

# FIRE ALARM SYSTEM SUBMITTAL

## PUYALLUP PUBLIC SAFETY BUILDING

1015 39TH AVENUE SOUTHEAST,  
PUYALLUP, WA 98374

INSTALLING CONTRACTOR:

**Range Electric**

Everon Project # 300691037

06/30/2025

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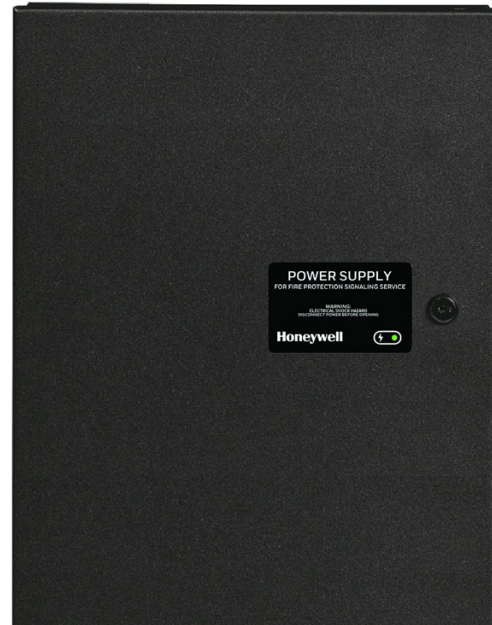
# HPF-PS6/HPF-PS10 Series 6/10 Amp, 24 Volt Power Supplies

## General

The HPF-PS Series is a remote power supply line from Honeywell and is a direct replacement for the PSE and FCPS Series. The HPF-PS6(B)(E) is a 6 amp and the HPF-PS10(B)(E) is a 10 amp, remote power supply with battery charger that may be connected to any 12 or 24 volt fire alarm control panel (FACP) or used as a stand-alone power supply. The HPF-PS Series provides 24 VDC power for NACs (notification appliance circuits) configured as either Class B or Class A (requires the ZNAC-PS option card) with multiple sync protocol options. The HPF-PS Series also provides auxiliary power, constant or resettable, suited for detectors, annunciators, door holders, and other fire alarm system peripherals. The HPF-PS Series cabinet can hold two 7 AH or 18 AH batteries and can charge up to 33 AH batteries in a separate cabinet. The HPF-PS6E and HPF-PS10E are models rated for 240V operation.

## Features

- Up to five (6 amp model) or seven (10 amp model) independently-configurable, power-limited output circuits for:
  - Class B and/or Class A NACs
  - Class B and/or Class A resettable or non-resettable 24V auxiliary power
  - door holder power
- Converts from Class B to Class A wiring without losing any outputs using the ZNAC-PS converter card (sold separately)
- Optimal for powering four-wire smoke detectors, annunciators, and other system peripherals requiring regulated power
- Configurable for ANSI® Temporal 3 or Temporal 4 coded output
- UL-Listed NAC synchronization using System Sensor®, Wheelock®, Gentex®, or AMSECO® appliances
- Synchronization can be triggered from FACP NAC/remote sync outputs, cascaded power supply, or a control module, single or multi, which may be housed within the power supply cabinet
- Ability to cascade up to four power supplies
- Two (6 amp model) or three (10 amp model) fully-isolated input/control circuits which can be programmed to any output
- Two Form C normally-closed trouble relays for AC Trouble and General Trouble, Ground Fault relay available on Canadian models only
- 6 or 10 amp full load output, respectively, with 3 A maximum/circuit
- Individual NAC power and trouble LEDs for diagnostic efficiency
- Trouble history modes for diagnostic support
- Wide range end-of-line supervision value (normal: 2K-27K ohms)
- Selectable earth fault detection (enable or disable)
- AC trouble report delay timer
- Completely configurable via onboard DIP switches, no extra software required
- Self-contained in compact, locking cabinet constructed of heavy gauge steel with a corrosion-resistant powder coat chip and scratch-resistant finish
- Cabinet designed with ten double knockouts and a removable door for ease of installation and wiring
- Includes integral battery charger capable of charging up to 33 AH batteries
- Cabinet can house two 7 AH or 18 AH batteries



- Battery charger may be disabled via DIP switch for applications requiring larger batteries and external battery charger
- Removable terminal blocks accommodate up to 12 AWG (3.1mm<sup>2</sup>) wire
- Works with any UL 864 FACP which utilizes an industry-standard reverse-polarity notification circuit
- Optional devices include addressable control, monitor, and relay modules and power-supervision relay (EOLR-1)

## Standards and Codes

The HPF-PS Series comply with the following standards:

