

DEC - 7 2010

PERMIT ISSUED

Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

# CITY OF PORTLAND

## BUILDING INSPECTION

### PERMIT

Permit Number: 101441

Please Read  
Application And  
Notes, If Any,  
Attached

This is to certify that FOUR CITY CENTER PROPERTIES LLC / Protection One  
 has permission to install fire alarm in Phone Room in basement  
 AT 4 CITY CTR CBL 032 P003001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and written permission procured before this building or part thereof is lathed or otherwise closed-in. 24 HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. Blenis (58)  
 Health Dept. \_\_\_\_\_  
 Appeal Board \_\_\_\_\_  
 Other \_\_\_\_\_  
Department Name

  
 Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

**City of Portland, Maine - Building or Use Permit Application**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 10-1441	Issue Date:	CBL: 032 P003001
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Location of Construction: 4 CITY CTR	Owner Name: FOUR CITY CENTER PROPERTI	Owner Address: PO BOX 403	Phone:
Business Name:	Contractor Name: Protection One	Contractor Address: 10 Manuel Drive Portland	Phone: 2073475316
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm System	Zone: B3

Past Use: Commercial	Proposed Use: Commercial - install fire alarm in Phone Room in basement	Permit Fee: \$100.00	Cost of Work: \$8,000.00	CEO District: 1
		FIRE DEPT: w/conditions 12/7/10 <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied	INSPECTION: Use Group: Type: IBC, 2003	

Proposed Project Description:  
install fire alarm in Phone Room in basement

Signature: *[Signature]*  
Signature: *[Signature]*  
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)  
Action.  Approved  Approved w/Conditions  Denied  
Signature \_\_\_\_\_ Date \_\_\_\_\_

Permit Taken By: Idobson	Date Applied For: 11/18/2010	<b>Zoning Approval</b>
-----------------------------	---------------------------------	------------------------

- This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.
- Building permits do not include plumbing, septic or electrical work.
- Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

<b>Special Zone or Reviews</b> <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date: 11/19/10 <i>[Signature]</i>	<b>Zoning Appeal</b> <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: _____	<b>Historic Preservation</b> YES <input type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>revises a separate review &amp; approval thru historic preservation</i>
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City of Portland

**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT \_\_\_\_\_ ADDRESS \_\_\_\_\_ DATE \_\_\_\_\_ PHONE \_\_\_\_\_



# CITY OF PORTLAND, MAINE

Department of Building Inspections

## Original Receipt

\_\_\_\_\_ 11-13 20 10 \_\_\_\_\_

Received from Prokathia L.

Location of Work 4 City Center

Cost of Construction \$ \_\_\_\_\_ Building Fee: \_\_\_\_\_

Permit Fee \$ \_\_\_\_\_ Site Fee: \_\_\_\_\_

Certificate of Occupancy Fee: \_\_\_\_\_

Total: 100

Building (IL) \_\_\_\_\_ Plumbing (I5) \_\_\_\_\_ Electrical (I2) \_\_\_\_\_ Site Plan (U2) \_\_\_\_\_

Other Fire Alarm

CBL: 30 P. 3

Check #: CC Total Collected \$ 100

**No work is to be started until permit issued.  
Please keep original receipt for your records.**

Taken by: S. J. J.

WHITE - Applicant's Copy  
YELLOW - Office Copy  
PINK - Permit Copy



**City of Portland, Maine - Building or Use Permit**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 10-1441	Date Applied For: 11/18/2010	CBL: 032 P003001
-----------------------	---------------------------------	---------------------

Location of Construction: 4 CITY CTR	Owner Name: FOUR CITY CENTER PROPERTI	Owner Address: PO BOX 403	Phone:
Business Name:	Contractor Name: Protection One	Contractor Address: 10 Manuel Drive Portland	Phone: (207) 347-5316
Lessee/Buyer's Name	Phone:	Permit Type: Fire Alarm System	

Proposed Use: Commercial - install fire alarm in Phone Room in basement	Proposed Project Description: install fire alarm in Phone Room in basement
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Dept: Zoning      Status: Approved with Conditions      Reviewer: Ann Machado      Approval Date: 11/19/2010

Note: Ok to Issue:

- 1) ANY exterior work requires a separate review and approval thru Historic Preservation. This property is located within an Historic District.
- 2) This permit is being approved on the basis of plans submitted. Any deviations shall require a separate approval before starting that work.

Dept: Building      Status: Approved with Conditions      Reviewer: Jonathan Rioux      Approval Date: 12/07/2010

Note: Ok to Issue:

- 1) Fire Alarm systems shall be installed per Sec. 907 of the IBC 2003
- 2) Separate permits are required for any electrical, plumbing, sprinkler, HVAC systems, heating appliances, including pellet/wood stoves, commercial kitchen exhaust hood systems and fuel tanks. Separate plans may need to be submitted for approval as a part of this process.

