lobbies, storage rooms, equipment rooms, and other tenantless spaces in those environments suitable for proper detector operation in accordance with this code.
- **NFPA 72, 2-1.4.2.3 Selective Coverage**
Where codes, standards, laws, or authorities having jurisdiction require the protection of selected areas only, the specified areas shall be protected in accordance with this code.
- **NFPA 72, 2-1.4.2.4 Supplementary (Non required) Coverage**
Where installed, detection that is not required by an applicable law, code, or standard, whether total (complete), partial, or selective coverage, shall conform to the requirements of this code. (For exceptions, refer to NFPA 72 Chapter 2 Spacing Requirements.)
- **NFPA 72, 2-1.4.3**
Where non required detection devices are installed for a specific hazard, additional non required detection devices shall not be required to be installed throughout an entire room or building.

- **NFPA 72, 2-2 Heat-Sensing Fire Detectors**
Heat-sensing fire detectors shall be installed in all areas where required by the NFPA codes and standards or by the authority having jurisdiction.
- **NFPA 72, 8-1.4.1.3.2 Detection in New Apartment Buildings**
Approved, single-station smoke alarms shall be installed in accordance with 7-6.2.10 of NFPA 101 outside every sleeping area in the immediate vicinity of the bedrooms and on all levels of the dwelling unit including basements. (101: 18-3.4.4.2) (For exceptions, refer to this section of NFPA 72.)
- **NFPA 72, 8-1.4.1.4.2 Detection in Existing Apartment Buildings Approved**, single-station smoke alarms shall be installed in accordance with 7-6.2.10 of NFPA 101 outside every sleeping area in the immediate vicinity of the bedrooms and on all levels of the dwelling unit including basements. (101: 19-3.4.4.1) (For exceptions, refer to this section of NFPA 72.)

4 Technical Bulletin

SMCSM01-Z is a member of SMC Networks' family of reliable, high-quality products using the latest technology available. Please review the information in this section to ensure you get the most out of your new SMCSM01-Z Smoke Sensor.

Pre-installation Considerations

Install the SMCSM01-Z in accordance with the National Fire Protection Association's (NFPA) Standard 72, Chapters 2 and 8. Depending on the application, you may need to reference other chapters of NFPA 72 or NFPA 101.

continued on next page

Placing the SMCSM01-Z

When choosing a location to install the SMCSM01-Z, consider:

- Use of structure and type of construction
- Contents you want to protect and their burning characteristics
- Human occupancy
- Total area to be monitored
- Ceiling height and surface condition
- Air movement and vent locations
- Obstructions
- Deflections

After considering these factors, choose a location:

- Where the temperature range is between 40° and 100° F (4.4° and 37.8° C).
- Where the humidity is between 0 and 90% noncondensing.
- Away from ventilation sources that can prevent smoke from reaching the SMCSM01-Z.
- That is at least 5 feet (1.5 m) from bathrooms.

When placing the SMCSM01-Z on a ceiling, mount it in the center of the room or hallway, at least 4 inches (10cm) away from any walls or partitions.

When mounting the SMCSM01-Z on a wall, place it so the top is 4 to 12 inches (10 to 31cm) below the ceiling.

In rooms with sloped, peaked, or gabled ceilings, locate SMCSM01-Z sensors 3 feet (.9 m) down or away from the highest point of the ceiling.

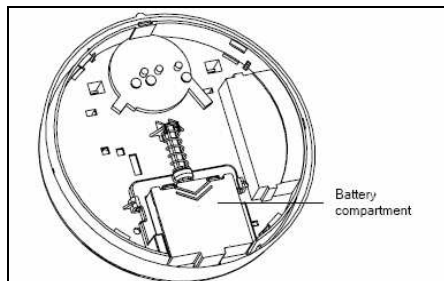
If mounting to suspended ceiling tile, secure the tile with the appropriate fastener to prevent tile removal.

Locations to Avoid

- Areas where normal ambient temperature exceeds 100° F (37.8° C).
- Dirty, dusty, insect infested areas.
- In or near areas with combustion particles (kitchens, garages, furnaces, hot-water heaters, gas space heaters).
- On the ceiling in rooms next to kitchens, where there is no transom between the kitchen and such rooms.
- Damp or humid areas, or near bathrooms with showers.
- Near fresh-air inlets or returns or very drafty areas.
- Near heating/air conditioning vents, fans, and fresh air intakes, which can drive smoke away from the sensor.
- In dead-air spaces at the top of peaked ceilings or in corners where walls and ceiling meet. Dead air can prevent smoke from reaching a smoke alarm/detector.
- Within 10 feet (3 m) of fluorescent light fixtures.