- **NFPA 72** National Fire Alarm Code
- **UL 864** Standard for Control Units for Fire Alarm Systems (NAC expander mode), 10th Edition
- **UL 1481** Power Supplies for Fire Alarm Systems
- **IBC 2009** (when using SEISKIT-MULTI-1)
- **CBC 2007** (when using SEISKIT-MULTI-1)

## 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:** S24562 (HPF-PS/E Series), S635, S674 (PSE Series, discontinued)
- **ULC Listed:** S24562 (HPF-PS Series), S635 (PSE-6C/PSE-10C discontinued)
- **CSFM Approved:** 7315-1637:0505 (HPF-PS Series), 7315-0028:0513 (PSE Series, discontinued)
- **FDNY COA:** 2022-TMCOAP-002231-AMND (HPF-PS Series), 2021-TMCOAP-001761-CERT (PSE Series, discontinued)
- **FM Approved**

## Primary (AC) Power:

- **HPF-PS6(B):** 120 VAC, 50/60 Hz, 5.0A maximum
- **HPF-PS10(B):** 120VAC, 50/60 Hz, 6.2 A maximum
- **HPF-PS6E:** 240 VAC, 50/60 Hz, 2.7A maximum
- **HPF-PS10E:** 240 VAC, 50/60 Hz, 3.5A maximum
- **Wire Size:** #12-14 AWG with 600 V insulation

## Command Input Circuit:

- **Trigger Input Voltage:** 9 to 32 VDC
- **Trigger Current:** 2.0 mA (16 - 32 V); Per Input: 1.0 mA (9 - 16 V)

## Trouble Contact Rating: 4 A at 24 VDC

## Output Circuits:

- 24 VDC filtered, regulated
- HPF-PS6(B): TB8-TB9 – 1A Regulated, 3A special applications; TB10-TB12 – 0.3A Regulated, 3A special applications
- HPF-PS10(B): TB8-TB11 – 1.5A Regulated, 3A special applications; TB12-TB14 – 0.3A Regulated, 3A special applications
- 6.0 A (HPF-PS6) or 10.0 A (HPF-PS10) maximum total continuous current for all outputs

## Secondary Power (Battery) Charging Circuit:

- Supports lead-acid batteries only
- Float-charge voltage: 27.6 VDC
- Maximum current charge: 1.5 A
- Maximum battery capacity: 18 AH (inside cabinet)
- Maximum battery charging capacity: 33 AH (external cabinet)

## Physical:

- **Dimensions:** 20.0"H x 14.5"W x 3.5"D (cm: 50.8H x 36.83W x 8.9D)
- **Weight:** with two 7Ah batteries is 24 pounds (10.9 kg), with two 18 AH batteries is 39 pounds (17.7 kg)

## Ordering Information

**HPF-PS6:** 6.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, red

**HPF-PS6B:** 6.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, black

**HPF-PS6E:** 6.0 A, 240 VAC remote charger power supply in a lockable, metal enclosure, red

**HPF-PS10:** 10.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, red

**HPF-PS10B:** 10.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure, black

**HPF-PS10E:** 10.0 A, 240 VAC remote charger power supply in a lockable, metal enclosure, red

**ZNAC-PS:** Optional Class A output converter module

**50152254-001:** Hardware kit for Canadian applications

**17045:** Alternate NOTIFIER lock set

**FCM-1:** Addressable Control Module for one Class B or Class A zone of supervised, polarized Notification Appliances. Notification Appliance Circuit option requires external 24 VDC to power notification appliances.

**FRM-1:** Addressable relay module containing two isolated sets of Form-C contacts, which operate as a DPDT switch

**FMM-1:** Addressable Monitor Module for one zone of normally open dry-contact initiating devices. Includes plastic cover plate and end-of-line resistor. Module may be configured for either a Class B or Class A IDC.

**FDM-1:** Dual Monitor Module. Same as FMM-1 except it provides two inputs for Class B wiring only

**FDRM-1:** Provides two monitored inputs and two Form-C relays. Functions in Class B wiring only.

**XP6-C:** Six-circuit supervised control module

**XP6-R:** Six Form-C relay control module

**EOLR-1:** 12/24 VDC end-of-line relay for monitoring four-wire smoke detector power

**BAT-1270-BP:** Battery, 12 volt, 7.0 AH, 5-pack (two required, see BAT Series data sheet DN-6933).

**BAT-12180-BP:** Battery, 12 volt, 18AH, 2-pack

**BAT-12330:** Battery, 12 volt, 33AH

**SEISKIT-MULTI-1:** Seismic kit for the HPF-PS Series. Includes bracket and hardware for two 7AH or two 18AH batteries.



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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.