Dept: Fire      Status: Approved with Conditions      Reviewer: Ben Wallace Jr.      Approval Date: 12/07/2010

Note: Emergency replacement. Floor plans and wiring diagrams to be provided upon completion of work. Ok to Issue:

- 1) Emergency replacement. Floor plans and wiring diagrams to be provided upon completion of work.
- 2) The fire alarm system shall comply with the City of Portland Standard for Signaling Systems for the Protection of Life and Property. All fire alarm installation and servicing companies shall have a Certificate of Fitness from the Fire Department.
- 3) Installation of a Fire Alarm system requires a Knox Box to be installed per city ordinance
- 4) Central Station monitoring for addressable fire alarm systems shall be by point.
- 5) As-built documents shall be submitted in pdf to the Building Inspections Office upon completion of job.
- 6) System acceptance and commissioning must be co-ordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.
- 7) All fire alarm records required by NFPA 72 should be stored in an approved cabinet located at the FACP labeled "FIRE ALARM RECORDS". Records cabinate, FACP, annunciator(s), and pull stations shall be keyed alike.

**PERMIT ISSUED**

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City of Portland





# Fire Alarm Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

Installation address: 4 City Center CBL: 32-P-3

Exact location: (within structure) Phone room in basement

Type of occupancy(s) (NFPA & ICC): Mixed use - Mercantile and Business

Building owner: Four City Center Properties

System Designer (point of contact): Kevin Inman

Designer phone: 207-332-1204 E-mail: kevininman@protection1.com

Installing contractor: Protection One Certificate of Fitness No: 1003

Contractor phone: 207-347-5316 E-mail: johnkempton@protection1.com

This is a new application: YES  NO  New AES Master Box: YES  NO   
(Include Master Box approval form)

Amendment to an existing permit: YES  NO  Permit no: \_\_\_\_\_

The following documents shall be provided with this application:

- |  |   |
|--|---|
| <input type="checkbox"/> Floor plans   | <input checked="" type="checkbox"/> Scope of Work           |
| <input type="checkbox"/> Wiring diagram  | <input type="checkbox"/> 11 1/2 x 17s                       |
| <input checked="" type="checkbox"/> Annunciator details                        | <input type="checkbox"/> pdf copy (may be e-mailed)         |
| <input checked="" type="checkbox"/> Input/ Output Matrix                       | <input checked="" type="checkbox"/> Designer qualifications |
| <input checked="" type="checkbox"/> Equipment data sheets                      | <input type="checkbox"/> Battery/ voltage drop calcs        |
| <input checked="" type="checkbox"/> Electrical Permit Pulled (check alarm/com) |   |

Master box approval only: YES  NO   
(If yes check *New AES Master Box* above)

COST OF WORK: \$8000

PERMIT FEE: 100  
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)

**RECEIVED**

NOV 18 2010

Dept. of Building Inspections  
City of Portland Maine

The designer shall be the responsible party for this application. Download a new copy of this application at [www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire) for every submittal. Submit all plans in electronic PDF in addition to readable 11 1/2 x 17s to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire alarm system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with the *City of Portland Technical Standard for Signaling Systems for the Protection of Life and Property*, available at [www.portlandmaine.gov/fire](http://www.portlandmaine.gov/fire).

Applicant signature: [Signature] Date: 11-18-10



Your World Is Worth Protecting®

[www.ProtectionOne.com](http://www.ProtectionOne.com)  
Scope of Work

Four City Center – replace existing Fire Alarm panel; system in Trouble now

Per conversation with Lt. Ben Wallace Portland Fire Department:

Replace existing panel with an Addressable Silent Knight panel  
Replace all Initiating devices with Addressable devices  
Repair Elevator Recall to meet code  
Install new Fire Alarm Document Box

Where we are doing this on a rush because of the panel condition, we will provide all drawings as soon as possible.

Thank you,

Kevin Inman, CET  
NICET Fire Alarm Level III  
207-332-1204



## IntelliKnight® Model 5700 Single Loop Addressable Fire Alarm Control System



### The affordable addressable fire alarm control panel solution.

IntelliKnight Model 5700 is a 50 point class leading single loop addressable fire alarm control/communicator system. 5700 provides you with the revolutionary value and performance of addressable sensing technology combined with exclusive, built-in digital communication,

distributed intelligent power, that includes an easy to use interface. Powerful features such as drift compensation and maintenance alert are delivered in this powerful FACP from Silent Knight.

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

#### Description

The basic IntelliKnight 5700 system can be enhanced by adding modules such as 5860 remote annunciator, 5824 serial/parallel printer interface module (for printing system reports), and 5496 intelligent power module. 5700 supports Hochiki or SK devices. 5700 also features a powerful built-in dual line fire communicator that allows for reporting of all system activity to a remote monitoring location.

#### Features

- Built-in support for up to 50 Hochiki devices or 50 SK detectors *and* 50 SK modules.
- Up to 125 zones and 125 output groups
- Uses standard wire—no shielded or twisted pair required
- Built-in digital communicator
- Central station reporting by point or by zone
- Supports Class B (Style 4) and Class A (Style 6 or 7) configuration for SLC
- Distributed, intelligent power
- Drift compensation
- 13 pre-programmed output cadences (including ANSI-3.41) and 4 programmable outputs
- Notification circuits configurable as 1 Class A (Style Z) or 2 Class B (Style Y), or auxiliary power for resettable, constant, or door holder power
- Built-in synchronization for AMSECO, Gentex®, Faraday, System Sensor® and Wheelock® appliances
- Built-in annunciator with 80-character LCD display
- RS-485 bus provides communication to system accessories
- Upload or download programming, event history, or detector status onsite or from a remote location using a PC and 5660 Silent Knight Software Suite (SKSS)
- Improvements in SKSS deliver five times faster upload/downloads
- Built-in RS-232 interface for programming via PC
- Built-in Form C trouble relay rated at 2.5A at 27.4 VDC
- Two built-in Form C programmable relays rated at 2.5A at 27.4 VDC
- Programmable date setting for Daylight Saving Time



Model 5700

#### Installation

The 5700 is a surface mount FACP.

