Farenhyt
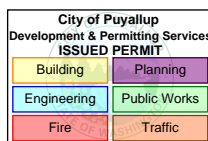
SILENT KNIGHT ®

by Honeywell

Scalable Analog/Addressable Fire Alarm Control System

IFP-2000 / RPS-2000

The IFP-2000 is an intelligent analog/addressable fire alarm control panel (FACP). The basic IFP-2000 panel contains one built in signaling line circuit (SLC), which can support 159 IDP sensors and 159 IDP modules or 127 SD devices per loop. Additional SLC loops can be added using the model 5815XL SLC expander to increase the overall point capacity to a maximum of 636 points per panel.

IFP-2000 has the interconnection capability for up to 16 panels. The system has two modes of operation, Multiple panels covering one larger building, or multiple independent buildings.

RPS-2000 is used in a networked system where at least one IFP-2000 is in the system. It is the same as an IFP-2000 without the display.

IFP-2000 has eight on-board Flexput™ circuits that can be configured for auxiliary power, notification outputs, or for conventional smoke detector inputs (Class A or Class B). The FACP also has a built-in, dual-line digital fire communicator, Form C trouble relay, and two programmable Form C relays. IFP-2000 has powerful features such as detector sensitivity, day/night thresholds, drift compensation, pre-trouble maintenance alert, and calibration trouble alert.

IFP-2000 supports a variety of devices, including RA-2000 remote annunciator, 5824 serial/parallel printer interface module (for event logging system reports), RPS-1000 intelligent power module, and IDP or SD protocol SLC devices.

Features

- Built-in support for up to 159 IDP sensors and 159 IDP modules or 127 SD devices SLC devices. SLC expander will increase overall capacity to 636 points per IFP-2000 panel.
- RPS-2000 is used in a networked system where at least one IFP-2000 is in the system.
- Up to 16 IFP-2000 or RPS-2000 panels can be networked providing up to 10,176 total points.
- Networked panels can be configured to emulate a large virtual system or can be segmented into separate sites for multiple building applications.
- Built-in UL listed digital communicator for remote reporting of system activity and system programming.
- 9.0A of output power is available through 8 sets of terminals for notification and auxiliary applications per panel.
- Supports Class B (Style 4) and Class A (Style 6 or Style 7) configuration for SLC, and SBUS.
- JumpStart auto programming allows for faster set up time by selecting default options for many programming tasks.
- System automatically tests IDP addressable devices.
- 999 software zones and 999 output groups.

Agency Listings

City of New York

IFP-2000

- Flexput™ I/O circuits configurable for auxiliary power, notification outputs, or conventional smoke detector inputs. Notification circuits can be configured as Class A (Style Z) or Class B (Style Y). 2- and 4-wire smoke detectors can be configured as Class A (Style D) or Class B (Style B).
- Two RS-485 buses provide communication to system accessories.
- Built-in USB interface for programming.
- Dedicated Form C trouble relay and two general purpose Form C programmable relays rated at 2.5 amps at 24 VDC.
- 13 preset notification cadence patterns (including ANSI 3.41) and four user programmable patterns.
- Four line LCD display with 40 characters per line.
- Built-in synchronization for appliances from AMSECO, Gentex®, System Sensor®, and Wheelock®.
- Programmable date setting for Daylight Saving Time.
- The IFP-2000 / RPS-2000 can be surface or flush mounted.
- Four programmable function keys.

P/N 350028 Rev G
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Specifications

Physical
Flush Mount Dim: 14.75"W x 25"H x 4"D
(37.5 W x 63.5 H x 10.16 D cm)

Overall Dimensions: 16"W x 26.4"H x 4.65"D
(40.6 W x 67 H x 11.8 D cm)

Weight: 28 lbs. (12.8 kg)

Color: Red

Environmental
Operating Temperature: 32ºF – 120ºF (0ºC – 49ºC)

Humidity: 10% – 93% non-condensing

Electrical
IFP-2000 AC: 120 VAC, 50/60 Hz, 5.0A

IFP-2000HV AC: 240 VAC, 50/60 Hz, 2.5A
Total Accessory Load: 9A @ 24 VDC power-limited

Standby Current: 290 mA

Alarm Current: 530 mA

Battery Charging Capacity: 17 to 55 AH

Battery Size: 18 AH max. allowed in control panel cabinet.
Larger capacity batteries can be housed in RBB or AB-55
accessory cabinet.