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Country of Origin: USA

## NOTIFIER

12 Clintonville Road  
Northford, CT 06472  
203.484.7161  
www.notifier.com





# SK-RELAY

## Intelligent Relay Module

The SK-RELAY is an addressable relay module for use with Honeywell Silent Knight Series fire alarm control panels (FACPs). The SK-RELAY allows a Silent Knight FACP to switch discrete contacts by code command. The relay contains two isolated sets of Form C contacts, which operate as a DPDT switch. No supervision is provided for the notification appliance circuit.

The SK-RELAY contacts can be used for virtually any normally open or normally closed application. Each SK-RELAY is programmed with a unique signaling line circuit (SLC) loop address. When an event occurs that controls the SK-RELAY, the relay is triggered by the FACP.

### INSTALLATION

The SK-RELAY mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor® PN SMB500) is available from Silent Knight.



**SK-RELAY**

## FEATURES & BENEFITS

- Two sets of Form C contacts
- Rotary address switches for fast installation
- Contacts are rated for a variety of amps (see Specifications)
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Relay programming is completely flexible—can be mapped to zone conditions
- Polling LED visible through the cover plate
- SEMS screws for easy wiring
- UL Listed

# SK-RELAY Technical Specifications

## PHYSICAL

4.675" H x 4.275" W x 1.4" D

Shipping Weight: 6.3 oz (196 g)

## ELECTRICAL

Operating Voltage: 15 – 32 VDC

End-of-Line Resistance: Not used

SLC Standby & Alarm Current: .255mA max @ 24VDC (one communication every 5 sec with LED enabled)

## ENVIRONMENTAL

Operating Temperature: 32°F – 120°F (0°C – 49°C)

Humidity: 10% – 93% non-condensing

## RELAY CONTACT RATINGS

3.0A @ 30VDC resistive

0.9A @ 110VDC resistive

0.9A @ 125VAC resistive

0.5A @ 125VAC inductive (PF = .35)

0.7A @ 75VAC inductive (PF = .35)

## ORDERING INFORMATION

→ SK-RELAY: Relay Module

## ACCESSORIES

SMB500: 4" Square Surface Mount Electrical Box

CB500 :Module Barrier

## COMPATIBILITY

The SK-RELAY 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

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

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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 Technical Support, call 800-446-6444.

## For more information

Learn more about Honeywell Silent Knight and other products by visiting [www.silentknight.com](http://www.silentknight.com)

## Honeywell Silent Knight

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

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# SK-MONITOR

## Intelligent Monitor Module

The SK-MONITOR is an addressable monitor module for use with Honeywell Silent Knight Series fire alarm control panels (FACPs). The SK-MONITOR is intended for use in intelligent, two-wire systems, where individual address of each module is selected using the built-in rotary switches.

The SK-MONITOR supports Class A supervised or Class B supervised wiring to the load device. Conventional 4-wire smoke detectors can be monitored for alarm and trouble conditions.

### INSTALLATION

The SK-MONITOR mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor® PN SMB500) is available from Silent Knight.



**SK-MONITOR**

## FEATURES & BENEFITS

- Single contact monitor
- Support for Class A and Class B wiring
- Fully supervised
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- SEMS screws for easy wiring
- UL Listed
- Rotary address switches for fast installation

# SK-MONITOR Technical Specifications

## PHYSICAL

**Height:** 4.5"H x 4" W x 1.25"D (11.4 X 10.2 X 3.1cm) → **SK-MONITOR:** Monitor Module

**Shipping Weight:** 6.3 oz (196 g)

## ELECTRICAL

**Operating Voltage:** 15 – 32VDC

**Current Draw (LED on):** 5.0mA max

**Operating Current (LED flashing):** 375µA

**Standby Current:** 400 µA max @ 24 VDC (one communication every 5 sec with 47K EOL); 550 µA max @ 24 VDC (one communication every 5 sec with EOL <1K)

5.5 mA (with LED latched on)

**LED Current:** 5.5 mA (with LED latched on)

End-of-Line Resistance: 47K Ω

**Initiating Device Circuit Wiring Resistance:** 1,500 Ω max

**SLC Loop Resistance:** 40 Ω max.

## ENVIRONMENTAL

**Operating Temperature:** 32°F – 120°F (0°C – 49°C)

**Humidity:** 10% – 93% non-condensing

## ORDERING INFORMATION

**SK-MONITOR:** Monitor Module

## ACCESSORIES

**SMB500:** 4" Square surface mount electrical box

## COMPATIBILITY

The SK-MONITOR 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

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

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# Indoor Selectable-Output Horns, Strobes, and Horn Strobes for Wall Applications

*System Sensor L-Series audible visible notification products are rich with features guaranteed to cut installation times and maximize profits with lower current draw and modern aesthetics.*

## Features

- Updated Modern Aesthetics
- Small profile devices for Horns and Horn Strobes
- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on wall units: 15, 30, 75, 95, 110, 135, and 185
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Mounting plate for all standard and all compact wall units
- Mounting plate shorting spring checks wiring continuity before device installation
- Electrically Compatible with legacy SpectraAlert and SpectAlert Advance devices
- Compatible with MDL3 sync module
- Listed for wall mounting only

## Agency Listings



**The System Sensor L-Series** offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draws and modern aesthetics. With white and red plastic housings, standard and compact devices, and plain, FIRE, and FUEGO-printed devices, System Sensor L-Series can meet virtually any application requirement.

