



# 120V AC Wire-In Smoke Alarm

Model i12020

*For Basic Use*

- Ionization Sensing Technology
- One button design (operates Smart Hush™ and test)
- Large mounting base
- Tamper resist feature
- Alarm memory
- Pre-stripped wiring harness with tinned strands



## Description

The Kidde i12020 is an AC powered, ionization smoke alarm that operates on a 120V power source.

This alarm uses 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.

The i12020 includes a quick connect wiring harness for easy installation. This unit is available in a 6-piece cut case with tray for easy display. The i12020 is a UL Listed product with a 5-year limited warranty.

## Install Confidence:

### Easy Installation

- Large mounting base makes mounting easier, protects surface paint from dirt and covers imperfections.
- Pre-stripped wiring harness with easy off cap does not require stripper tool. Tinned strands increase conductivity and wire nut grip.

### Fewer Callbacks

- One button design for easy operation and less confusion. Operates Smart Hush™ and alarm test.
- Dust cover protects sensor from contaminants during construction reducing nuisance alarms.

### User-Friendly Features

- Tamper resist locking feature deters alarm theft.
- Alarm memory flashes red LED indicating which unit was the initiating alarm in interconnected system.
- Interconnectable with up to 24 devices (of which 18 can be initiating) including smoke, CO and heat alarms. See user's guide for complete instructions.



## Architectural and Engineering Specifications

The smoke alarm shall be Kidde model i12020 or approved equal. It shall be powered by a 120VAC, 60Hz source. The unit shall incorporate an ionization sensor with nominal sensitivity of 0.50 to .83%/ft. The temperature operation range shall be between 40°F (4°C) to 100°F (38°C) and the humidity operating range shall be 5% - 95% 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. 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 initiating 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 alarm shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling.

The alarm shall include a piezoelectric horn that is rated at 85 decibels at 10 feet. The unit shall include Smart Hush™ feature that silences the unit for approximately 7 minutes if a nuisance condition occurs. The unit shall incorporate red and green LED indicators. The green LED (when illuminated) indicates the presence of AC power. The red LED (located under the TEST/Hush button) has **four modes of operation**:

**Standby Condition:** The red LED will flash every 30-40 seconds to indicate that the smoke alarm is operating properly. **Alarm Condition:** When the alarm senses products of combustion and goes into alarm the red LED will flash one flash per second. The flashing LED and pulsating alarm will continue until the air is cleared. When units are interconnected, only the red LED of the alarm that senses the smoke or is being tested (the originating unit) will flash. All other units in the interconnected system will sound an alarm but their red LED's will NOT flash. **Alarm Memory:** This smoke alarm is equipped with an alarm memory, which provides a visual indication when an alarm has been activated. The red LED will illuminate for about 1.5 seconds every 16 seconds to indicate the memory condition. **Smart Hush™ Mode:** The red LED will illuminate for 1.5 seconds every 8 seconds, indicating the smoke alarm is in the Smart Hush™ Mode.

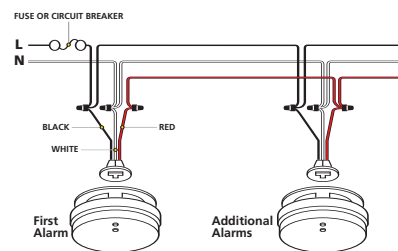
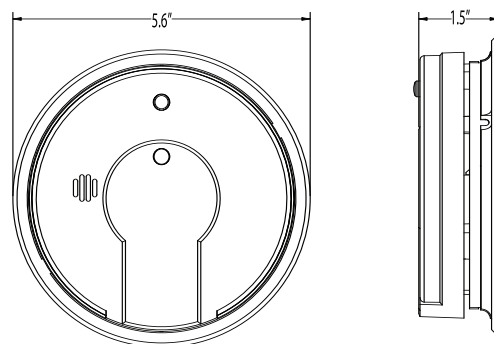
The unit shall at a minimum meet the requirements of UL217, NFPA72, (chapter 11), The State of California Fire Marshall, NFPA101 (One and two family dwellings), Federal Housing Authority (FHA, Housing and Urban Development (HUD).

## Installation of Smoke Alarm

The smoke alarm must be installed to comply with all local codes having jurisdiction in your area. All wiring shall be in accordance with articles 210 and 300.3(B) of the US National Electrical Code, ANSI / NFPA 70 and NFPA 72. The multiple station interconnect wiring must be in the same raceway as the AC power wiring. In addition the resistance if the interconnect wiring shall be a maximum of 10 ohms. Make certain all alarms are wired to a single, continuous (non-switched) power line, which is not protected by a ground fault interrupter. A maximum of 1000 ft. of wire can be used in the interconnect system. Use standard UL listed household wire as required by code.

## Technical Specifications

Model:	i12020
UPC:	0-47871-40379-0
Power Source:	120VAC (80mA)
Sensor:	Ionization
Audio Alarm:	85dB at 10ft
Temperature Range:	40°F (4.4°C) to 100°F (37.8°C)
Humidity Range:	5%-95% relative humidity (RH)
Size:	5.6" in diameter x 1.55" depth
Weight:	.5lbs
Interconnects:	Up to 24 Kidde devices
LED:	Green, receiving ac power Red, 4 modes of operation
Warranty:	5 year limited



## Ordering Information

Ordering Number	UPC	I2F5	Pack Quantity	Dimensions (w x d x h inches)	Weight	Case/Skid	Layers/Skid	Skid Weight
N/A	0-47871-40379-0	N/A	individual*	5.75 x 1.5 x 5.75	0.5 lbs	N/A	N/A	N/A
21006374	0-47871-40379-0	100-47871-40379-7	Cut Case (6 units)	6.5 x 13.25 x 6	3 lbs	147	7	441 lbs

\*Not for sale by individual unit



1016 Corporate Park Drive, Mebane NC 27302  
1-800-880-6788 • www.kiddeus.com

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