Flexput Circuits
Eight circuits that can be programmed individually as:
Notification Circuits: 3A per circuit @ 24 VDC, power-limited
Auxiliary Power Circuits: 3A per circuit @ 24 VDC, power-limited

Initiation Circuit: 100 mA per circuit @ 24 VDC, power-limited

Indicator Lights
General Alarm (Red): On when in alarm

Supervisory (Yellow): On when a supervisory condition exists

System Troubles (Yellow): On when a trouble condition exists

System Silenced (Yellow): On when an alarm, trouble or
supervisory condition has been silenced but not yet cleared

System Power (Green): Off for AC failure; On when power
systems are normal

Telephone
Requirements: FCC Part 15 & Part 68 approved

Jack: RJ31X (two required)

Approvals
NFPA 13, NFPA 15, NFPA 16, NFPA 70, & NFPA 72: Central
Station; Remote Signalling; Local Protective Signalling
Systems; Auxiliary Protected Premises Unit; & Water Deluge
Releasing Service. Suitable for automatic, manual, waterflow,
sprinkler supervisory (DACT non-coded) signalling services
Other Approvals: UL Listed, FM Approved, City of New York,
CSFM, and OSHPD (CA) OSP-0065-10

Approved Releasing Solenoids

Manufacturer	Part number	Rating	Current	Freq
Asco	T8210A107	24 VDC	3 A max	0 Hz
Asco	8210G207	24 VDC	3 A max	0 Hz

Ordering Information

IFP-2000	Intelligent Fire Alarm Control Panel
IFP-2000HV	High Voltage (240VAC) Intelligent Fire Alarm Control Panel
RPS-2000	Intelligent Fire Alarm Control Panel without built in display
RPS-2000HV	High Voltage (240VAC) Intelligent Fire Alarm control Panel without built-in display

SBUS Accessories

RA-2000	Red Remote Annunciator. Four line LCD annunciator with 40 characters per line
RA-2000GRAY	Gray Remote Annunciator Four line LCD annunciator with 40 characters per line
5815XL	Signal Line Circuit (SLC) Expander
RPS-1000	6 amp Intelligent Power Module with 6 flexputs
5496	6 amp intelligent Power Module
5824	Serial/Parallel Printer Interface Module
5880	LED I/O Module
5865-3 & 5865-4	LED Fire Annunciators
5883	Relay Interface Board

IDP Devices
See the specification sheets listed below for a complete
listing of the IDP devices.

350361	Intelligent Device Protocol devices specification sheet

SD Devices
See the specification sheets listed below for a complete
listing of the SD devices.

350360	SD Device Protocol devices specification sheet

Networking Accessories

IFP-RPT-FO	Network repeater board for fiber optic
IFP-RPT-UTP	Network repeater board for twisted pair wire
IFP-RPT-UTP-KIT	Wired twisted pair network repeater card and cabinet kit.
IFP-RPT-FO-KIT	Fiber optic network repeater card and cabinet kit.

Miscellaneous Accessories

5655	Silent Knight Software Suite - 2. Provides programming, upload /download, and event reporting
RBB	Remote Battery Box Accessory Cabinet. Use for backup batteries up to 35 AH. Dimensions: 16" W x 10" H x 6" D (40.64 W x 25.4 H x 15.24 D cm)
AB-55	Remote Battery Box Accessory Cabinet. Use for backup batteries that are 35 AH - 55AH. Dimensions: 20" W x 12" H x 7.5" D (50.8 W x 30.48 H x 19.05 D cm)
SK-SCK	Seismic Compliance Kit

SILENT KNIGHT

by Honeywell

SD505-AHS
Addressable Heat Detector

IntelliKnight® addressable heat detectors combine accurate heat detection with pin-point location ID. An essential combination for any installation.

IntelliKnight heat detectors are an essential component in virtually any IntelliKnight installation. The IntelliKnight panel recognizes each detector by its specific address, so precious seconds are not wasted in determining location of an alarm.