The L-Series line of wall-mount horns, strobes, and horn strobes include a variety of features that increase their application versatility while simplifying installation. All devices feature plug-in designs with minimal intrusion into the back box, making installations fast and foolproof while virtually eliminating costly and time-consuming ground faults.

To further simplify installation and protect devices from construction damage, the L-Series utilizes a universal mounting plate for all models with an onboard shorting spring, so installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to suit a wide range of application requirements using field-selectable candela settings, automatic selection of 12- or 24-volt operation, and a rotary switch for horn tones with two volume selections.

## L-Series Specifications

### Architect/Engineer Specifications

#### General

L-Series standard horns, strobes, and horn strobes shall mount to a standard 2 x 4 x 1 7/8-inch back box, 4 x 4 x 1 1/2-inch back box, 4-inch octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2 x 4 x 1 7/8-inch back box. A universal mounting plate shall be used for mounting ceiling and wall products for all standard models and a separate universal mounting plate shall be used for mounting wall compact models. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, and 185.

#### Strobe

The strobe shall be a System Sensor L-Series Model \_\_\_\_\_ listed to UL 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

#### Horn Strobe Combination

The horn strobe shall be a System Sensor L-Series Model \_\_\_\_\_ listed to UL 1971 and UL 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

#### Synchronization Module

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectraAlert strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4 1/16 x 4 1/16 x 2 1/8-inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

### Physical/Electrical Specifications

<b>Standard Operating Temperature</b>	32°F to 120°F (0°C to 49°C)
<b>Humidity Range</b>	10 to 93% non-condensing
<b>Strobe Flash Rate</b>	1 flash per second
<b>Nominal Voltage</b>	Regulated 12 DC or regulated 24 DC/FWR <sup>1,2</sup>
<b>Operating Voltage Range</b>	8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)
<b>Operating Voltage Range MDL3 Sync Module</b>	8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal)
<b>Input Terminal Wire Gauge</b>	12 to 18 AWG
<b>Wall-Mount Dimensions (including lens)</b>	5.6" L x 4.7" W x 1.91" D (143 mm L x 119 mm W x 49 mm D)
<b>Compact Wall-Mount Dimensions (including lens)</b>	5.26" L x 3.46" W x 1.91" D (133 mm L x 88 mm W x 49 mm D)
<b>Horn Dimensions</b>	5.6" L x 4.7" W x 1.25" D (143 mm L x 119 mm W x 32 mm D)
<b>Compact Horn Dimensions</b>	5.25" L x 3.45" W x 1.25" D (133mm L x 88mm W x 32mm D)

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.

2. Strobe products will operate at 12 V nominal only for 15 cd and 30 cd.

# UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)				
	Candela	8–17.5 Volts	16–33 Volts	
		DC	DC	FWR
Candela Range	15	88	43	60
	30	143	63	83
	75	N/A	107	136
	95	N/A	121	155
	110	N/A	148	179
	135	N/A	172	209
	185	N/A	222	257

UL Max. Horn Current Draw (mA RMS)				
		8–17.5 Volts	16–33 Volts	
		DC	DC	FWR
Sound Pattern	dB			
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