#### Compatibility

The 5700 SLC supports multiple device types of the *same* protocol:

- Hochiki
- SK

You cannot mix Hochiki and SK devices on a FACP. However, any combination of addressable devices of the same protocol can be used on the 5700.

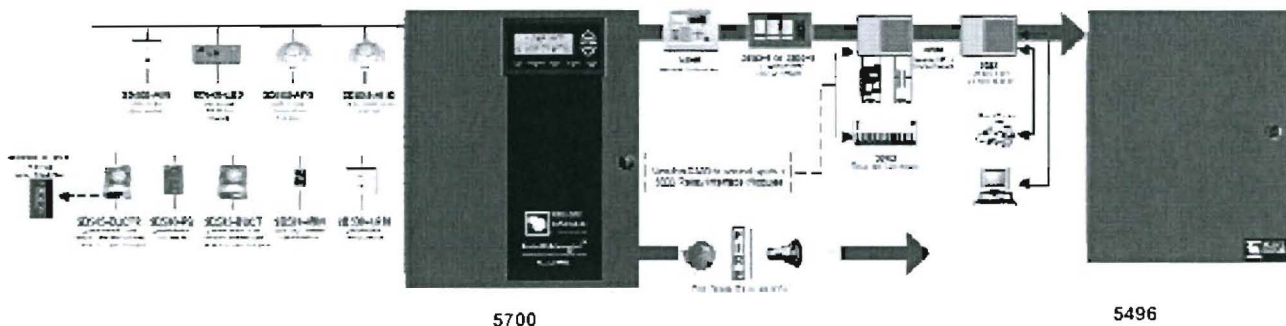


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# Model 5700 Fire Alarm Control Panel



## Specifications

### Electrical

Primary AC: 120 VAC, 60 Hz, 1.5A  
 Total Accessory Load: 2.5A @ 27.4 VDC  
 Notification Power: 2.5A @ 27.4 VDC, power-limited  
 Standby Current: 200 mA  
 Alarm Current: 325 mA  
 Notification/Aux Power Circuits: 2.5A @ 27.4 VDC per circuit, power-limited  
 Battery Charging Capacity: 7.0-35.0 AH  
 Battery Size: 7 AH max. allowed in FACP cabinet. Larger capacity batteries can be housed in an RBB accessory cabinet.

### Physical

Dimensions  
 12.75" W x 15.2" H x 3.4" D  
 (32.39 W x 38.42 H x 8.57 D cm)  
 Weight: 11.5 lbs. (5.2 kg)  
 Color: Red  
 Telephone Requirements:  
 FCC Part 15 and Part 68 approved  
 Type of 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;  
 CSFM 7170-0559: 144;  
 MEA 429-92-E Vol. XVI

## S-BUS Accessories

### 5860/R Remote Fire Annunciator

Features the same 80 character backlit LCD display keypad and firefighter's key switch as the 5700. The system can be fully programmed and operated from any 5860. 5860 is gray and 5860R is red.

### 5496 Intelligent Power Module

A 6 amp notification power expander that provides four additional power-limited notification appliance circuit outputs

### 5880 LED/IO Module

Features 40 LED outputs, 8 normally open dry contact inputs and one piezo output.

### 5865-3 and 5865-4

#### Remote LED Annunciator

Features 30 Programmable LED (15 red and 15 yellow) outputs and a piezo sounder. The 5865-4 adds a silence and reset switch to the package.

### 5883 Relay Board

Features 10 general purpose Form C relays. Used with 5880 module.

### 5824 Serial/Parallel Printer Interface Module

Provides one parallel and one RS-232 serial port for connecting a printer to 5808. Use to print a real-time log of system events, detector status reports, and event history. Interfaces with building control system.

## Miscellaneous Accessories

### 5660 Silent Knight Software Suite

User-friendly Windows software for remote programming of 5700s using a PC. Upload and view panel account information, event history, and detector status.

### 5670 Silent Knight Software Suite

End-user facility management software allows viewing of detector status and event history via modem or direct connection.

### RBB

Remote Battery Box Accessory Cabinet. Use if backup batteries are too large to fit into FACP cabinet. Dimensions:

16" W x 10" H x 6" D  
 (406 mm W x 254 mm H x 152 mm D)

### SD505-DTS-K

Remote test switch that provides remote key operated test function and annunciation of detector alarm with SD505-DUCTR.

