SILENT KNIGHT
by Honeywell

# SK-

## An Intelligent Multicriteria Sn

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 05/05/14

A patented photoelectric sensing chamber and dual thermistor heat detector combine with an array of on-board software tools, to maximize fire detection.

Combine all this with the features you've come to expect from Silent Knight smoke detectors—easy installation, stable operation, RF/transient protection, and vandal-resistant locking—and it adds up to a flexible solution to your fire protection needs.

## Description

The SK-Acclimate Multi criteria Photoelectric Smoke Detector incorporates both thermal and photoelectric technologies that interact to maximize detection. An on-board microprocessor with advanced software focuses on rejecting nuisance alarms. The SK-Acclimate is for use with Silent Knight Intelliknight-series fire alarm control panels (FACPs).

Using advanced software, SK-Acclimate continuously samples the air in the environment and adjusts its detection parameters and alarm threshold accordingly. And it does this automatically, without user intervention.

A dual stage drift compensation feature reduces maintenance frequency. SK-Acclimate offsets the effects of gradual dust build-up and will notify the control panel before its compensation level is reached, allowing time for maintenance. Once the compensation limit is reached, a second signal is sent to the control panel indicating an urgent need for maintenance.

## Features

- Reliable analog communications for trouble-free operation
- Dual electronic thermistor design
- 6" mounting base included
- Superior EMI resistance for reliability
- Microprocessor-based design to provide maximum features
- Simple field cleaning for code compliance
- 0.025" mesh bug screen to keep unwanted insects out
- Variety of mounting options to meet any application
- Dual LED indicators for 360° visibility
- Detector transmits signal to indicate maintenance is required
- Detector sensitivity increases in hot fires
- Transient smoke conditions are ignored
- Rotary address switches for fast installation

## Specifications

### Physical

Height: 2.0" (51 mm)

Diameter: 6.1" (155 mm) installed in B210LP base

Shipping Weight: 5.2 oz. (147 g)

### Electrical

Operating Voltage: 15–32 VDC

Standby Current:

250 µA @ 24 VDC
(no communication LED off)

300 µA @ 24 VDC
(1 communication every 5 sec with LED enabled)

LED Current: 6.5 mA@ 24 VDC max (when on)

### Environmental

Operating Temperature: 32º – 100ºF (0ºC – 38ºC)

Humidity: 10% – 93% non-condensing

**SK-Acclimate (base included)**

### Other Ratings

Thermal: Fixed Temperature Set point: 135ºF (57ºC)

Velocity: 0 – 4000 fpm
(0 – 6.1 m/sec)

Insect Screen Hole Size: 0.025" (0.64 mm) nominal

## Compatibility

The SK-Acclimate is compatible with the following detector bases:

| | |
|---|---|
| B210LP | (included) 6" Base |
| B501 | Mounting Base |
| B224BI | Isolator Base |
| B224RB | Relay Base |
| B200SR | Sounder Base |

The SK-Acclimate is compatible with the following IntelliKnight FACP's:
5700
5808
5820XL
5820XL-EVS

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# Model SK-Acclimate

## Engineering Specifications

The contractor shall furnish and install where indicated on the plans, Multi criteria SK-Acclim incorporate Photoelectric Smoke detection and a fixed temperature heat detector. The comb head, and twist-lock base, shall be UL® listed compatible with Silent Knight's IntelliKnight fire alarm control panels. The base shall be the appropriate twist-lock base B210LP.

The detector shall have a flashing status LED for visual supervision. When the detector is actuated, the flashing LED will latch on steady. The detector may be reset by actuating the control panel reset switch.

The calibration of the detector shall be capable of being selected and measured by the control panel without the need for external test apparatus.The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field selectable as required.

The SK-Acclimate shall automatically perform a functional test of the detector. The test method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.

Wiring SK-Series Detector Mounting Bases

## Accessories

RA100Z Remote LED Annunciator.

RMK400 Recessed Mounting Kit. Provides low profile for use with B501.

XR2B Detector removal head. A removal and replacement tool for SK plug-in detectors. Includes the T55-127-000.

M02-04-01 Detector Test Magnet.

M02-09-00 Test Magnet with Telescoping Handle.

XP-4 Extension Pole for XR2B. Extends from 5 – 15 ft.

T55-127-000 Detector Removal Head.BCK-200B Black Detector Kit. For SK-series detectors.

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This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610. Phone: (800) 328-0103, Fax: (203) 484-7118. For Technical Suppport, Please call 800-446-6444. **www.silentknight.com**

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