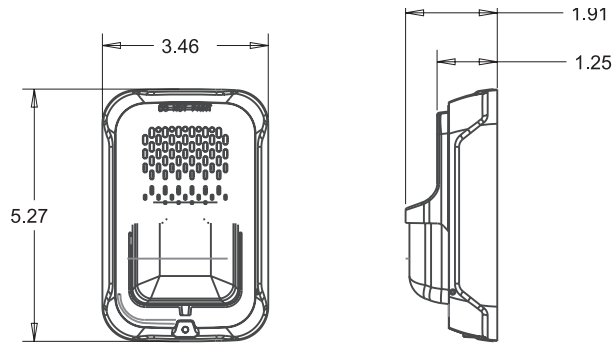
UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe, Candela Range (15–115 cd)									
DC Input	8-17.5 Volts		16-33 Volts						
	15cd	30cd	15cd	30cd	75cd	95cd	110cd	135cd	185cd
Temporal High	98	158	54	74	121	142	162	196	245
Temporal Low	93	154	44	65	111	133	157	184	235
Non-Temporal High	106	166	73	94	139	160	182	211	262
Non-Temporal Low	93	156	51	71	119	139	162	190	239
3.1K Temporal High	93	156	53	73	119	140	164	190	242
3.1K Temporal Low	91	154	45	66	112	133	160	185	235
3.1K Non-Temporal High	99	162	69	90	135	157	175	208	261
3.1K Non-Temporal Low	93	156	52	72	119	138	162	192	242
FWR Input	16-33 Volts								
	15cd	30cd	75cd	95cd	110cd	135cd	185cd		
Temporal High	83	107	156	177	198	234	287		
Temporal Low	68	91	145	165	185	223	271		
Non-Temporal High	111	135	185	207	230	264	316		
Non-Temporal Low	79	104	157	175	197	235	283		
3.1K Temporal High	81	105	155	177	196	234	284		
3.1K Temporal Low	68	90	145	166	186	222	276		
3.1K Non-Temporal High	104	131	177	204	230	264	326		
3.1K Non-Temporal Low	77	102	156	177	199	234	291		

# Horn Tones and Sound Output Data

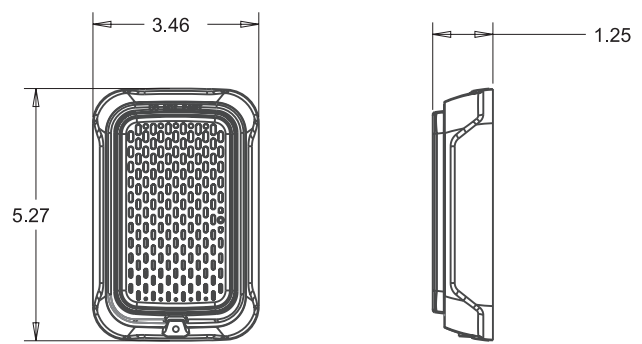
Horn and Horn Strobe Output (dBA)					
Switch Position	Sound Pattern	dB	8–17.5 Volts	16–33 Volts	
			DC	DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83
9*	Coded	High	85	90	90
10*	3.1 KHz Coded	High	84	89	89

\* Settings 9 and 10 are not available on the 2-wire horn strobes.

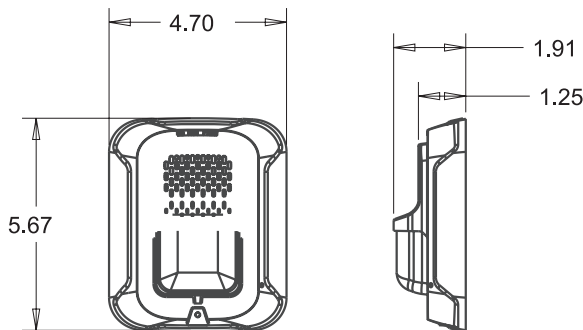
## L-Series Dimensions



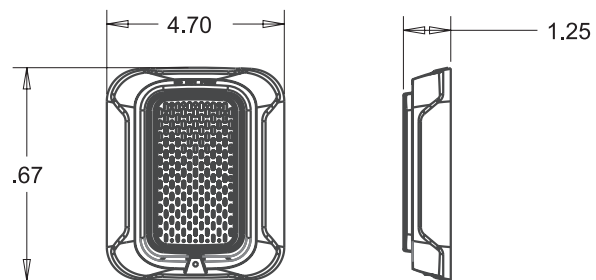
Compact Strobe / Horn Strobe



Compact Horn



Strobe / Horn Strobe



Horn

## L-Series Ordering Information

Model	Description
<b>Wall Horn Strobes</b>	
P2RL	2-Wire, Horn Strobe, Red
P2WL	2-Wire, Horn Strobe, White
P2GRL	2-Wire, Compact Horn Strobe, Red
P2GWL	2-Wire, Compact Horn Strobe, White
P2RL-P	2-Wire, Horn Strobe, Red, Plain
P2WL-P	2-Wire, Horn Strobe, White, Plain
P2RL-SP	2-Wire, Horn Strobe, Red, FUEGO
P2WL-SP	2-Wire, Horn Strobe, White, FUEGO
<b>Wall Strobes</b>	
SRL	Strobe, Red
SWL	Strobe, White
SGRL	Compact Strobe, Red
SGWL	Compact Strobe, White
SRL-P	Strobe, Red, Plain
SWL-P	Strobe, White, Plain
SRL-SP	Strobe, Red, FUEGO
SWL-CLR-ALERT	Strobe, White, ALERT

