Project:

Galt Joint Union Elementary School District Greer Elementary School Site Work for Portable Classrooms



REQUESTS FOR INFORMATION				
Item		Response		
RFI #	Subject	Response		
1	Can you please provide Fire Alarm AS BUILTS or the model number or photo of at least one of the fire alarm addressable devices? (Smoke or Heat detector).	Attached to these responses are cutsheets of Fire Alarm Devices installed on the campus.		
2		This is inaccurate, the plans do indicate exact part numbers to provide on sheet E3.2. We are using SK devices.		
3	The scope of work indicates demolition and off haul of the existing portables. Is there a HAZMAT report for these (2) buildings?	There currently is not a Hazmat Report for these buildings / The District will provide before construction.		
4	Can you please provide the engineer's estimate for this project or advise if it will be announced through an addendum?	The Cost Estimate for this project was \$318,849.00		
5	Safety - fencing, etc.	The Contractor will be responsible for providing security fencing around the area of work and scheduling appropriate access during school hours		

REQUESTS FOR INFORMATION				
	Item	Response		
RFI #	Subject	Response		
6	Special Conditions are referenced in contract documents but not included. Please provide the Special Conditions if they are required.	There are no Special conditions.		
7	Please provide the geotechnical report if it is available.	A Geotechnical report was not required for this project.		
8	Please provide the asbestos and lead paint hazardous materials report if it is available.	District will provide this before construction begins.		
9	Please confirm American Modular Systems will be installing the new portable classroom buildings on site.	Correct, AMS will install new modular buildings on site.		
10	The Agreement within the District's issued Bid Packet has the contract amount written as \$558,000. Please confirm this is a typographical error.	This was a typo in the contract.		
11	The Agreement within the District's issued Bid Packet is missing pages. Please include a full copy of the agreement for this project.	These pages are not missing.		
12	No insurance limits are specified. Please specify insurance limits.	This is in the bidding packet - 11.1.6 - Builders Risk Insurance		
13	No retention amount is specified. Please specify retention amount.	No retention will be required.		

REQUESTS FOR INFORMATION				
	Item	Response		
RFI #	Subject	Response		
14	The payment and performance bond forms are missing from the bid documents. Please provide.	Will be provided to the successful bidder to be returned with a signed contract.		
15	The Workers' Compensation Certificate is missing from the bid documents. Please provide.	Will be provided to the successful bidder to be returned with a signed contract.		
16	The escrow agreement form is missing from the bid documents. Please provide.	Escrow agreement - Not applicable		
17	The criminal history clearance form is missing from the bid documents. Please provide.	Will be provided to the successful bidder to be returned with a signed contract.		

# 6820EVS

### Intelligent Fire Alarm Control Panel with Emergency Voice System

# The 6820EVS panel and accessories provide features to meet the requirements for Mass Notification Systems as described in UL 2572.

The 6820EVS is an intelligent addressable Fire Alarm Control Panel combined with an Emergency Voice System (EVS) and are direct replacements for the 5820XL-EVS FACP. When the EVS features are enabled, they are integrated with the fire alarm and voice evacuation functions of the control panel.

The emergency voice system operations include an onboard supervised microphone, All-call and non-active call buttons can quickly select all active or non-active output groups. The system also allows for emergency messages over fire.

The 6820EVS FACP has one built-in signaling line circuit (SLC), which can support 159 SK detectors and 159 SK modules, or 127 SD protocol devices. Additional SLC loops can be added for a maximum of 1110 (SK) or 635 (SD) points per panel.

The built-in digital alarm communicator/transmitter (DACT) is dual technology, IP and POTS. The POTS transmits system status (alarms, troubles, AC loss, etc.) to a Central Station via the public switched telephone network. The IP communicator's internet monitoring capability sends alarm signals over the Internet saving the monthly cost of two dedicated business telephone lines. Although not required, the secondary telephone line may be retained providing backup communication over the public switched telephone line. Optional cellular reporting is available.

The 6820EVS has six onboard Flexput<sup>®</sup> circuits that can be configured as notification outputs or auxiliary power. The 6820EVS also has a form-C trouble relay, and two programmable form-C relays, along with powerful features such as drift compensation, pre-trouble maintenance alert, a built-in sensor test to comply with NFPA 72 calibration testing requirements, and a calibration trouble alert.

