



# Intelligent Photoelectric Smoke Sensors

The SK-Photo is a photoelectric smoke detector and the SK-Photo-T is a photoelectric smoke detector with thermal. These plug in smoke detectors, with

integral communication, provide features that surpass conventional detectors and are for use with Silent Knight IntelliKnight Fire Alarm Control Panels (FACPs).

For more information about the IntelliKnight system, or to locate your nearest source, please call 800-328-0103 or in Connecticut, call (203) 484-7161.

# **Description**

SK-Photo and SK-Photo-T are plug-in type smoke sensors that combine a photoelectric sensing chamber with addressable analog communications. Point ID capability allows each detector's address to be set with rotary address switches, providing exact detector locations for selective maintenance when chamber contamination reaches unacceptable levels.

SK-Photo and SK-Photo-T have a unique optical sensing chamber that is engineered to sense smoke produced by a wide range of combustion sources. In the SK-Photo-T, dual electronic thermistors add 135°F (57°C) thermal technology to maximize detection.

#### **Features**

- · Sleek, low-profile design
- · Base included
- Reliable analog communications for trouble-free operation
- · Age resistant polymer housing
- Dual electronic thermistor design on the SK-Photo-T
- · Superior EMI resistance for reliability
- Simple field cleaning for code compliance
- Variety of mounting options to meet any application
- Dual LED indicators for 360° visibility
- Detector transmits signal to indicate maintenance is required
- Optional remote LED annunciator (System Sensor® PN RA100Z)

- Plug-in mounting provides ease of installation
- Tamper-proof feature available on mounting bases
- · Listed for use in duct applications
- Rotary address switches for fast installation
- UL Listed
- FM Approved

# **Specifications**

### **Physical**

Height: 2.0" (5.0 cm)
Diameter: 4.1" (10.4 cm)
Shipping Weight: 5.2 oz. (147 g)

### **Electrical**

Operating Voltage: 15-32 VDC

Standby Current:

300 µA @ 24 VDC Maximum

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

## Environmental

**Operating Temperature** 

SK-Photo: 32° - 120°F (0°C - 49°C)

SK-Photo-T: 32° - 100°F (0°C - 38°C)

Humidity: 10% – 93% non-condensing

#### **Other Ratings**

SK-Photo-T Thermal: Fixed temperature set point 135°F (57°C) Velocity: 0 – 4000 fpm (0 – 20 m/sec) SK-Photo Insect Screen Hole Size: 0.016" (0.41 mm) nominal



SK-Photo (Base included)

# Compatibility

The SK-Photo and SK-Photo-T are compatible with the following IntelliKnight FACPs:

5700 5808 5820XL

SK-Photo and SK-Photo-T are compatible with the following detector bases:

B210LP (included) 6" base B501 2 wire base B501BHT-2 Temporal base B224RB Relay base B224BI Isolator base B501BH-2 Sounder base



# Model SK-Photo and SK-Photo-T Intelligent Photoelectric Smoke Sensors



## **Engineering Specifications**

The contractor shall furnish and install where indicated on the plans, Intelligent photoelectric smoke sensors Silent Knight SK-Photo or SK-Photo-T with thermal. The combination detector head, and twist-lock base, shall be UL listed and compatible with Silent Knight's IntelliKnight fire control panels.

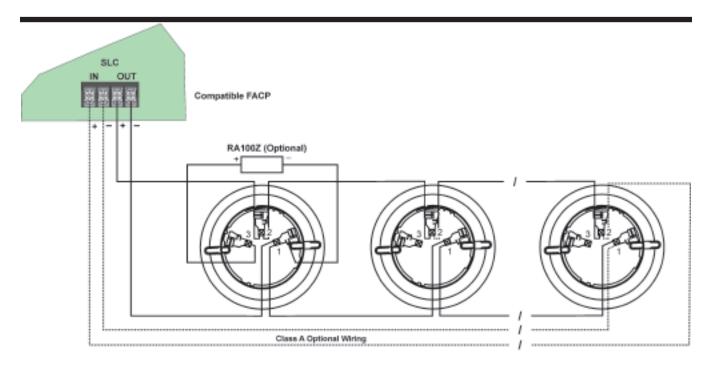
The base shall permit direct interchange with SK-Photo or SK-Photo-T. Base shall be the appropriate twist-lock base part number B210LP (included).

The smoke 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-Photo 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