Like other IntelliKnight detector models, the SD505-AHS offers a low profile for pleasing aesthetics.

The IntelliKnight family of detectors has been designed to use a common base, Model SD505-6AB, allowing complete application and placement flexibility. Combine all this with the features you've come to expect from Silent Knight detectors—easy installation, stable operation, RF/transient protection, and vandal-resistant locking—and it adds up to a flexible solution for all your fire protection needs.

Model SD505-AHS Addressable Heat Detector

The SD505-AHS is a heat detector suited to virtually any commercial setting. The SD505-AHS is an absolute temperature device. This means that it responds in alarm if the temperature goes above the trip point (programmed at the panel).

The SD505-AHS provides accurate temperature measurement data to the fire alarm control panel. This heat detector is particularly suited to environments where smoke detectors cannot be used because of the presence of steam or cooking fumes, such as in a kitchen.

Operation

The SD505-AHS unit is made up of an externally mounted thermistor with a specially designed cover that protects the thermistor while allowing maximum air flow. The thermistor reads the temperature from the air it takes in. It then transmits a signal representing the temperature to the IntelliKnight panel.

If the temperature exceeds the trip point (programmed at the panel), an alarm occurs. The status LED lights continuously during the alarm period.

Under normal conditions, the status LED blinks approximately every 15 seconds, indicating that the head is communicating with the loop.

Features

- Low profile, 2 inches, including base
- Absolute temperature device
- Simple and reliable addressing
- Uses digital communication protocol
- The SD505-AHS is UL Listed and meets the requirements outlined in NFPA 72 Inspection Testing and Maintenance, Chapter 7.
- CFSM listed
- MEA listed
- FM approved

SD505-AHS Heat Detector

Specifications

Operating Voltage:	17 to 41 VDC
Current Consumption:	
Standby:	.55 mA
Alarm:	.55 mA
Detection Temperature Range:	135°F to 150°F (57°C TO 65°C)
Ambient Temperature:	32ºF to 120ºF (0ºC to 49ºC)
Mounting:	4" SQR, 4" OCT Single gang mud ring
Rated Spacing:	70' between sensors on smooth ceilings.
Compatible Bases: (Sold Separately)	SD505-6AB SD505-6SB SD505-6IB SD505-6RB

Model SD505-AHS
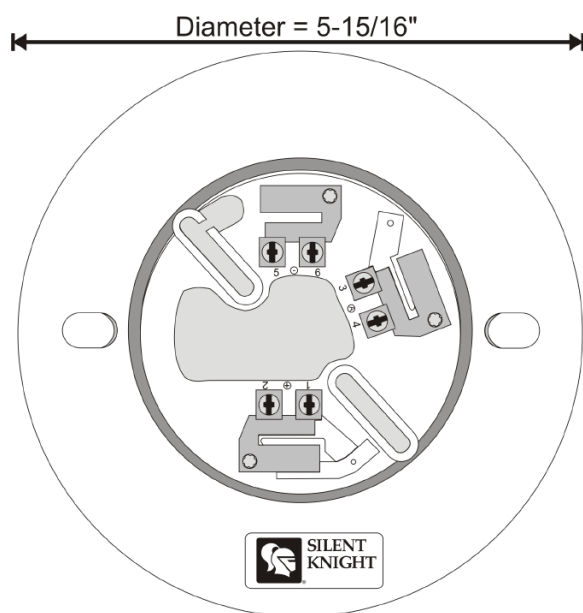# Addressable Heat Detector

Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable heat detector Silent Knight SD505-AHS. The combination detector head, and twist-lock base, shall be UL® listed compatible with Silent Knight's IntelliKnight fire alarm control panels.

The base shall permit direct interchange with Silent SD505-APS Photoelectric Smoke Detector, or SD505-AIS Ionization Smoke Detector. Base shall be the appropriate twist-lock base SD505-6AB.

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

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field removable when not required.

Voltage and RF/transient suppression techniques shall be employed to minimize false alarm potential.