A common communications and annunciation link allows up to 17 panels to be connected via copper or fiber optic cable. A designated panel is configured as the communicator for all panels in the link for convenient single-point communications.



# FEATURES AND BENEFITS

- Single enclosure for both fire and emergency voice components
- Ability to select EVS messages as priority
  over fire
- 15 Recordable one-minute messages that can be mapped to eight EVS buttons
- Capable of producing 520 Hz tones to meet NFPA 72 requirements
- Support for up to 4 LOCs and 8 addressable amplifiers
- Expandable SLC loops to 1110 (SK) or 635 (SD) point capacity
- Six Flexput circuits for NAC outputs or auxiliary power

- Selectable strobe synchronization for Amseco<sup>3</sup>, System Sensor, Wheelock<sup>3</sup>, and Gentex<sup>8</sup> devices
- Built-in DACT with IP and optional cellular reporting
- Built-in USB interface for quick and easy programming
- JumpStart<sup>®</sup> auto programming reduces installation time
- 999 software zones & 999 output groups for flexible design options
- 23 preset notification cadence patterns (including ANSI<sup>©</sup> 3,41)
- Allows up to 24 SBUS devices
- Four programmable function keys

- Two programmable relays and one fixed trouble relay
- Compatible with SWIFT<sup>®</sup> wireless devices
- Convenient field-upgradeable firmware
- Network support for up to 17 sites
- Network card allows copper network connection with a multi-mode or singlemode fiber connection
- Real-time clock/calendar with automatic daylight savings control
- History file with 1,000 event capacity



### **USER INTERFACE**

#### LED INDICATORS

- 🔹 General Alarm (Red)
- Supervisory (Yellow)
- System Trouble (Yellow)
- System Silenced (Yellow
- System Power (Green)

#### KEYPAD

- 12-key numeric pad
- Acknowledge
- Alarm Silence
- System Reset
- Drill
- F1-F4 Programmable Function Keys

# PROGRAMMING

The 6820EVS system offers several options to simplify and expedite programming. JumpStart<sup>®</sup> auto programming minimizes programming required to start a new system. The built-in keypad, or the remote annunciators give on-site access to current system programming, System programming can also be accomplished using the Windows<sup>®</sup>-based Honeywell Fire Software Suite (HFSS).

## **ORDERING INFORMATION**

6820EVS: Addressable fire alarm control panel, red

#### COMPATIBLE EVS EQUIPMENT

EVS-50W: 50 Watt amplifier

EVS-125W: 125 Watt amplifier

- EVS-100W: 50/100 Watt amplifier
- EVS-100WBU: External backup amplifier
- EVS-INT50W: 50 /Watt internal amplifier

EVS-CE4: Provides 4 additional audio circuits

EVS-RVM: Remote voice module

EVS-SW24: 24 switch expander

EVS-VCM: Network voice control module

EVS-LOC: Local operator console

#### COMPATIBLE SBUS DEVICES

 $6860:\,4x40\,LCD$  remote fire annunciator with four programmable buttons, red

5860: 4x20 LCD remote fire annunciator, gray

5860R: 4x20 LCD remote fire annunciator, red

6855: 4x20 LCD remote fire annunciator, red

5865-3: LED annunciators- display up to 30 LEDs (15 red/15 yellow)

5865-4: LED annunciators- display up to 30 LEDs (15 red/15 yellow). Key switches for silence and reset, and a system trouble LED

5880: LED I/O module with 40 programmable LED outputs and eight supervised dry contact inputs

5883: Relay interface. Provides 10 Form C relays

5824: Serial/Parallel printer interface module for printer connection

#### SK COMPATIBLE ADDRESSABLE DEVICES

**Note:** SKand SD devices cannot be mixed in the same fire alarm system.

SK-ACCLIMATE: Multi criteria photoelectric smoke detector with thermal  $135\,^{\rm oF}$  fixed temperature

SK-BEAM: Reflected beam smoke detector without test feature

SK-BEAM-T: Reflected beam smoke detector with test feature

OSI-RI-SK: Reflected beam smoke detector, SK protocol

SK-CONTROL: Supervised control module

SK-CONTROL-6: Six circuit supervised control module

SK-DUCT: Photoelectric duct smoke detector with extended air speed range

SK-FIRE-CO: Four criteria fire and carbon monoxide detector

SK-FIRE-CO-W: Four criteria fire and carbon monoxide detector, white

SK-HEAT: Fixed thermal detector (135°F)