### Hochiki and SK Devices

See the specification sheets listed below for a complete listing of the Hochiki and SK devices

- |       |   |
|-------|---|
| 53624 | Hochiki Devices Specification Sheet     |
| 53623 | SK Protocol Devices Specification Sheet |



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610  
 Phone: (800) 328-0103 or (203) 484-7161, Fax: (203) 484-7118. [www.silentknight.com](http://www.silentknight.com)

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 Flexput is a Trademark of Silent Knight

**MADE IN AMERICA**

P/N 350392 Rev. F

ECN 09-520 09/09

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**SK-Minimon****Intelligent Mini Monitor Module**

The SK-Minimon addressable mini monitor modules for use with Silent Knight IntelliKnight fire alarm control panels (FACP). The SK-Minimon is designed to be used with pull stations, water flow switches, and other applications requiring dry contact alarm initiation devices.

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

**Description**

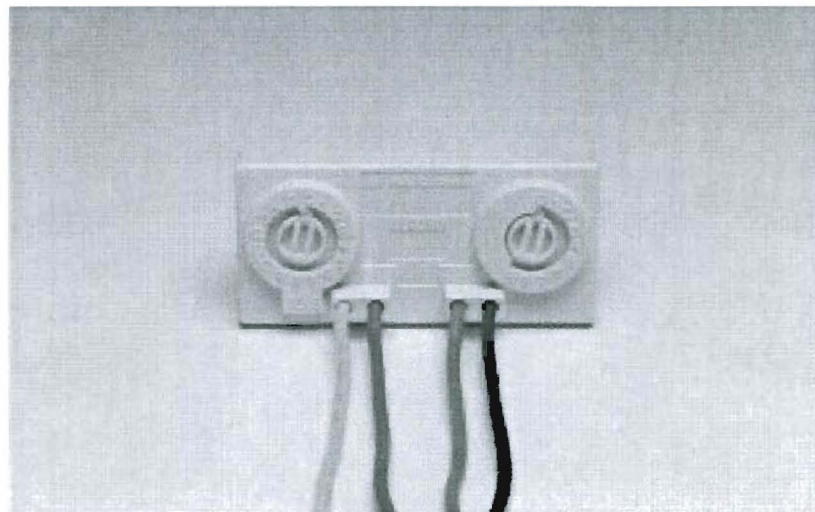
The SK-Minimon is an addressable monitor modules for use with the IntelliKnight fire alarm control panels (FACPs). The SK-Minimon acts as an interface to contact devices, such as waterflow switches and pull stations.

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

The SK-Minimon can be mounted in a single gang junction box directly behind the monitored device. Its small size and light weight allow it to be installed without rigid mounting requirements.

**Features**

- Single contact monitor
- SK-Minimon support for Class B (Style B) contact monitor wiring
- Small and lightweight size allows for flexible mounting options
- Rotary address switches for fast installation
- UL listed

**SK-Minimon****Specifications:****Electrical**

Standby Current: 400 uA max @  
24 VDC with comm.  
Voltage Range: 15 - 32 VDC  
End of Line Resistance: 47 k Ohms

**Physical**

Dimensions:  
2.75" W x 1.3" H x 0.5" D  
Weight: 1.2 oz (37 g)

**Environmental**

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

Humidity:  
10% – 93% non-condensing

**Compatibility**

The SK-Minimon is compatible with the following IntelliKnight FACP's:

5700  
5808  
5820XL

**Approvals**

UL approved  
CSFM  
FM Approved



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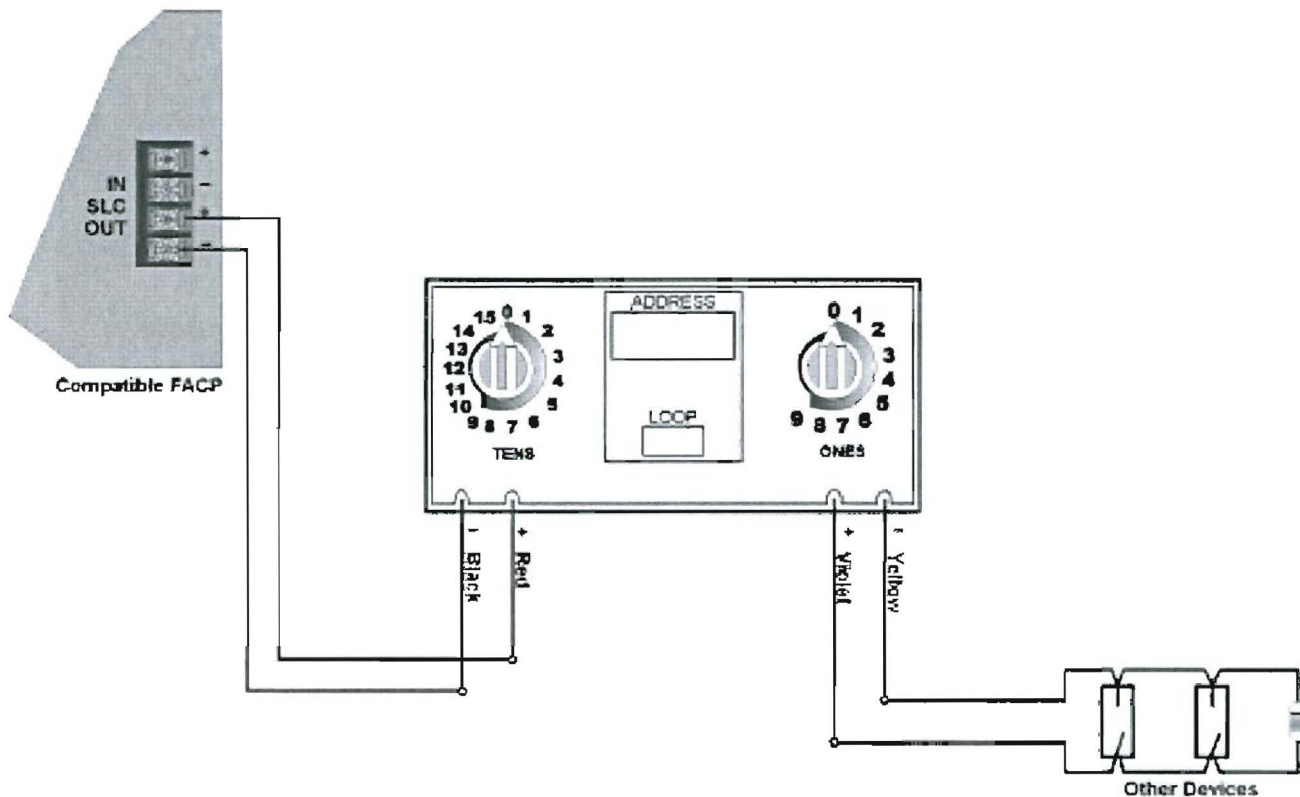
# SK-Minimon Intelligent Monitor Module



## Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable monitor modules Silent Knight SK-Minimon. The modules shall be UL listed and compatible with Silent Knight's IntelliKnight FACP's. The device shall be capable of Styles A and B supervised wiring to the load device.

The SK-Minimon shall be installed inside a single gang junction box directly behind the monitored unit.



Wiring the SK-Minimon





## SK-Heat, SK-Heat-HT and SK-Heat-ROR



### Addressable thermal heat and rate-of-rise detectors

The SK-Heat, SK-Heat-HT, and SK-Heat-ROR are plug in thermal detectors, with integral communication, that provide features that surpass conventional detectors. These thermal detectors are for use with Silent Knight IntelliKnight series Fire Alarm Control Panels (FACPs).

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.

### Description

SK-Heat, SK-Heat-HT and SK-Heat-ROR are intelligent sensors that utilize a state-of-the art thermistor sensing circuit for fast response. Sensitivity is continuously monitored and reported to the FACP. Point ID capability allows each detector's address to be set with rotary address switches, providing exact detector locations for selective maintenance when chamber contamination reaches unacceptable levels.

SK-Heat is a fixed temperature thermal detector that uses a thermistor sensing circuit to produce 135°F (57°C) fixed thermal detection.

SK-Heat-HT is a high temperature detector that provides fixed temperature alarm at 190°F.

SK-Heat-ROR is a fixed temperature and rate-of-rise thermal detector that uses a thermistor sensing circuit to produce 135°F (57°C) thermal protection.

### Features

- Sleek, low-profile design
- Reliable analog communications for trouble-free operation
- Age resistant polymer housing
- Innovative thermistor sensing circuit
- Superior EMI resistance for reliability
- Variety of mounting options to meet any application

- Dual LED indicators for 360° visibility
- Detector transmits signal to indicate maintenance is required
- Plug-in mounting provides ease of installation
- Optional remote LED annunciator (System Sensor® PN RA100Z)
- Tamper-proof feature available on mounting bases
- Rotary address switches for fast installation
- UL Listed

### Specifications

#### Physical

Height: 2.0" (51 mm)  
Diameter: 6.1" (155 mm) installed in B210LP base  
Shipping Weight: 4.8 oz (137 g)

#### Electrical

Operating Voltage: 15 to 32 Volts DC Peak  
Standby Current: 300µA @ 24 VDC  
LED Current: 6.5 mA @ 24 VDC

### Environmental

#### Operating Temperature

SK-Heat & SK-Heat-ROR: -4° – 100°F (20°C – 38°C)

SK-Heat-HT: -4° – 150°F (20°C – 66°C)

Humidity: 10% – 93% noncondensing

#### Thermal Ratings

SK-Heat: Fixed temperature setpoint 135°F (57°C)



SK-Heat (base included)

SK-Heat-HT: High temperature heat 190°F (88°C)

SK-Heat-ROR: Rate-of-rise detection 15°F/min (8.3°C/min)

### Compatibility

The SK-Ion is compatible with the following IntelliKnight FACP's:

5700  
5808  
5820XL

The SK-Heat, SK-Heat-HT and SK-Heat-ROR are compatible with the following detector bases:

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



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# Model SK-Heat, SK-Heat-HT, SK-Heat ROR Addressable Thermal and Rate-of-Rise Thermal Detectors