Model	Description
<b>Horns</b>	
HRL	Horn, Red
HWL	Horn, White
HGRL	Compact Horn, Red
HGWL	Compact Horn, White
<b>Accessories</b>	
TR-2	Universal Wall Trim Ring Red
TR-2W	Universal Wall Trim Ring White
SBBRL	Wall Surface Mount Back Box, Red
SBBWL	Wall Surface Mount Back Box, White
SBBGRL	Compact Wall Surface Mount Back Box, Red
SBBGWL	Compact Wall Surface Mount Back Box, White

### Notes:

All -P models have a plain housing (no "FIRE" marking on cover)  
 All -SP models have "FUEGO" marking on cover  
 All -ALERT models have "ALERT" marking on cover



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 AVDS86503 • 03/17

# L-Series, Indoor Strobes and Horn Strobes

## Indoor Selectable-Output Strobes/Horn Strobes for Ceiling Applications

### General

The L-Series audible visible notification products offer the most versatile and easy-to-use product line of horns, strobes, and horn strobes in the industry. This product includes lower current draws and a modern aesthetic design which reduce installation times and maximize profits. In addition, the L-Series offers white and red plastic housings and wall and ceiling mounting options.

Similar to the entire L-Series product line, the ceiling-mount strobes and horn strobes include a variety of features that increase their application versatility while simplifying the installation. All devices offer a plug-in design so that there is minimal intrusion into the backbox. These features make installations fast and foolproof while eliminating costly and time-consuming ground faults.

To simplify the installation, the L-Series uses a universal mounting plate allowing you to mount the devices to a wide array of backboxes. With an on-board shorting spring, Installers can test wiring continuity before the device is installed.

Installers can also easily adapt devices to suit a wide range of application requirements using the following:

- Field-selectable candela settings
- Automatic selection of 12- or 24-volt operation
- Rotary switch for horn tones with two volume selections



*Ceiling Horn Strobe*

## FEATURES & BENEFITS

- |  |   |   |   |   |
|--|---|---|---|---|
| <ul style="list-style-type: none"> <li>• Listed for ceiling mounting only</li> <li>• Features a plug-in design so that there is minimal intrusion into the backbox</li> <li>• Designed with a tamper-resistant construction</li> <li>• Provides an automatic selection of 12- or 24-volt operation at 15 and 30 candela</li> </ul> | <ul style="list-style-type: none"> <li>• Uses field-selectable candela settings on the following ceiling units:               <ul style="list-style-type: none"> <li>- 15</li> <li>- 30</li> <li>- 75</li> <li>- 95</li> <li>- 115</li> <li>- 150</li> <li>- 177</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Produces horn rated at 88+ dBA at 16 volts</li> <li>• Offers a rotary switch for horn tone and two volume selections</li> <li>• Includes a universal mounting plate for ceiling units</li> </ul> | <ul style="list-style-type: none"> <li>• Contains a mounting plate with a shorting spring feature that checks the wiring continuity before device installation</li> <li>• Compatible with MDL3 sync module</li> </ul> | <ul style="list-style-type: none"> <li>• Supports electrical compatibility with the legacy SpectrAlert and the SpectrAlert Advance devices</li> </ul> |
|--|---|---|---|---|

## Architect/Engineer Specifications

### General

The L-Series ceiling-mount strobes and horn strobes shall mount to any of the following:

- double-gang backbox
- 4-inch octagon backbox
- a standard 4 x 4 x 1 1/2-inch backbox

Two-wire products shall also mount to a single-gang compact 2 x 4 x 1 7/8-inch backbox. A universal mounting plate shall be used for mounting ceiling and wall products. The notification appliance circuit wiring shall terminate at the universal mounting plate.

Also, the L-Series products, when used with the Sync•Circuit Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When it is used with the Sync•Circuit Module, the following occur:

- 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts.
- 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts.

The Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply.

Ceiling strobes and horn strobes shall have the following field-selectable candela settings including:

- 15
- 30
- 75
- 95
- 115
- 150
- 177

### Strobe

The strobe shall be an L-Series Model \_\_\_\_\_ listed to UL Standard 1971 and shall be approved for fire protective service. The strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system.

### Horn Strobe Combination

The horn strobe shall be an L-Series Model \_\_\_\_\_ listed to UL Standard 1971 and UL Standard 464 and shall be approved for fire protective service. The horn strobe shall be wired as a primary-signaling notification appliance and comply with the Americans with Disabilities Act requirements for visible signaling appliances, flashing at 1 Hz over the strobe's entire operating voltage range. The strobe light shall consist of a xenon flash tube and associated lens/reflector system. The horn shall have two audibility options and an option to switch between a temporal three pattern and a non-temporal (continuous) pattern. These options are set by a multiple position switch. The horn on horn strobe models shall operate on a coded or non-coded power supply.