SK-HEAT-W: Fixed thermal detector (135°F), white

SK-HEAT-ROR: Fixed rate of rise detector

SK-HEAT-HT: Fixed high temperature heat detector (190°F)

SK-HEAT-HT-W: Fixed high temperature heat detector (190°F), white

SK-HEAT-ROR-W: Fixed rate of rise detector, white

SK-ISO: Fault isolator module

SK-MINIMON: Mini monitor module

SK-MONITOR: Monitor module

SK-MONITOR-2: Dual input monitor module

SK-MON-10: 10- input monitor module

SK-PHOTO: Photoelectric smoke detector

SK-PHOTO-W: Photoelectric smoke detector, white

SK-PHOTO-R: Photoelectric detector with remote test capability

SK-PHOTO-R-W: Photoelectric det, with remote test capability, white

SK-PHOTO-T: Photoelectric smoke detector with fixed heat (135°F)

SK-PHOTO-T-W: Photoelectric smoke detector with fixed thermal heat (135°F), white

SK-PTIR-W: Multi criteria photoelectric smoke detector with thermal 135°F fixed temperature, white

SK-PULL-SA Addressable single action pull station

SK-PULL-DA: Addressable dual action pull station

SK-RELAY: Addressable relay module

SK-RELAY-6: Addressable Six relay control module

SK-RELAYMON-2: Addressable Dual relay/monitor module

SK-ZONE: Addressable zone interface module

SK-ZONE-6: Six zone interface module

#### **SK BASES**

B210LP: 6" mounting base B501: 4" Flangeless mounting base B200S: Intelligent sounder base B200S-LF: Low-frequency intelligent sounder base B224RB: Relay base B224BI: Isolator base

#### SD COMPATIBLE ADDRESSABLE DEVICES

**Note:** SK and SD devices cannot be mixed in the same fire alarm system.

SD505-6AB: Addressable 6" base

SD505-6IB: Addressable 6" short circuit isolator base

SD505-6RB: Addressable 6" relay base

SD505-6SB: Addressable 6" sounder base

SD500-AIM: Addressable input module (switch input)

SD500-ANM: Addressable notification module

SD500-ARM: Addressable relay module

SD505-DTS-K: Remote test switch/LED indicator for the SD505-DUCTR

SD505-DUCT: Addressable Duct Smoke Detector

SD505-DUCTR: Addressable Duct Detector housing with relay base

SD505-HEAT: Absolute temperature heat detector. Trip point range from 135°F–150°F (0°C–37°C)

SD500-LIM: Addressable Line isolator module

SD500-MIM: Addressable Mini input monitor module (switch input) SD505-PHOTO: Photoelectric smoke detector

SD500-PS/-PSDA: Addressable Single or dual action pull station

SD500-SDM: Addressable smoke detector module

#### SWIFT WIRELESS DEVICES

**Note:** SWIFT is only compatible with System Sensor (SK) devices. It is not compatible with Hochiki (SD) devices.

WSK-WGI: Wireless gateway

 $\mathsf{WSK}\text{-}\mathsf{PHOTO}\text{:}$  Wireless photoelectric smoke detector with  $\mathsf{B501W}$  base

WSK-PHOTO-T: Wireless photoelectric smoke detector with fixed thermal detection (135°F) and B501W base

W-SYNC: Wireless sync module

WSK-HEAT: Wireless, fixed heat detector (135°F) with B501W base

WSK-HEAT-ROR: Wireless rate-of-rise heat detector and B501W base

WSK-MONITOR: Wireless monitor module

WSK-RELAY: Wireless relay module

WSK-PULL-DA: Wireless pull station

WAV-CRL, WAV-CWL: Wireless AV bases

W-USB: Wireless USB radio/antenna dongle that plugs into the USB port of a PC running SWIFT Tools

SWIFT Tools: Programming and diagnostic utility for the wireless gateway and devices. Available for download from www.farenhyt.com

#### SYSTEM EXPANDERS

6815: SLC Expander for IDP or SK devices 5815XL: SLC expander for SD devices RPS-1000: 6A power supply with 6 Flexput circuits & 2 Form C relays