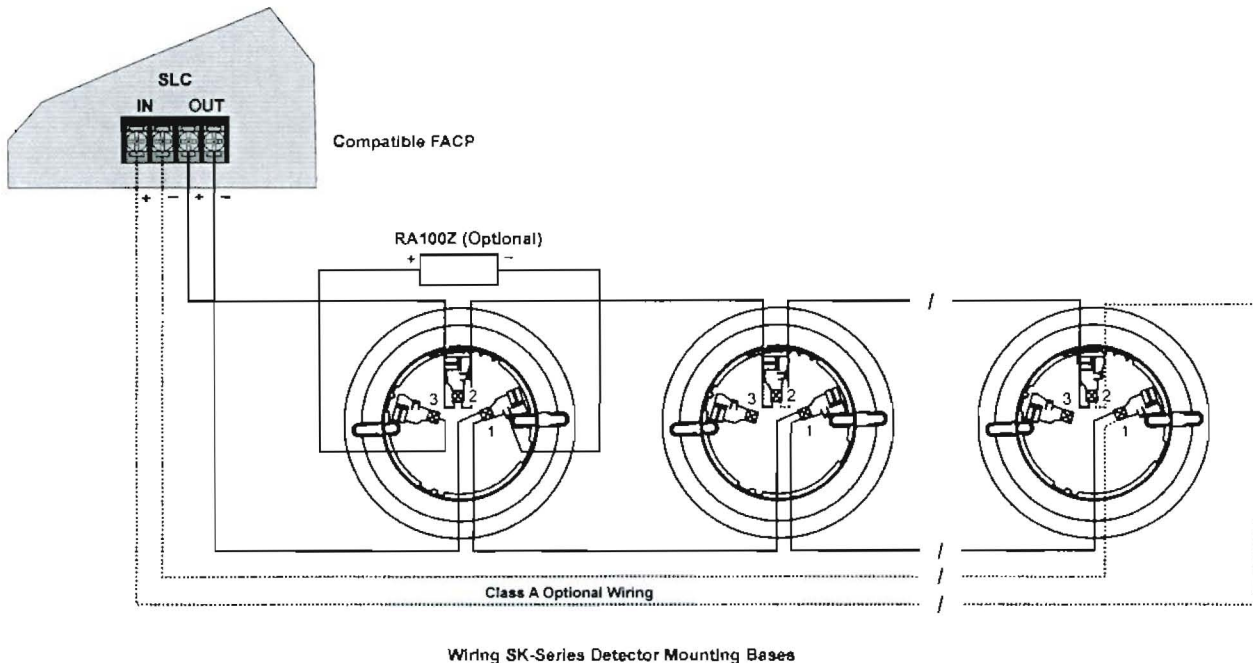


## Engineering Specifications

The contractor shall furnish and install where indicated on the plans, Intelligent Thermal Sensor Silent Knight Model SK-Heat, SK-Heat-HT or SK-Heat-ROR. The base included shall be B210LP.

The smoke 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.



### Accessories

RA100Z - Remote LED Annunciator.

RMK400 - Recessed Mounting Kit. Provides low profile for use with B501.

XR2B - Detector Removal Tool. A removal and re- placement tool for SK plug-in detectors. Includes the T55-127-000.

M02-04-01 - Replacement Test Magnet

M02-09-00 - Test Magnet with Telescoping Handle

XP-4 - Extension Pole for XR2B. Extends from 5 - 15 ft.

T55-127-000 - Detector Removal Head

BCK-200B - Black Detector Kit. For SK-series detectors

\* Unless otherwise noted, specifications apply to all SK thermal detectors



by Honeywell

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FORM# 350120 Rev. A  
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## SK-Photo and SK-Photo-T



### Intelligent Photoelectric Smoke Sensors

The SK-Photo is a photoelectric smoke detector and the SK-Photo-T is a photoelectric smoke detector with thermal. These plug in smoke detectors, with integral communication, provide features that surpass conventional detectors and are for use with Silent Knight IntelliKnight Fire Alarm Control Panels (FACPs).

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

#### Description

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

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

#### Features

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

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

#### Specifications

##### Physical

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

##### Electrical

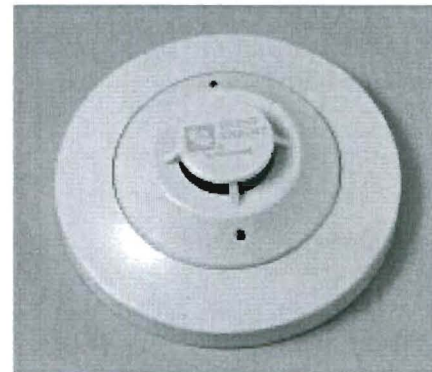
Operating Voltage: 15–32 VDC  
Standby Current:  
300 µA @ 24 VDC Maximum  
Alarm Current: 6.5 mA @ 24 VDC max  
(with LED on)

##### Environmental

Operating Temperature  
SK-Photo: 32° – 120°F (0°C – 49°C)  
SK-Photo-T: 32° – 100°F (0°C – 38°C)  
Humidity: 10% – 93% non-condensing

##### Other Ratings

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



SK-Photo (Base included)