Installing the SMCSM01-Z

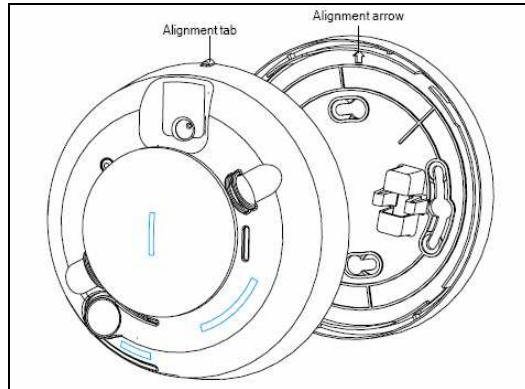
- A.** Slide the battery compartment cover away from the SMCSM01-Z to unsnap it and lift it off.



- B.** Observing proper polarity, insert two 3V lithium batteries into the SMCSM01-Z battery compartment and replace the battery compartment cover.
- C.** Remove the red plastic dust cover from the SMCSM01-Z. The sensor ships with a dust cover for protection on construction sites with dusty environments.
- D.** Disconnect alarm-notification appliances, service-release devices and extinguishing systems. Test communications between the control panel and the SMCSM01-Z before permanently mounting the sensor as follows:
- Hold the SMCSM01-Z where you plan to install it.
 - Press the SMCSM01-Z test button for 8-to-10 seconds. The SMCSM01-Z sends a signal to the control panel.
 - At the control panel, verify the signal was received and that RF signal strength is adequate. If no signal is received or the RF signal is low, relocate the SMCSM01-Z and retest.
- E.** Using two supplied screws and anchors, mount the base.
- F.** Attach the SMCSM01-Z to the mounting base as follows:
- Line up the raised alignment tab on the lip of the SMCSM01-Z with the arrow on the mounting base.
 - Insert the SMCSM01-Z into the base and turn clockwise about 15 degrees until it snaps into place.

Note: The SMCSM01-Z cannot be attached to the mounting base if no batteries are installed.

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G. Test communications between the control panel and SMCSM01-Z again:

- Press the Test button on the alarm for 8-to-10 seconds. The SMCSM01-Z sends a signal to the control panel.
- Verify that the signal at the control panel was received.

H. Test the SMCSM01-Z (see “Sensitivity Testing” on this page).

Note: The control panel alarm and all auxiliary functions should be verified for a complete test of the system.

Sensitivity Testing

- A.** Press the SMCSM01-Z Test button for 4 seconds. When the test starts, the SMCSM01-Z LED flashes 1 to 9 times.
- B.** Count the number of LED flashes and see the table below to determine the status of the SMCSM01-Z sensitivity and any action to take.

Understanding the LED

The LED on the SMCSM01-Z shows the following status:

- Flash = normal operation
- ON = smoke detected, sending an alarm
- OFF = trouble or maintenance is required

Flashes	Meaning	Steps to Take
1	Unserviceable hardware fault	Reset the SMCSM01-Z and rerun sensitivity test. If error persists, replace the sensor.
2 - 3	SMCSM01-Z is becoming insensitive	Clean the SMCSM01-Z, reset it, and rerun the sensitivity test. If the error persists, replace the sensor.
4 - 7	SMCSM01-Z is within normal sensitivity range.	None
8 - 9	SMCSM01-Z is becoming too sensitive.	Verify that the smoke chamber is snapped down securely. Clean the SMCSM01-Z and replace the smoke chamber.

Annual Testing

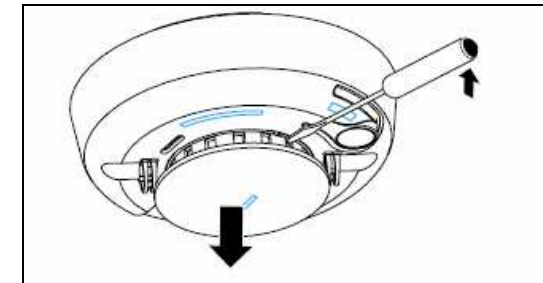
Test the SMCSM01-Z in place annually using Smoke! in a can® (product number SM-200), a canned aerosol simulated smoke and follow the directions on the can.

Cleaning the SMCSM01-Z

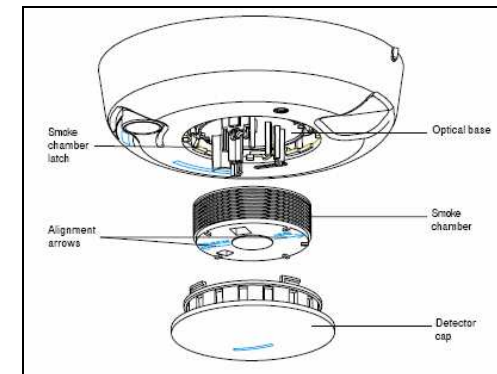
Clean the SMCSM01-Z cover with a dry or damp (water) cloth as needed to keep it free from dust and dirt. When necessary, use the following procedure to clean the interior of the SMCSM01-Z and replace the smoke chamber.