Diameter = 5-15/16"

Model SD505-6AB Detector Base
(Front View)

Diameter = 3-15/16"

DO NOT PAINT

Height = 2 inches, including base

Model SD505-AHS Detector Head
(Front View)

Farenhyt

**Analog/Addressable
Photoelectric Smoke Detector**

SD505-APS

In addition to accurately detecting a smoldering fire, each SD505-APS photoelectric detector has a unique address, which is recognized by the FACP.

The SD505-APS compensates automatically for contamination in the environment. Detector calibration test viewing is simple—even from a remote site. The SD505-APS offers a low profile installation and uses the model SD505-6AB base, compatible with other detectors in the series, allowing for complete application and placement flexibility. Like other Farenhyt smoke detectors, the SD505-APS offers easy installation, stable operation, RF/transient protection, and vandal-resistant locking.

Specifications

Operating Voltage:	17-41 VDC
Current Consumption:	
Standby:	.55 mA
Alarm:	.55 mA
Operating Temperature:	32°F to 120°F (0°C to 49°C)
Relative Humidity:	85% noncondensing
Sensitivity:	0.88% - 3.56% FT
Air Velocity:	0 - 300 FPM

Features

- Low profile, 2 inches, including base
- Simple and reliable addressing without mechanical switches
- Automatic compensation for sensor contamination
- Built-in fire test feature
- Simple detector calibration can be viewed through the control panel or remotely through a Windows™ based computer. (Windows™ software required for remote viewing.)
- Vandal-resistance locking features
- Field cleanable

Agency Listings

MEA
284-91-E
Vol III

SD505-APS

Approvals

- UL listed, meets NFPA 72
- CSFM 7272-0559:129
- MEA 284-91-E Vol lll
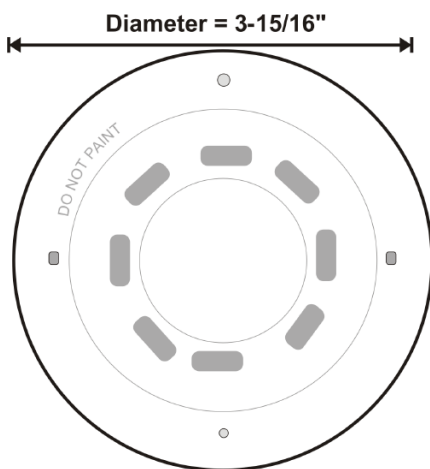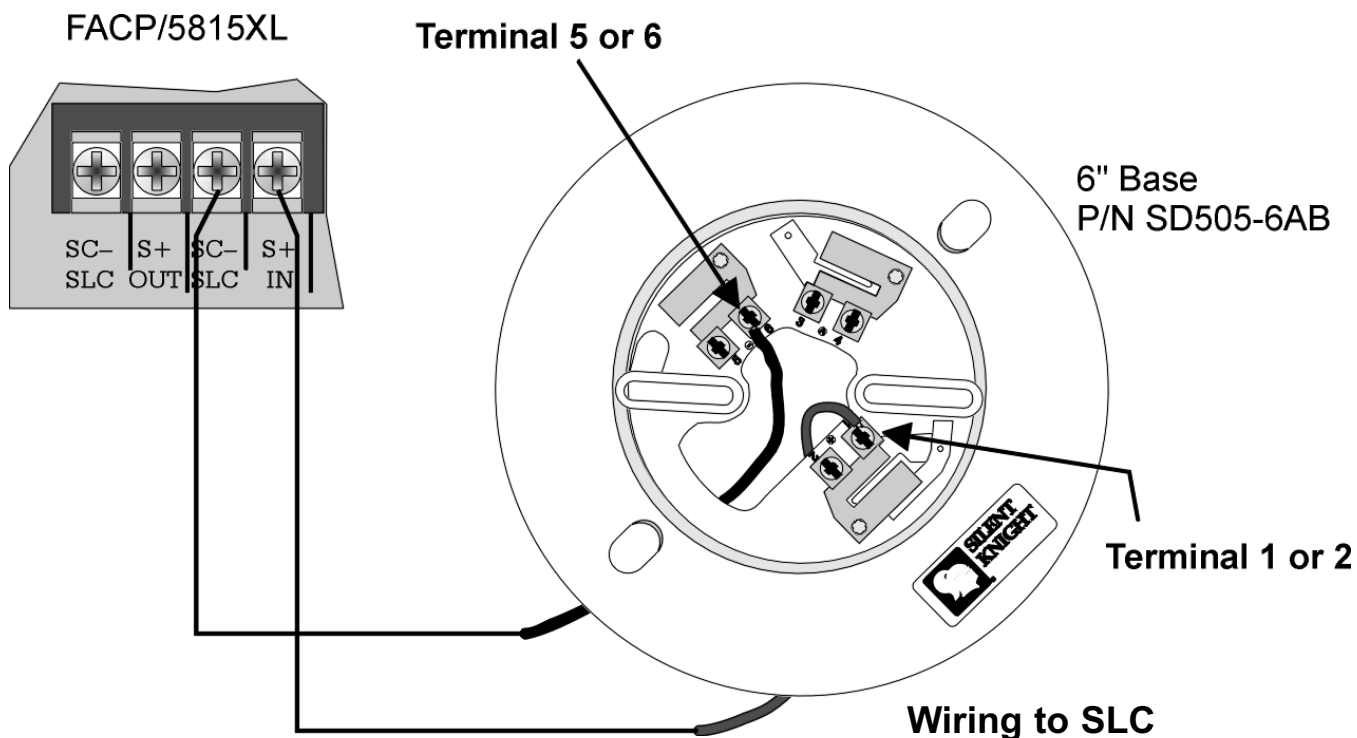- FM Approved