#### Compatibility

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

5700  
5808  
5820XL

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

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



**SILENT  
KNIGHT**

by Honeywell



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



## Engineering Specifications

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

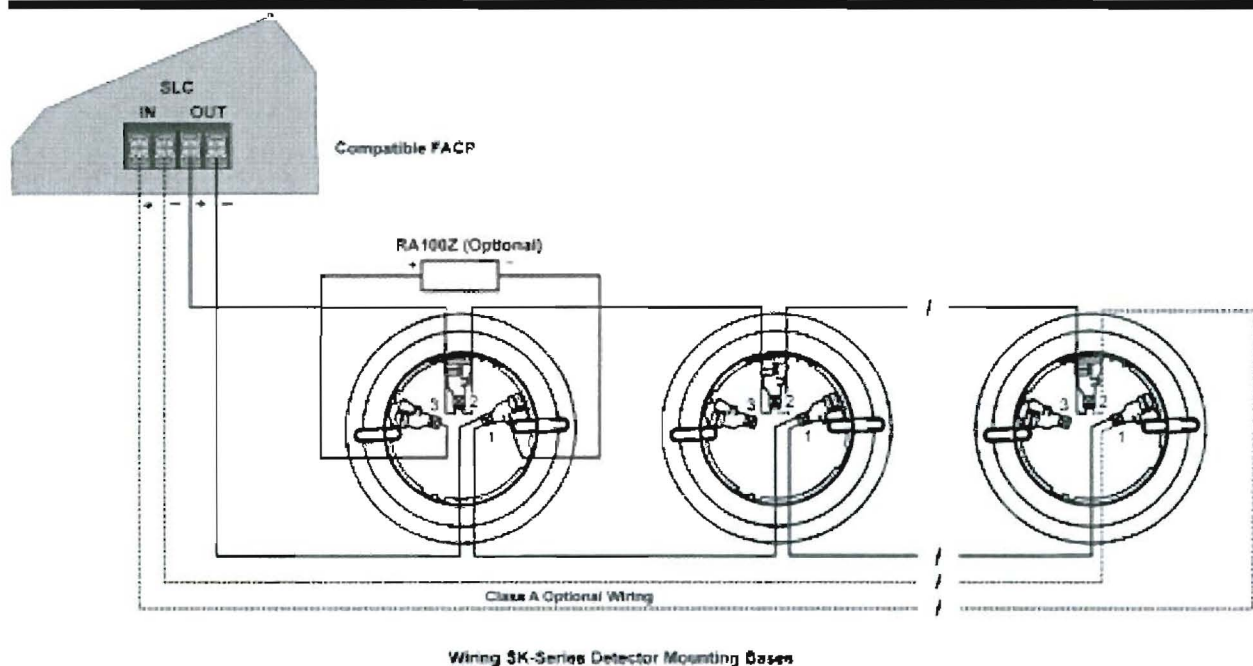
The base shall permit direct interchange with SK-Photo or SK-Photo-T. Base shall be the appropriate twist-lock base part number B210LP (included).

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

The calibration of the detector shall be capable of being selected and measured by the control panel without the need for external test apparatus.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field selectable as required.

The SK-Photo shall automatically perform a functional test of the detector. The test method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.





## SK-Pull-SA and SK-Pull-DA



### Intelligent Pull Stations

The SK-Pull-SA and SK-Pull-DA are a single action or dual action addressable fire alarm pull station for use with Silent Knight's IntelliKnight fire control panel. Extremely easy to operate, the SK-Pull-DA/SA provides a fast and practical means of manually initiating a fire alarm signal. The IntelliKnight panel recognizes each manual pull station by its specific address saving precious seconds in determining the location of an alarm.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103 or in Connecticut, call (203) 484-7161.

### Description

The SK-Pull-SA is a single action pull station requiring only one motion to activate the station. The SK-Pull-DA is a dual action pull station requiring two motions to activate the station. Both pull stations are designed to work with Silent Knight IntelliKnight series fire alarm control panels (FACPs).

### Features

- Installer can open station without causing an alarm condition
- Dual-color LED is visible through handle of station blinks green to indicate normal operation and remains steady red in an alarm condition
- Key operated test and reset lock using lock plate actuator
- Key matches compatible FACPs locks
- Meets the Americans with Disabilities Act Accessibility Guidelines (ADAAG) controls and operating mechanisms guidelines (Section 4.1.3[13])
- Meets ADA requirement for 5 lbs maximum pull force to activate
- Shell, door, and handle molded from durable LEXAN®
- Reliable analog communications for trouble-free operation
- Braille text on station handle
- Handle latches in down position and the word *Activated* appears, clearly indicating the station has been pulled
- Rotary address switches for fast installation
- UL Listed, including UL 38, Standard of Manually Actuated Signaling System



