



# Dual Sensor Ionization & Photoelectric Smoke Alarm

120V AC Wire-in with 9V Battery Backup

Part Number Pi2010CA-N Model Pi2010CA  
10-Year Limited Warranty

## Dual Sensor Technology

Hush® Button

Test Button

120 V AC Direct Wire

- Interconnects with up to 24 devices

9V Battery Backup



## Description

The Kidde Pi2010CA is a 120V AC, wire-in smoke alarm with 9V battery backup that can function as a stand alone unit or interconnect with up to 24 Kidde devices (of which 18 can be initiating). The Kidde Pi2010CA provides continuous protection against smoke and fire hazards, even during power outages.

This smoke alarm combines both photoelectric and ionization sensors to offer the best protection against both fast flaming and slow smoldering fires. Leading authorities recommend that both ionization and photoelectric smoke alarms be installed to help ensure maximum detection of the various types of fires that can occur within the home. Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smoldering fires) sooner than ionization alarms.

## Features and Benefits

- **Dual Sensor Technology**
  - **Ionization Sensor** – may detect invisible fire particles (associated with flaming fires) sooner than photoelectric alarms.
  - **Photoelectric Sensor** – may detect visible particles (associated with smoldering fires) sooner than ionization alarms.
- **120V Interconnectable** – Will interconnect with up to 24 other devices (18 of which can be initiating), including smoke alarms (limit of 12), CO and heat alarms.
- **9V Battery Backup (included)** – Provides continuous protection even during power outages.
- **Hush® Button** – Temporarily silences nuisance alarms for approximately 10 minutes (smoke must be present before Hush® is activated).
- **Test Button** – Simultaneously tests the unit's electronics and verifies alarm operation.
- **Tamper Resistant** – Deters from tampering or theft.



## Architectural and Engineering Specifications

The smoke alarm shall be Kidde Unit Pi2010CA or approved equal. It shall be powered by a 120V AC, 60Hz, 80mA source along with a 9V battery backup. The temperature operation range shall be between 4.4°C and 37.8°C (40° and 100°F) and the humidity operating range shall be 10%–95% relative humidity.

The unit shall incorporate both an ionization smoke sensor and a photoelectric smoke sensor with a nominal alarm sensitivity of 0.72–4.0%/ft.

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 unit shall provide optional tamper resistance that deters removal of the unit from the wall or ceiling.

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 initiation devices (smoke, heat, CO, etc.) interconnected, it is still possible to interconnect 6 strobe lights and/or relay modules.

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 unit shall include Hush® feature that silences the unit for approximately 10 minutes if a nuisance condition occurs. 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 red and green LED indicators. The green LED (located under the Hush® button) when illuminated, indicates the presence of AC power. The red LED (located under the Test button) has four modes of operation:

- **Standby Condition:** The red LED will flash every 45 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 rapidly. All other units in the interconnected system will sound an alarm but their red LED's will NOT flash rapidly.
- **Hush® Mode:** The red LED will flash every 10 seconds, indicating the smoke alarm is in the Hush® mode.
- **Low Battery Condition:** The red LED flash will be accompanied by an audible chirp. Replace the battery when this condition occurs.

The unit shall at a minimum meet the requirements of CAN/ULC-S531. It also shall include a 10-year manufacturer's limited warranty.

## Ordering Information

UPC: 0-47871-15868-3

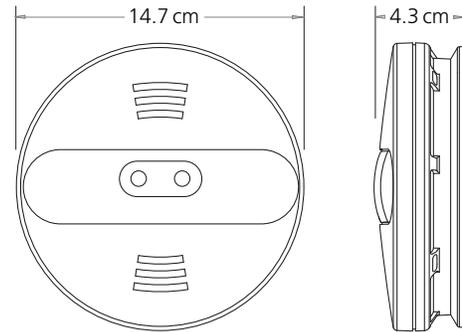
Part Number	12 of 5	Pack Quantity	Case Dimensions (w x d x h centimeters)	Case Weight	Case/Skid
Pi2010CA-N	100-47871-15868-0	6 units	17 cm x 35 cm x 16 cm	2.72 kg	126



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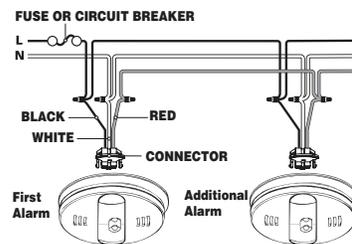
## Technical Specifications

<b>Power Source:</b>	120V AC, 60Hz, 80mA max per alarm 9V battery backup
<b>Sensors:</b>	Smoke: Ionization and Photoelectric
<b>Audio Alarm:</b>	85 dB at 10 ft
<b>Temperature Range:</b>	4.4°C (40°F) to 37.8°C (100°F)
<b>Humidity Range:</b>	10%-95% relative humidity, non-condensing
<b>Size:</b>	14.7 cm in diameter x 4.3 cm depth
<b>Weight:</b>	0.24 kg
<b>Wiring:</b>	Quick connect plug with 6" pigtails
<b>Interconnects:</b>	Up to 24 Kidde devices (of which 18 can be initiating)
<b>Warranty:</b>	10-year limited



## Installation of Alarm

The smoke alarm should be installed to comply with all local codes having jurisdiction in your area. 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 305m (1000') of wire can be used in the interconnect system. Use standard CSA listed household wire as required by code.



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