

# **Kidde** **wireless system**

Provide Advanced Fire Protection with the Kidde Wireless System

## Why Wireless?

- When one alarm sounds they all do.
- Ability to interconnect without wires.
- Install in minutes, anywhere in the home! Less cost, and less hassle than re-wiring.

## AC Powered Smoke Alarm

Makes it easy to expand the coverage of a current interconnected system.



### Wireless AC Powered Smoke Alarm

The Kidde Wireless AC Powered Smoke Alarm makes it easy to expand the coverage of a current interconnected system. Simply replace one interconnected smoke alarm with the Kidde Wireless AC powered alarm. Kidde Wireless Battery Powered Smoke Alarms can be installed in additional rooms that need extra protection. This AC powered alarm bridges a home's current interconnected system to the newly installed alarms, so that when one alarm is triggered, all alarms will sound.

## Battery Powered Smoke Alarm

Enables quick and easy installation of an interconnected smoke alarm system without messy wiring or labor.



### Wireless Battery Powered Smoke Alarm

The Kidde Wireless Battery Powered Smoke Alarm allows for quick and easy installation an interconnected smoke alarm system without messy wiring or labor. The battery-powered units are linked so that when one alarm is triggered, all alarms will sound. In addition to providing protection to any room of the home, this battery powered alarm also can be placed in a detached workshop or shed and linked into the home's interconnected system.

*Kidde wireless alarms use ionization sensing technology. Ionization sensing alarms may detect invisible fire particles (associated with flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible particles (associated with smoldering fires) sooner than ionization alarms.*

Item	Part Number	Pack Qty	UPC	1 2 of 5	Dimensions w x d x h
Battery Wireless Smoke Alarm RF-SM-DC	0919-9999	3 piece PDQ	0 47871 05557 9	100 47871 05557 6	8.5" x 6.75" x 9.75"
Hardwired AC Wireless Smoke Alarm RF-SM-AC	1279-9999	3 piece PDQ	0 47871 05560 9	100 47871 05560 6	8.5" x 6.75" x 9.75"

# Kidde Wireless System: Architectural, Engineering, and Technical Specifications

## Architectural and Engineering Specifications for Wireless Model RF-SM-AC

The smoke alarm shall be Kidde Model RF-SM-AC or approved equal. It shall be powered by a 120VAC, 60Hz source along with a 9V battery backup. The unit shall incorporate an ionization sensor with nominal sensitivity of  $0.60 \pm 0.1$  percent/Ft. The temperature operation range shall be between 40F (4C) to 100F (38C) and the humidity operating range shall be up to 85% relative humidity.

The smoke alarm can be installed on any standard single gang electrical box, up to a 4" octagon junction box. The electrical connection (to the alarm) shall be made with a plug-in connector.

The smoke alarm shall work interconnected immediately out of the box without any user programming. A maximum of 24 Kidde devices can be interconnected in a multiple station arrangement. The interconnect system must not exceed the NFPA (National Fire Protection Association) limit of 18 initiation devices, of which 12 can be smoke alarms. With 18 initiating devices (smoke, heat, CO, etc.), interconnected, it is still possible to interconnect 6 strobe lights and/or relay modules.

The smoke alarm shall give fire alarm signals priority over all other signals. The smoke alarm shall incorporate a maximum allowable response delay from activation of an initiating device to receipt and alarm/display by the receiver/control unit of 30 seconds. The smoke alarm shall automatically repeat alarm transmission at intervals not exceeding 60 seconds until the initiating device is returned to its non-alarm condition (per NFPA 72, Chapter 6, Section 6.16.3.2).

The smoke alarm shall have remote hush and low battery hush capabilities. The unit shall have alarm memory to indicate which alarm in a system was the initiating alarm (per NFPA 72, Chapter 6, Section 6.16.3.5). The unit shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling.

The alarm shall include a test button that will electronically simulate the presence of smoke and cause the unit to go into alarm. This sequence tests the unit's electronics, battery and horn to ensure proper operation.

The unit shall include a piezoelectric horn that is rated at 85 decibels at 10 feet. The smoke alarm shall produce an audible signal in the form of the "three pulse" temporal pattern. Each ON phase shall last 0.5-second  $\pm 10$  percent. After the third of these ON phases, there shall be an OFF phase that lasts 1.5 seconds  $\pm 10$  percent. This pattern should repeat continuously without interruption. The unit shall also include a low battery warning utilizing a brief alarm chirp every 30-40 seconds for a minimum of seven (7) days.

The unit shall incorporate one red LED to the alarm's current status and mode of operation. The red LED will flash in conjunction with the alarm beep, and flash during a smoke alarm, a low battery mode and a unit error. The unit shall incorporate one green LED to indicate the alarm's current status and mode of operation. The green LED will indicate one of five (5) conditions:

**Standby Condition** (powered by AC and battery backup)– The LED will be constant on

**Standby Condition** (powered by only battery backup) – The LED will flash approximately every 10 seconds.

**Initiating Alarm Indicator** – The LED will flash every second while sounding an alarm to signify that the alarm sensed a smoke hazard.

