



**SILENT  
KNIGHT**

by Honeywell

## Analog/Addressable Devices with Hochiki (SD) Protocol

### SD Devices

SD devices are intelligent analog/addressable devices for use with the following IntelliKnight addressable fire alarm control panels (FACPs): 5820XL, 5808 and 5700. SD detectors, modules, and accessories communicate to the FACP over the signaling line circuit loop (SLC loop) using a two wire connection. Shielded or twisted wire is not required. Up to 127 addressable SD devices can communicate with the FACP on a single SLC loop. Any combination of addressable SD devices and SD modules can be used on a single SLC loop.

The assortment of SD detectors, modules, and accessories that are compatible with IntelliKnight addressable FACPs are described below. For detailed information on SD devices, see the device specification sheet.

### Detectors

#### SD505-APS

A photoelectric smoke detector. SD505-APS has an LED light source and silicon photo diode receiving element. The detector features automatic drift compensation for contamination and a simple detector calibration test procedure that can be run at the FACP or remotely using 5650/5651 Silent Knight Software Suite.



SD505-APS  
(Base not included)

#### SD505-AHS

A fixed temperature heat detector that uses an externally mounted thermistor with a specially designed cover that protects the thermistor while allowing maximum air flow. SD-505-AHS offers a programmable trip point temperature from 135°F – 150°F (57°C – 65°C). This detector is well suited for environments where smoke detectors cannot be used because of the presence of steam or cooking fumes, such as in a kitchen.



SD505-AHS  
(Base not included)

#### SD505-AIS

An ionization smoke detector that has a sampling chamber and reference chamber for high stability and for a variety of applications where early warning of trouble from super-heated or flaming combustibles is desired. Presence of visible smoke or invisible gases greatly influences the current flow in the sampling chamber, changing the



SD505-AIS  
(Base not included)

voltage ratio between the chambers. The difference is amplified inside the detector. When reaching a critical level, the detector triggers an alarm.

#### SD505-DUCT

A addressable duct smoke detector that detects smoke and products of combustion present in air moving through an HVAC duct. This duct detector is housed in a heavy duty metal housing with a preinstalled SD505-APS photoelectric smoke detector. SD505-DUCT has an air velocity rating from 300 feet per minute to 4,000 feet per minute. Order SD505-T2, SD505-T5, or SD505-T10 air sampling tubes separately.

#### SD505-DUCTR

A duct smoke detector that detects smoke and products of combustion present in air moving through an HVAC duct. The SD505-DUCTR provides a fully programmable Form C contact. This duct detector is housed in a heavy duty metal housing with a preinstalled SD505-APS photoelectric smoke detector and relay module. When smoke is detected in a duct, the detector communicates the condition to the FACP. The built-in relay module then turns off fans, blowers, and other devices. SD505-DUCTR has an air velocity rating from 300 feet per minute to 4,000 feet per minute Order SD505-T2, SD505-T5, or SD505-T10 air sampling tubes separately. Optional SD505-DTS-2 remote test switch available.



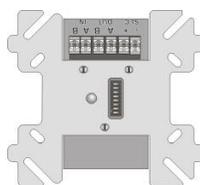
SD505-DUCTR

## SD Devices

### Modules

#### SD500-AIM

A dry contact input module that acts as an interface to contact devices, such as waterflow switches and pull stations. The SD500-AIM supports Class B supervised wiring. This module monitors for alarm contact closures and open circuit wiring fault conditions. Mounts in a 4" square box.



SD500-AIM

#### SD500-MIM

A compact and light weight monitor module that acts as an interface to contact devices, such as waterflow switches and pull stations. The SD500-MIM supports Class B supervised wiring. This module mounts in a single gang box.

#### SD500-ARM

A relay module that provides one relay with two Form C contacts rated at 2.0A @ 30 VDC or 0.6A @ 120 VAC. The SD500-ARM can control a wide variety of normally open or normally closed applications, including elevator recall, door closing, fan operation, and auxiliary notification.

#### SD500-ANM

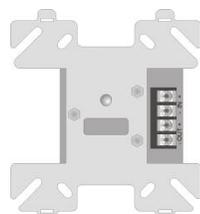
A notification module that lets you add notification circuits wherever they are needed on an FACP SLC loop. The SD500-ANM provides supervised monitoring of wiring to load devices such as bells, horns, and strobes. You can supply power to this module near the signaling appliance to reduce wire gauge requirements or supply power from a main power supply and control it separately by the individual notification modules. The SD500-ANM supports Class B and Class A wiring and all 16 notification patterns available on the FACP.

#### SD500-SDM

A two-wire interface module that allows an FACP to interface with and monitor two-wire conventional devices. This means you can retrofit an existing building and use existing conventional devices, including two-wire smoke detectors and devices with dry contacts, such as pull stations and heat detectors. The SD500-SDM transmits the status condition (normal, open, or alarm) of one full zone of two-wire devices to the FACP. The SD500-SDM supports Class B and Class A wiring.

#### SD500-LIM

A line isolator module that isolates a short circuit wiring fault on an SLC loop. When a short occurs on the SLC loop, it is detected as a trouble but all of the SLC devices protected by a SD500-LIM will continue to operate.



SD500-LIM

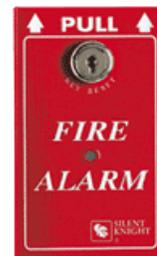
#### SD500-LED

An LED driver module that connects to the SLC loop and is capable of driving 80 LEDs. IntelliKnight FACP's support up to 40 SD500-LEDs per SLC loop.

### Accessories

#### SD500-PS/SD500-PSDA

The SD500-PS is a single action pull station requiring only one motion to activate the station. The SD500-PSDA is a dual action pull station requiring two motions to activate the station. Both pull stations feature a rugged metal construction and mount in a single gang box.



SD500-PS

#### SD505-DTS-2

A remote test switch for use with the SD505-DUCTR that provides remote key operated test function and annunciation of detector alarm.

#### SD505-6SB

A 6" mounting base adds an audible output function to SD505-APS, SD505-AIS, and SD505-AHS. The SD505-6SB can be used as a single station, multi-station, or as a system sounder.

#### SD505-6RB

A 6" mounting base with one Form C relay contact. The SD505-6RB lets you control a wide variety of normally open and normally closed applications, including elevator recall, door closing, fan operation, and auxiliary notification. Because this relay is addressable, the relay device can be located at any point on the SLC loop.

#### SD505-6IB

A 6" mounting base with a built-in isolator for SD505-APS, SD505-AIS, and SD505-AHS detectors. When the SD505-6IB is connected to the SLC loop, a short, open, or ground fault occurring on the SLC loop is detected as a trouble but all SLC devices continue to operate. SD505-6IB fits under SD505-6AB detector base (included).



SD505-6IB Isolator Base

#### SD505-6AB

A 6" mounting base is for use with SD505-APS, SD505-AIS, and SD505-AHS.

#### SD505-4AB

A 4" mounting base is for use with SD505-APS, SD505-AIS, and SD505-AHS.



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. [www.silentknight.com](http://www.silentknight.com)

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