5496: 6 amp NAC power expander with 4 power-limited output ckts

#### **OPTIONAL COMMUNICATORS**

CELL-CAB-SK: Cellular communicator, metal enclosure w/lock & key

CELL-MOD: Cellular communicator, plastic enclosure

IPGSM-4G: Dual path fire alarm communicator, cellular and/or IP (primary or backup, selectable)

SK-IP -2: Remote reporting via the Internet. Requires a VisorALARM<sup>®</sup> receiver at the central station

#### MISCELLANEOUS ACCESSORIES

SK-NIC: Network Interface Card, Provides a common communications link for the IFP-300

SK-NIC-KIT: Installation Accessory Kit

SK-FML: Fiber-Optic Multi Mode, transmitter and receiver

SK-FSL: Fiber-Optic Single Mode

RBB: Remote battery box accessory cabinet

SK-SCK: Seismic compliance kit used to fasten batteries to the fire panel

#### SOFTWARE SOLUTIONS

SKST: Silent Knight Selection Tool provides the installer or design architect with a Windows®-based software system configuration tool to create a detailed bill of material (BOM) and battery calculations

HFSS: Honeywell Fire Software Suite provides remote and local panel programming, detector status, event history and additional data. Databases can be uploaded/downloaded via the panel's USB port using a flash drive. Requires a PC running Microsoft<sup>®</sup> Windows<sup>®</sup>.

## 6820EVS TECHNICAL SPECIFICATIONS

#### SYSTEM CAPACITY

Intelligent Signaling Line Circuits: 1 (expandable)

Addressable device capacity: 1110 (SK) or 635 (SD)

#### Programmable software zones: 999

Output circuits: 6 (expandable)

SBUS devices: 24 (16 annunciators, 8 LED modules)

LOC units: 4

Addressable amplifiers (total watts): 8 (1000)

#### ELECTRICAL

AC Power: 120VAC, 60Hz, 2.7A

Standby Current: 190 mA

Alarm Current: 250 mA

Flexput Circuits: Terminal block provides connections for (six Class B or three Class A) NACs or auxiliary power. Power-limited, supervised circuitry. Maximum current per circuit: 3 A. Cannot exceed 6A total for all circuits. End-of-line resistor: 4.7k ohm, ½ watt for Class B NAC

**Communication Loop:** Supervised and power-limited, Class A or Class B, 32VDC, 150mA

Two Programmable Relays and One Fixed Trouble Relay: Contact rating: 2.5 A @ 27.4 VDC (resistive), Form C

Battery: Cabinet holds maximum of two 18 AH batteries

Battery Charger Capacity: 7-35 AH

#### PHYSICAL

Dimensions: 21.6" W x 28.1" H x 5.1" D (54.9cm W x 71.4cm H x 13.0cm D)

Weight: 50 lbs (22.7 kg.)

Color: Red

#### TEMPERATURE AND HUMIDITY RANGES

This system meets NFPA requirements for operation at  $0 - 49^{\circ}$ C ( $32 - 120^{\circ}$ F) and at a relative humidity  $93\% \pm 2\%$  RH (noncondensing) at  $32^{\circ}$ C  $\pm 2^{\circ}$ C ( $90^{\circ}$ F  $\pm 3^{\circ}$ F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of  $15 - 27^{\circ}$ C/ $60 - 80^{\circ}$ F.

#### NFPA STANDARDS

The 6820 complies with the following NFPA 72 Fire Alarms Systems requirements: NFPA 13, NFPA 15, NFPA 16, NFPA 70, NFPA 72

Central station; remote Signaling; Local Protective Signaling Systems; Auxiliary Protected Premises Unit; Water Deluge releasing service, Suitable for automatic, manual, waterflow, sprinkler supervisory (DACT non-coded) signaling services

# AGENCY LISTINGS AND APPROVALS

The listings and approvals below apply to the basic 6820 control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

UL Listed: S2766 CSFM: 7165-0559:0500 FDNY: COA# 6249 FM: Approved

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Country of origin: USA

Honeywell Silent Knight

12 Clintonville Road Northford, CT 06472-1610 203,484,7161 www.silentknight.com

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# 5495

Distributed Power Module

The 5495 Distributed Power Module is the most powerful and costeffective power supply available today. It delivers 6 amps of notification apoliance circuit power and built-in synchronization for appliances from System Sensor ",Gentex ", AMSECO ", and Wheelock. The 5495's switch mode power supply design is up to 50% more efficient than competitive linear mode power supplies. Also, ADA retrofits are easier and less expensive with the 5495 because it integrates into current systems without the costly investment in new components.