**Alarm Memory Condition** – The LED will flash every second signifying that the alarm sensed a smoke hazard. It will continue to flash every second until the test/reset button is pressed, thus resetting the alarm.

**Hush® Mode Condition** – The LED will flash every 2 seconds while the alarm is in Hush® Mode

The unit shall at a minimum meet the requirements of UL217, NFPA72. The State of California Fire Marshall, NFPA 101 (one and two family dwellings) Federal Housing Authority (FHA), Housing and Urban Development (HUD). It shall also include a 10-year manufacturer's limited warranty.

### Technical Specifications:

Power Source: 120VAC; 9V battery backup  
Audio Alarm: 85dB at 10ft  
Temperature Range: 40F (4.4C) to 100F (37.8C)  
Humidity Range: up to 85% relative humidity (RH)  
Sensor: Ionization  
Wiring: Quick connect plug with 8" pigtails  
Size: 5.75" in diameter x 1.25" depth  
Weight: .5lb  
Interconnects: Up to 24 devices (of which 18 can be initiating)

## Architectural and Engineering Specifications for Wireless Model RF-SM-DC

The smoke alarm shall be Kidde Model RF-SM-DC or approved equal. It shall be powered by three (3) AA batteries. The unit shall incorporate an ionization sensor with nominal sensitivity of  $0.69 \pm 0.19\%$ /ft. The temperature operation range shall be between 40F (4C) to 100F (38C) and the humidity operating range shall be up to 85% relative humidity.

The smoke alarm shall work interconnected immediately out of the box without any user programming. A maximum of 24 Kidde devices can be interconnected in a multiple station arrangement. The interconnect system must not exceed the NFPA (National Fire Protection Association) limit of 18 initiation devices, of which 12 can be smoke alarms. With 18 initiating devices (smoke, heat, CO, etc.), interconnected, it is still possible to interconnect 6 strobe lights and/or relay modules. The smoke alarm shall give fire alarm signals priority over all other signals. The smoke alarm shall incorporate a maximum allowable response delay from activation of an initiating device to receipt and alarm/display by the receiver/control unit of 30 seconds. The smoke alarm shall automatically repeat alarm transmission at intervals not exceeding 60 seconds until the initiating device is returned to its non-alarm condition (per NFPA 72, Chapter 6, Section 6.16.3.2).

The smoke alarm shall have remote hush and low battery hush capabilities. The unit shall have alarm memory to indicate which alarm in a system was the initiating alarm (per NFPA 72, Chapter 6, Section 6.16.3.5). The unit shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling.

The alarm shall include a test button that will electronically simulate the presence of smoke and cause the unit to go into alarm. This sequence tests the unit's electronics, battery and horn to ensure proper operation.

The unit shall include a piezoelectric horn that is rated at 85 decibels at 10 feet. The smoke alarm shall produce an audible signal in the form of the "three pulse" temporal pattern. Each ON phase shall last 0.5-second  $\pm 10$  percent. After the third of these ON phases, there shall be an OFF phase that lasts 1.5 seconds  $\pm 10$  percent. This pattern should repeat continuously without interruption. The unit shall also include a low battery warning utilizing a brief alarm chirp every 30-40 seconds for a minimum of seven (7) days.

The unit shall incorporate one red LED to indicate the alarm's current status and mode of operation. The red LED will flash in conjunction with the alarm beep, and flash during a smoke alarm, a low battery mode and a unit error.

The unit shall incorporate one green LED to indicate the alarm's current status and mode of operation. The green LED will indicate one of four (4) conditions:

**Standby Condition** – The LED will flash approximately every 10 seconds.

**Initiating Alarm Indicator** – The LED will flash every second while sounding an alarm to signify that the alarm sensed a smoke hazard.

**Alarm Memory Condition** – The LED will flash every second signifying that the alarm sensed a smoke hazard. It will continue to flash every second until the test/reset button is pressed, thus resetting the alarm.

**Hush® Mode Condition** – The LED will flash every 2 seconds while the alarm is in Hush® Mode

The unit shall at a minimum meet the requirements of UL217, NFPA72 (chapter 11 2002 edition), The State of California Fire Marshall, NFPA 101 (one and two family dwellings) Federal Housing Authority (FHA), Housing and Urban Development (HUD). It shall also include a 10-year manufacturer's limited warranty.

### Technical Specifications:

Power Source: 3 AA batteries  
Audio Alarm: 85dB at 10ft  
Temperature Range: 40F (4.4C) to 100F (37.8C)  
Humidity Range: up to 85% relative humidity (RH)  
Sensor: Ionization  
Wiring: None  
Size: 5.75" in diameter x 1.25" depth  
Weight: .5lb  
Interconnects: Up to 24 devices ( of which 18 can be initiating)

KL-1279-9999DS



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