- A.** Notify the Central Monitoring Station that the smoke sensor is being tested. Make sure the system is in Test mode with the Central Monitoring Station.

- B.** Remove the SMCSM01-Z from its mounting base (see “Mounting Base Instructions” on page 4).
- C.** Remove batteries (see “Replacing Batteries” on page 4).
- D.** Slide a flat-blade screwdriver in the detector cap slot. Gently push the handle down to pry the cap up and off.



- E.** Squeeze the smoke chamber where indicated by the alignment arrows and pull it up and away from the SMCSM01-Z and discard. See the following figure.



- F.** Blow out or use a soft-bristled brush to remove dust and dirt from the smoke chamber base.

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- G.** Line up the new smoke chamber with the optical base by aligning the arrows on the smoke chamber to the latches on the optical base and snap down into place.
- H.** Replace the detector cap by lining up the cap with the SMCSM01-Z. Then insert the cap into the SMCSM01-Z and turn clockwise approximately 15 degrees. The cap snaps firmly into place when secure.
- I.** Insert the batteries into the SMCSM01-Z using the proper polarity, and replace the battery compartment cover.
- J.** Reattach the SMCSM01-Z to its mounting base (see “Mounting Base Instructions” on this page).
- K.** Test the SMCSM01-Z sensitivity and contact the Central Monitoring Station to place the system back online (remove from Test mode).

Note: Verify all auxiliary functions for a complete test of the system.

Maintaining the SMCSM01-Z

The SMCSM01-Z requires minimal maintenance for easy field service and maintenance.

- A.** Test the SMCSM01-Z weekly (see “Sensitivity Testing” on page 3). If it requires maintenance, the LED goes OFF and a signal is sent to the control panel as described in the following table.

Note: The SMCSM01-Z does not provide warnings for fires resulting from explosions, smoking in bed, or other furniture, ignition of flammable liquids, vapors and gases, children playing with matches or lighters.

Replacing Batteries

Use only 3V lithium 123 batteries, as listed on the battery compartment cover.

- A.** Remove the SMCSM01-Z from the mounting base (see “Mounting Base Instructions” on this page).
- B.** Slide the battery compartment cover away from the SMCSM01-Z to unsnap it and lift it off (see the figure on page 2).
- C.** Remove and dispose of the batteries appropriately.

Signal	Meaning
CleanMe	SMCSM01-Z sensitivity is out of range and needs cleaning. See “Cleaning the SMCSM01-Z” on page 3.
Maintenance alert	SMCSM01-Z failed power-up self test. Perform a sensitivity test (see “Sensitivity Testing” on page 3). If the problem persists, replace the SMCSM01-Z.
Low battery	Batteries are low and must be replaced as soon as possible.

- D.** Observe correct polarity and insert two new 3V lithium batteries into the battery compartment and replace the cover.

Note: Use only new batteries when replacing old batteries. Do not replace with batteries that were used previously.

- E.** Reattach the SMCSM01-Z to the mounting base and test the system.

Mounting Base Instructions

To remove the SMCSM01-Z from the mounting base:

- A.** Hold the SMCSM01-Z.
- B.** Turn it counterclockwise approximately 15 degrees. The SMCSM01-Z snaps off from the mounting base.

To attach the SMCSM01-Z to the mounting base:

- A.** Line up the raised alignment tab on the lip of the SMCSM01-Z with the arrow on the mounting base (see the figure on page 2).
- B.** Insert the SMCSM01-Z into the base and turn clockwise approximately 15 degrees. It snaps firmly into place when secure.



Congratulations! You have successfully installed the SMCSM01-Z Smoke Sensor.

Compliances

The information in this guide is in accordance with NFPA 72 and/or CAN/ULC-S524, depending on country of installation.

FCC Notice

This device has been designed, constructed, and tested with for compliance with FCC Rules that regulate intentional and unintentional radiators. As the user of this device, you are not permitted to make any alterations or modifications to this equipment or to use it in any way that is inconsistent with the information described in this quick-start guide, without the express written permission of SMC Networks. Doing so will void your warranty to operate this equipment. This device complies with Part 15 of the FCC rules. Operation of this device 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.
- The SMCSM01-Z contains FCCID:JI5-SMCZB01 and ICID:4137A-SMCZB01. The “IC” designation preceding the radio certification number indicates that this device complies with the Industry of Canada specifications.

ETL Notice: This device complies with all ETL and ETL safety requirements.

UL and ULC Notices: This device complies with UL Standard UL268 and ULC Standard ULC S529.

Smoke detectors are not to be used with detector guards, unless the combination has been evaluated and found suitable for that purpose.