Ordering Information

- SD505-APS

Photoelectric Smoke Detector head

Compatible Bases

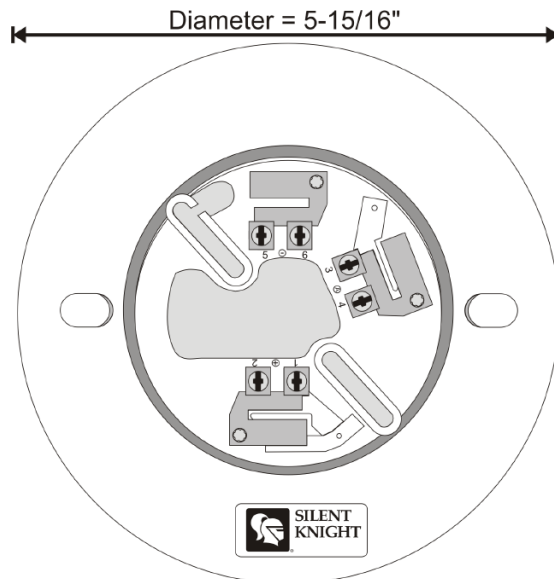- SD505-6AB
- SD505-6IB
- SD505-6RB
- SD505-6SB

FACP/5815XL

Terminal 5 or 6

**6" Base
P/N SD505-6AB**

SC− | S+ | SC− | S+
SLC | OUT | SLC | IN

Terminal 1 or 2

Wiring to SLC

Diameter = 3-15/16"

DO NOT PAINT

Diameter = 5-15/16"

**Height = 2 inches,
including base**

Model SD505-APS

(Top View)

**Model SD505-6AB
Detector Base
(Top View)**

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Made in the U.S.A.

Honeywell

SILENT KNIGHT

SD500-ARM

Addressable Relay Module

The SD500-ARM is an addressable device that adds two Form C contacts to the Farenhyt addressable system. The contacts are rated at 2.0 amps @ 30 VDC or .6 amp @ 120 VAC.

The SD500-ARM allows you to control a wide variety of normally open and normally closed applications, including elevator recall, door closing, fan operation, and auxiliary notification. And, because the relay module is addressable, these applications can be located at any point in the signaling line circuit.