## Synchronization Module

The module shall be a Sync•Circuit model MDL3 listed to UL Standard 464 and shall be approved for fire protective service. The module shall synchronize the L-Series strobes at 1 Hz and synchronize horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single-pair of wires.

The module shall mount to a 4 11/16 x 4 11/16 x 2 1/8-inch backbox. The module shall also control two Style Y (Class B) circuits or one Style Z (Class A) circuit. The module shall synchronize multiple zones. Daisy-chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

### UL Current Draw

Table 1 lists the UL maximum strobe current draw.

Candela	8-17.5 Volts	16-33 Volts	FWR
	DC	DC	
15	87	41	60
30	153	63	86
75	N/A	111	142
95	N/A	134	164
115	N/A	158	191
150	N/A	189	228
177	N/A	226	264

Table 1: UL Maximum Strobe Current Draw (mA RMS)

## UL Current Draw Data

Table 2 lists the maximum UL Current Draw (mA RMS) allowed for 2-Wire Horn Strobes.

DC Input	8-17.5 Volts		16-33 Volts						
	15cd	30cd	15cd	30cd	75cd	95cd	115cd	150cd	177cd
Temporal High	103	167	71	90	143	165	187	217	254
Temporal Low	96	165	54	71	137	161	185	211	249
Non-Temporal High	106	173	71	90	141	165	187	230	273
Non-Temporal Low	95	166	54	71	124	161	170	216	258
3.1K Temp Hi	111	164	69	94	147	163	184	229	257
3.1K Temp Low	103	163	54	88	143	155	185	212	252
3.1K Non-Temporal High	111	172	69	94	144	164	202	229	271
3.1K Non-Temporal	103	169	54	88	131	155	187	217	259
16-33 Volts									
FWR Input	15cd	30cd	75cd		95cd	115cd	150cd	177cd	
Temporal High	107	135	179		198	223	254	286	
Temporal Low	78	101	151		172	199	229	262	
Non-Temporal High	107	135	179		198	223	254	286	
Non-Temporal Low	78	101	151		172	199	229	262	
3.1K Temporal High	108	135	179		200	225	256	289	
3.1K Temporal Low	79	101	150		171	196	229	260	
3.1K Non-Temporal High	108	135	179		200	225	255	289	
3.1K Non-Temporal Low	79	101	150		171	196	229	260	

Table 2 UL Max. Current Draw (mA RMS), 2-Wire Horn Strobe

## Horn Strobe Tones and Sound Output Data

Table 3 lists the horn strobe tones and sound output data.

Switch Position	Sound Pattern	dB	8-17.5 Volts	16-33 Volts	FWR
			DC	DC	
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83

Table 3: Horn Strobe Tones and Sound Output Data



## L-Series Dimensions

Figure 1 illustrates the dimensions for the ceiling-mount horn strobes.

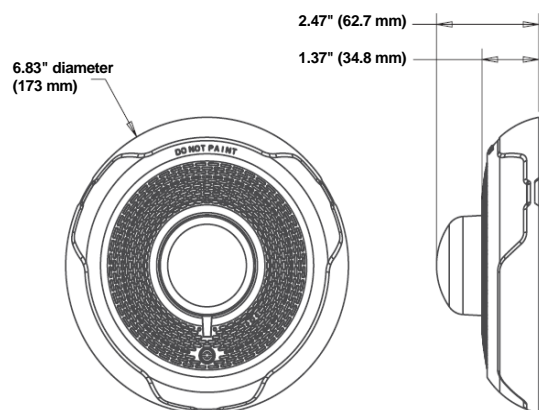


Figure 1 Ceiling-Mount Horn Strobes

## L-Series Dimensions

Figure 2 illustrates the dimensions for the ceiling backbox surface mount backbox.

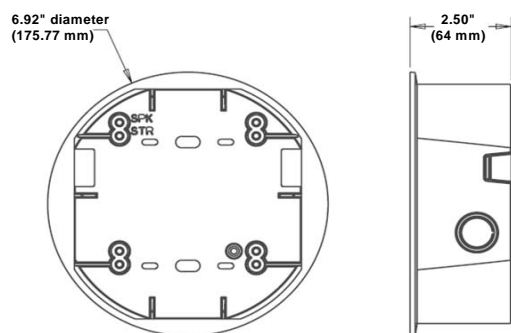


Figure 2 Ceiling-Surface-Mount Backbox

## L-Series Ordering Information

### Ceiling Horn Strobes:

PC2RL: 2-Wire, Horn Strobe, Red

→ PC2WL: 2-Wire, Horn Strobe, White

PC4RL: 4-Wire Ceiling Horn Strobe, Red, FIRE

PC4WL: 4-Wire Ceiling Horn Strobe, White, FIRE

### Ceiling Strobes:

SCRL: Strobe, Red

→ SCWL: Strobe, White

SCWL-CLR-ALERT: Strobe, White, ALERT

## L-Series Dimensions

Figure 3 illustrates the dimensions for the ceiling backbox surface mount backbox.