The 5495 is a 6 amp notification power expander that provides its own AC power connection, battery charging circuit, and backup battery. The 5495 is the costeffective solution for powering notification appliances required by the Americans with Disabilities Act (ADA). The 5495 has built-in ANSI cadence pattern, which can upgrade older control panels that lack cadence capability.

#### **CONNECTION TO LOCAL FIRE CONTROL**

The 5495 may be connected to a local fire control which utilizes Class A or Class B type notification circuits operating between 9 and 32 VDC. The control panel's notification circuit is connected to one of the inputs on the 5495. The control panel's notification circuit end-of-line resistor is also connected across two terminals on the 5495, which provides supervision between the 5495 and the fire control panel. Polarized audible and/or visual notification devices are then connected to the 5495 signal circuits using the 4 7k  $\Omega$  end-of-line resistors provided. Since the 5495 draws very little oower from the control, it is possible to connectione 5495 to each notification circuit on the control panel and still provide full supervision of the notification circuits all the way back to the control panel.

E.

- UELLETERFORMUS of notification power
- Pomercupply 5. al and d vit him de design reduces. damaging heat and man igc i powar up tie 50% more efficiently th mother's / terms
- · Dip switchr Jinton for easy reconfiguration
- 24 VDC filtered output zolt ige

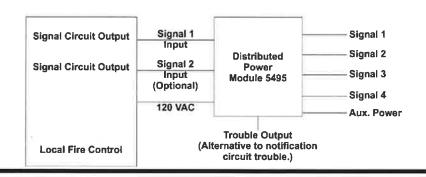
- · Four so wer-limit d. notification outputs; 2 Class A or 4 Chr.; B. or 1 Class A and 2 Class
- Additional continuous. auxilia, popul
- + 3 amps perioutpun 01 201
- · 2 mout 2 Chis Block Allars A

- indicator.
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- · Upenators with moliuphnized UL Listed notification devices
- ANGLOOD AND ADDRESS purpuir expability hull-in



5495

## 5495 Technical Specifications



Model 5495 Block Diagram

#### SUPERVISION

The 5495 supervises a variety of functions including:

- Low AC power
- · Low battery condition
- · Earth ground fault
- Auxiliary output power limit condition.
- EOL supervision trouble or power limited condition at an output

When a trouble condition occurs, the 5495 creates a trouble condition on the host control signal circuits to which it is connected, the 5495 still maintains the ability to be activated by the host control. In addition, the 5495 provides a Form C trouble relay output as an alternative to using the notification circuit trouble.

#### PHYSICAL

**Dimensions:** 12 25'W x 16"H x 3"D (30.88 cm W x 40.64 cm H x 7.62 cm D)

ENVIRONMENTAL Operating Temperature: 32°F to 120°F (0°C to 49°C) Humidity: 10% - 93% concernsing)

#### ELECTRICAL

AC input: 120 VAC at 2A Output: 24 VDC at 6A Current: Standby 75mA; Alarm 205mA Auxiliary power circuit: 1 Notification circuits: 4 Output configuration:2 Class A (Style Z); 4 Class B (Style Y) (1 Class A & 2 Class B)

#### For more information

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

#### **Honeywell Silent Knight**

12 Clintonville Road Northford, C<sup>+</sup> 064 72 800-328-0103 Amps per output circuit: 3.0 (6.0 amps total) Notification circuit output: Alarm Current (for typical voltages) drawn from main panel's notification appliance circuits.