COMPATIBILITY

The SD500-ARM is compatible with the following Honeywell Silent Knight FACPs:

6820: Addressable fire alarm control panel with up to 1,110 addressable points

6820EVS: Addressable fire alarm control panel with an emergency mass notification system, up to 1,110 addressable points

**6808:** Addressable fire alarm control panel with up to 198 addressable points

6700: Addressable fire alarm control panel with up to 100 addressable points

5820XL: Addressable fire alarm control panel

5820XL-EVS: Addressable fire alarm control panel with an emergency communication systems

5808: Addressable fire alarm control panel

5700: Addressable fire alarm control panel

FRONT VIEW
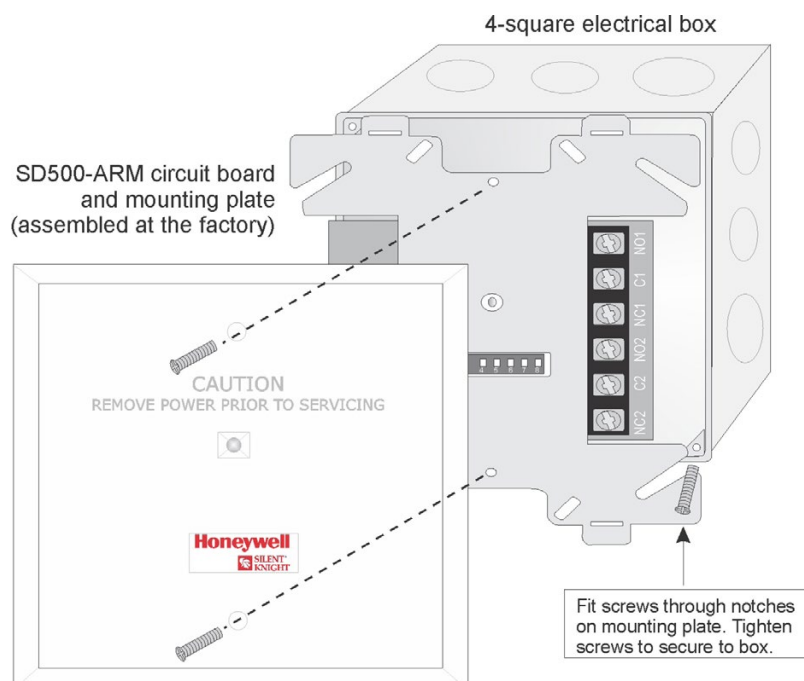
CAUTION
REMOVE POWER PRIOR TO SERVICING

Honeywell
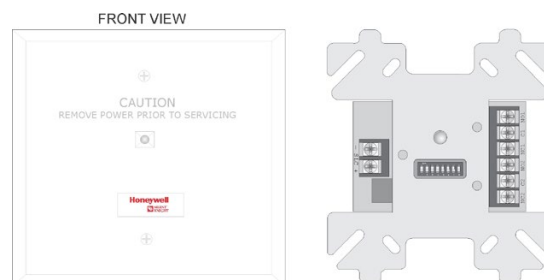
SD500-ARM

FEATURES & BENEFITS

- Two sets of Form C contacts. (Double pull/Double Throw relays)

- Contacts are rated at 2A @ 30 VDC or .6A @ 120 VAC.

- Up to 127 relays can be used on each SLC loop.

- Relay programming is completely flexible— can be mapped to zone conditions.

- Polling LED visible through cover plate.

- UL listed, complies with NFPA 72.

SD500-ARM Technical Specifications

4-square electrical box

SD500-ARM circuit board
and mounting plate
(assembled at the factory)

CAUTION
REMOVE POWER PRIOR TO SERVICING

Honeywell
SILENT KNIGHT

NO1
C1
NC1
NO2
C2
NC2

Fit screws through notches
on mounting plate. Tighten
screws to secure to box.

TYPICAL MOUNTING FOR SD500-ARM

SPECIFICATIONS

PHYSICAL:
Mounting: 4" square

ENVIRONMENTAL
Operating Temperature: 32°F to 120°F (0°C to 49°C)
Humidity: 0 to 93% relative humidity (non condensing)

ELECTRICAL:
Standby Current: .55 mA
Alarm Current: .55 mA
Contact Rating: Form C
2A @ 30VDC or .6A @ 120VAC

ORDERING INFORMATION
SD500-ARM: Addressable relay module

AGENCY LISTINGS AND APPROVALS
UL Listed
CSFM
MEA 429-92-E, Vol 9
FM approved

For more information
Learn more about Honeywell Silent Knight and other products by visiting
www.silentknight.com

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Honeywell
SILENT KNIGHT