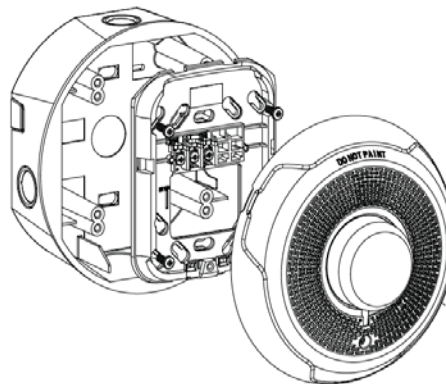


Figure 3 2-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Backbox

## SL Series Dimensions

Figure 4 illustrates the dimensions for the ceiling backbox surface mount backbox.

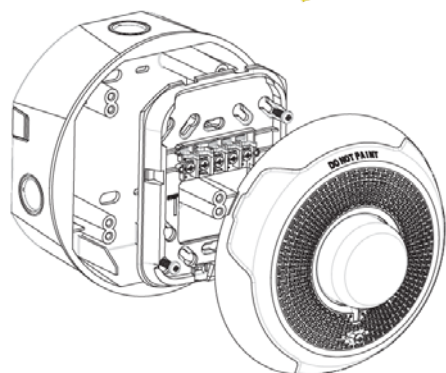


Figure 4 4-Wire Ceiling Mount Horn Strobes with Ceiling Surface Mount Backbox

## L-Series Ordering Information

### Accessories:

TRC-2: Universal Ceiling Trim Ring Red

TRC-2W: Universal Ceiling Trim Ring White

SBBCRL: Ceiling Surface Mount Back Box, Red

SBBCWL: Ceiling Surface Mount Back Box, White



# L-Series, Indoor Strobes and Horn Strobes Technical Specifications

## SYSTEMS

### Temperature Ranges:

**Standard Operating Temperature:** 32°F to 120°F (0°C to 49°C)

**Humidity Range:** 10 to 93% non-condensing

### Voltagess:

**Strobe Flash Rate:** 1 flash per second

**Nominal Voltage:** Regulated 12 VDC or regulated 24 DC/FWR<sup>1</sup>

**Operating Voltage Range<sup>2</sup>:** 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal)

**Operating Voltage Range (MDL3):** 8.5 to 17.5V(12 V nominal) or 16.5 to 33 V(24V nominal)

### Wire Gage:

**Input Terminal Wire Gauge:** 12 to 18 AWG

### Dimensions:

**Ceiling-Mount Dimensions (including lens):** 6.8" diameter x 2.5" high (173 mm diameter x 64 mm high)

**Ceiling-Mount Surface Mount Back Box Skirt Dimensions (SBB CR, SBB CW):** 6.9" diameter x 3.4" high (175 mm diameter x 86 mm high)

### Notes:

1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12 V nominal only for 15 and 30 cd.

## TEMPERATURE AND HUMIDITY RANGES

This system meets NFPA requirements for operation at 0 – 49°C/32 – 120°F and at a relative humidity 93% ± 2% RH (noncondensing) at 32°C ± 2°C (90°F ± 3°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°C/60 – 80°F.

## STANDARDS

The L-Series, Ceiling Strobes and Horn Strobes are designed to comply with the following standard:

**UL Standard:** UL 1971 and UL 464

## 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:** S5512, S4011

**CSFM:** 7135-1653:0503

7125-1653:0504

**ISO 9001 Certification**

For a complete listing of all compliance approvals and certifications, please visit:

<http://www.gamewell-fci.com/en-US/documentation/Pages/Listings.aspx>

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## For more information

Learn more about Gamewell-FCI's L-Series, Indoor Strobes and Horn Strobes and other products available by visiting [www.Gamewell-FCI.com](http://www.Gamewell-FCI.com)

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**Honeywell**

# SK-PHOTO-W SERIES

## Addressable Photoelectric Smoke Detectors

The Silent Knight® 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 268 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 d351634isplay (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 electrical-box 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 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.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" (51mm) high; base determines diameter

- B300-6:** 6.1" (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% non-condensing

**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 SPAG91, available at [www.systemsensor.com](http://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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