12 VDC 6.5 mA 24 VDC One input circuit: 15 mA, Both input circuits: 0 mA

#### No. of inputs: 2 Input configuration: 2 Class B or 2 Class A Input voltage range: 9 - 32VDC Battery charging capacity: 35,0AH

#### **INDICATOR LIGHTS**

AC power on : Green Battery trouble: Yellow Ground fault: Yellow Aux trouble: Yellow Output troubles (1-4): Yellow

#### **ORDERING INFORMATION**

5495: Distributed Power Module

#### ACCESSORIES

SK-SCK: Seismic Compliance Kit

#### **AGENCY LISTINGS**

- UE tined.
- CSFM 7300-0559 123
- Most NEPA 72 requirement
- MEA 429-92-E Vol XII
- OSHPD (CA) OSP-0065-10

For a complete tisting of all compliance approvals and certifications, please visit www.silentknight.com.

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For Technical Support, call 800-446-6444



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# SK-DUCT

Intelligent Air Duct Smoke Detector

The SK-DUCT Intelligent air duct smoke detector is used with SK-PHOTOR (included) for detecting smoke and products of combustion present in air moving through an HVAC air handling system. When smoke is detected in a duct, the unit communicates the condition to the Honeywell Silent Knight control panel. The panel, in turn, depending on programming and wiring, turns off fans, blowers, and other devices. The duct housing allows for mounting of SK-RELAY addressable relay module.

The Model SK-DUCT Air Duct Smoke Detector utilizes photoelectric technology for the detection of smoke. It provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial and Industrial applications.

The SK-DUCT is in a heavy duty gray steel back box with a clear cover. It features a pivoting housing that fits both square and rectangular footprints capable of mounting to a round or rectangular duct. It installs quickly and easily.

The unit senses smoke in the most challenging conditions, operating in airflow speeds of 100 to 4000 feet per minute, temperatures of  $-4^{\circ}F$  to 158°F, and a humidity range of 0 to 95 percent (non-condensing).



SK-DUCT

# FEATURES & BENEFITS

- Ver inthe mounting sphone square or rectangular configuration
- M: w Cover Umper lign it
- LED atom indication and communication on censor head
- D it us and limits the spread of smoke

- Rugg idistrict block box vith clean plantic cover
- Easy children
- Lirge Erminal
- connaction freis
- Tran long the cover for convenient visual in pection
- Patented slimpling tube installs from front or back of the distoctor with no tools required.
- Available (poll) within houring to accommodats mounting of rolay module
- ∍ ULti old

### SK-DUCT Technical Specifications

#### PHYSICAL

(Rectangular): 14.38'(37 cm) L X 5'(12.7 cm) W X 2.5'(6.6 cm) D (Square): 7.75'(19.7cm) L x 9'(22.9cm) W x 2.5' D (6.35cm)

Weight: 1\_6lb (0\_73kg)

**ELECTRICAL** (using SK-Photo or SK-PhotoR) **Operating Voltage:** 15–32 VDC

Standby Current: 300  $\mu A \circledast 24$  VDC max ( Alarm Current: 6.5 mA  $\circledast$  24 VDC max (with LED on)

#### ENVIRONMENTAL

**Operating Temperature:** -4°F – 158°F (-20°C – 70°C)

Humidity: 0% - 95% (non-condensing)

#### **AIR VELOCITY**

100 to 4000 ft/min: (0.5 - 20.3 m/sec.)

#### **ORDERING INFORMATION**

**SK-DUCT**: Intelligent non-relay duct smoke detector

SK-PHOTO: Addressable Photo Detector SK-PHOTOR: Addressable Photo Detector with remote test capability (included with SK-Duct) SK-RELAY: Addressable Relay Module, must be added if relay function is required, (fits in housing)

#### ACCESSORIES

DST1: Metal Sampling Tube Duct Width up to 1' DST1.5: Metal Sampling Tube Duct Widths 1' - 2' DST3: Metal Sampling Tube Duct Widths 2' - 4' DST5: Metal Sampling Tube Duct Widths 4' - 8' DST10: Metal Sampling Tube Duct Widths 8' - 12' DH4000E-1: Weatherproof Enclosure ETX: Metal Exhaust Tube Duct width 1' RA100Z: Remote LED Annunciator DC0IL: Duct accessory coil, required if using with

SK-PHOTO and not SK-PHOTOR (included) with SK-DUCT

RTS151: Magnetic Remote Test station RTS151KEY: Key-Activated Remote Test station M02-04-00 Test Magnet P48-21-00 Replacement End Cap for Vietal Sampling Tube APA151: Remote annunciator with piezo alarm

#### **IMPORTANT NOTES:**

• The use of either RTS151 or RTS151KEY requires the installation of an accessory coil, DCOIL, sold separately. Please refer to the SK-DUCT installation instructions for more information

 The RTS151/RTS151KEY test coil circuit requires an external 24VDC power supply which must be UL listed.

ACCESSORY CURRENT LOADS AT 24VDC					
Device	Standby	Alarm			
RA100Z	OmA	12mA Max			
RTS151	CmA	12mA Max			
RTS151KEY	12mA	12mA Max			

#### COMPATIBILITY

The SK-DUCT is compatible with the following Honeywell Silent Knight fire alarm control panels: 6820: Addressable fire alarm control panel 6820EVS: Addressable fire alarm control panel with an emergency mass notification system, 6808: Addressable fire alarm control panel 6700: Addressable fire alarm control panel 5700: Addressable fire alarm control panel 5808: Addressable fire alarm control panel 5808: Addressable fire alarm control panel 5808: Addressable fire alarm control panel 5820XL: Addressable fire alarm control panel 5820XL-EVS: Addressable fire alarm control panel with an emergency mass notification system, For a complete listing of all compliance approvals and certifications, please visit www.sitentknight.com.

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#### **Honeywell Silent Knight**

12 Clintonville Road Northford, CT 06472 800-328-0103

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# **SK-PHOTO-W SERIES**

Addressable Photoelectric Smoke Detectors

The Silent Knight<sup>®</sup> SK-PHOTO-W Series feature a modern design and expanded color options support a variety of contemporary aesthetic demands. In addition, each detector is constructed for exceptional installation and maintenance efficiency.

The SK-PHOTO-W Series intelligent plug-in smoke detectors are designed for both performance and aesthetics, and are direct replacements for the SK-PHOTO Series detectors. A new modern, sleek, contemporary design and enhanced optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards. The SK-PHOTO-W Series detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. Point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for selective maintenance when chamber contamination reaches an unacceptable level. Dual electronic thermistors add 135°F (57°C) fixed temperature thermal sensing on the SK-PHOTO-T-W. The SK-PHOTO-R-W is a remote test capable detector for use with DNR Series duct detector housings.



# FEATURES AND BENEFITS

- Designed to meet UL 1268 7th Edition
- Sleek and stylish contemporary design
- Stable communication technique with noise immunity
- Addressable by device
- Rotary, decimal addressing (Refer to the Silent Knight panel manuals for device capacity)
- Two-wire SLC connection
- LEDs blink every time the unit is polled
- 360°-field viewing angle of the visual alarm indicators (two bi-color LEDs); LEDs blink green in Normal condition and turn on

steady red in Alarm

- Integral communications and built-in device-type identification
- 🖲 Remote test feature from the panel
- Built-in functional test switch activated by external magnet
- Walk test with address display (an address of 121 will blink the detector LED 12-(pause)-1)
- Low standby current
- Built-in tamper-resistant feature
- Designed for direct-surface or electricalbox mounting

- 🖲 Sealed against back pressure
- Plugs into separate base for ease of installation and maintenance
- Expanded color options
- SEMS screws for wiring of the separate base
- Optional remote, single-gang LED accessory
- Optional sounder, relay, and isolator bases



#### INSTALLATION

The SK-PHOTO-W Series plug-in intelligent thermal detectors use a separate base to simplify installation, service, and maintenance. Installation instructions are shipped with each detector.

Mount base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep. For a chart of compatible junction boxes, see SK-61045.

**Note:** Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring "T-taps" or branches are permitted for Style 4 (Class "B") wiring.

**Note:** When using relay or sounder bases, consult the SK-ISO installation sheet I56-3627 for device limitations between isolator modules and isolator bases.

#### **OPERATION**

Each SK-PHOTO-W Series detector uses one of the panel's addresses (total limit is panel dependent) on the Signaling Line Circuit (SLC). It responds to regular polls from the control panel and reports its type and the status. If it receives a test command from the panel (or a local magnet test), it stimulates its electronics and reports an alarm. It blinks its LEDs when polled and turns the LEDs on when commanded by the panel. The SK-PHOTO-W Series offers features and performance that represent the latest in smoke detector technology.

#### **PRODUCT LINE INFORMATION**

Note: "-IV" suffix indicates ivory color.

SK-PHOTO-W: White, low-profile photoelectric sensor

**SK-PHOTO-T-W:** White, same as SK-PHOTO-W but includes a built-in 135°F (57°C) fixed-temperature thermal device

**SK-PHOTO-R-W:** White, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW

B300-6: White, standard flanged low-profile mounting base

B300-6-BP: Bulk pack of B300-6, package contains 10

**B300-6-IV:** Ivory, standard flanged low-profile mounting base **B501-WHITE:** White, standard European flangeless mounting base

**B501-BL:** Black, standard European flangeless mounting base **B501-IV:** Ivory, standard European flangeless mounting base **B501-WHITE-BP:** Bulk pack of B501-WHITE, contains 10

B200S-WH: White, Intelligent, programmable sounder base

B200S-IV: Ivory, Intelligent, programmable sounder base

**B200SR-WH:** White, Intelligent sounder base for retrofit applications **B200SR-IV:** Ivory, Intelligent sounder base for retrofit applications

B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base

**B200S-LF-IV:** Ivory, Low Frequency Intelligent, programmable sounder base

**B200SR-LF-WH:** White, Low Frequency Intelligent sounder base for retrofit applications

**B200SR-LF-IV:** Ivory, Low Frequency Intelligent sounder base for retrofit applications

B224RB-WH: White, plug-in System Sensor® relay base

B224RB-IV: Ivory, plug-in System Sensor relay base

B224BI-WH: White, plug-in System Sensor isolator detector base

B224BI-IV: Ivory, plug-in System Sensor isolator detector base

#### ACCESSORIES

TR300: White, replacement flange for B210LP or B300-6 bases

TR300-IV: Ivory, replacement flange for B210LP or B300-6 bases

**RA100Z(A):** Remote 3 – 32 VDC LED annunciator, mounts to a U<sub>s</sub>S. single-gang electrical box, for use with B501 and B300-6 bases only

M02-04-00: Test magnet

M02-09-00: Test magnet with telescoping handle

CK300: White, detector color kit, pack of 10

CK300-IV: Ivory, detector color kit, pack of 10

CK300-BL: Black, detector color kit, pack of 10

# **SK-PHOTO-W SERIES TECHNICAL SPECIFICATIONS**

#### PHYSICAL/ENVIRONMENTAL

#### Sensitivity:

- UL Applications: 0.5% to 4.0% per foot obscuration.
- ULC Applications: 0,5% to 3,5% per foot obscuration

**Size:** 2.0" (5.3 cm) high; base determines diameter

- B300-6:61" (15.6 cm) diameter
- B501: 4" (10.2 cm) diameter

For a complete list of detector bases, see SK-61045.

#### Shipping weight: 3.4 oz. (95 g)

#### Operating temperature range:

- SK-PHOTO-W: 32°F to 122°F (0°C to 50°C)
- SK-PHOTO-T-W: 32°F to 100°F(0°C to 38°C)
- SK-PHOTO-R-W installed in a DNR/DNRW: -4°F to 158°F (-20°C to 70°C)

UL/ULC Listed Velocity Range: 0-4000 ft/ min. (1219.2 m/min.), suitable for installation in ducts

**Relative humidity:** 10% – 93% noncondensing

**Thermal ratings:** fixed-temperature set point 135°F (57°C), rate-of-rise detection 15°F (8.3°C) per minute, high temperature heat 190°F (88°C)

#### **ELECTRICAL SPECIFICATIONS**

Voltage range: 15 - 32 volts DC peak

Standby current (max. avg.): 200µA @ 24 VDC (one communication every 5 seconds with LED enabled)

Max current: 4.5 mA @ 24 VDC ("ON")

# DETECTOR SPACING AND APPLICATIONS

Silent Knight recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceiling, space detectors 30 feet (9.1m). For specific information regarding detector spacing, placement, and special applications refer to NFPA 72. A System Smoke Detector Application Guide, document A05-1003, is available at www.systemsensor.com.

#### AGENCY LISTINGS AND APPROVALS

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. *Consult factory for latest listing status.* 

- UL Listed: S6173
- FM Approved
- CSFM: 7272-0559:0512

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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.

Country of origin: Mexico

#### Honeywell Silent Knight

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