SK-Pull-SA



SK-Pull-DA

### Compatibility

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

5700  
5808  
5820XL

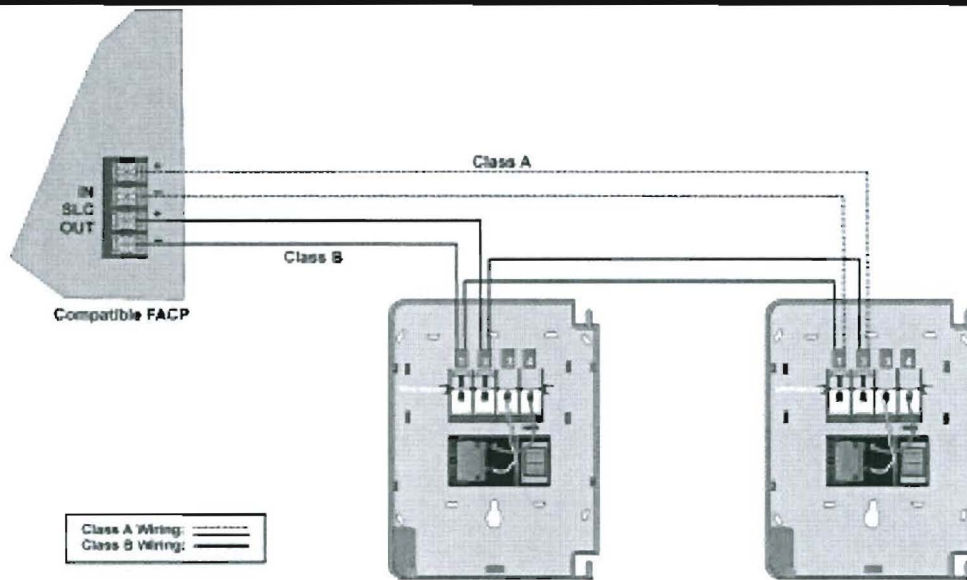
# Model SK-Pull-Da and SK-Pull-SA



## Engineering Specifications

The contractor shall furnish and install where indicated on the plans, Addressable Pull Stations, Silent Knight model SK-Pull-SA single action pull station or SK-Pull-DA, dual action pull station.

SK-Pull-DA or SK-Pull-SA meet the ADAAG controls and operating mechanisms guidelines, and the ADA requirements for a 5 lb. maximum pull force to activate the pull station.



Wiring SK-Pull-SA & SK-Pull-DA Pull Stations

### Specifications

#### Physical

Height: 5.5" (14 cm)

Width: 4" (10.2 cm)

Depth: 5.4 oz. (3.7 cm)

Housing Material: LEXAN polycarbonate resin

#### Bi-Colored LED:

Blinking Green: Normal

Steady Red: Alarm

Switch: Single pole, single throw (SPST) normally open (N/O) switch which closes upon activation of the pull station

#### Electrical

Operating Voltage: 15–32 VDC

Average Operating Current (LED flashing): 300  $\mu$ A

Wire Gauge: Up to 12 AWG (3.1 mm<sup>2</sup>)

#### Environmental

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

Humidity: 10% – 93% non-condensing

#### Accessories

BG-TR Optional trim ring.

SB-I/O Surface backbox



## 5860 Remote Annunciator



### Bring the power to control an IntelliKnight fire alarm control panel to every area within your facility.

Now you can operate and program your IntelliKnight system from up to eight locations throughout your facility. The 5860 remote annunciator provides the same advanced, easy-to-use interface found on the IntelliKnight panel's built-in annunciator. The 80-character display and

ergonomically designed keypad allow for simple and error-free system operation. All operations—including reset, silence, detector status checking, fire drill, and programming—are identical.

Access to the system is through a firefighter's key or an access code. For security, a special installation code is needed for programming functions. The 5860 connects to the IntelliKnight panel via the RS-485 system bus. Wire runs can be up to 6000 feet from the panel.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-446-6444, or in Minnesota, call 763-493-6435.

#### Description

Features include an 80-character backlit LCD providing easy-to-understand system messages. The annunciator is ergonomically designed with over-sized buttons for the most frequently used features, like Reset and Silence.

In addition to status messages displayed on the LCD, there are five LEDs for alarm, supervisory, trouble, silence, and AC power status.

The annunciator is available in gray to match virtually any decor and red for applications where the annunciator must stand out. The annunciator enclosure can be surface or flush mounted. A trim ring kit is available for surface mounting.

#### Features

- 80-character backlit LCD display (4 lines with 20 characters on each line)
- Tactile and audible feedback
- Accepts user codes or fire fighter's key
- Larger keypad buttons for system reset and silence
- Install up to eight 5860s per FACP

- Available in red or light gray
- Support for simultaneous use of multiple 5860s
- RS-485 interface to panel
- Operation and appearance is identical to 5860 built-in annunciator
- On-board piezo sounder audibly indicates alarms, troubles, and supervisories
- Five status LEDs for alarm, supervisory, trouble, silence and AC power conditions
- Wiring lengths up to 6000 ft. from the FACP (depending on wire gauge and number of devices on SBUS)
- UL listed, complies with NFPA 72
- CSFM approved

#### Electrical Specifications

Operating Voltage: 24 VDC  
Standby Current: 20 mA max  
Alarm Current: 25 mA

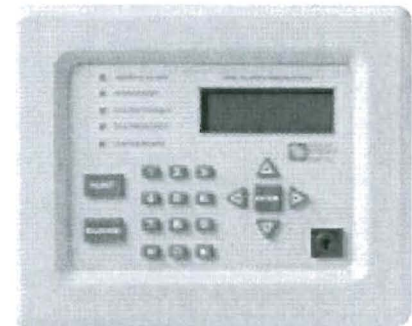
Wiring Distance: 6,000 max. from FACP (depending on wire gauge and number of devices on the SBUS)

Max Per System: 8

#### Mechanical Specifications

Physical 9.1" W x 7.4" H x 1.5" D  
(23.1 W x 18.8 H x 3.8 D cm)

Shipping Weight: 2.8 lbs (1.3 kg)



5860

Color  
5860R: Red  
5860: Gray

#### Environmental

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

Humidity: 10% – 93% non-condensing

#### Approvals

NFPA 72; UL Listed;  
CSFM 7170-0559: 135;  
MEA 429-92-E Vol. IX;  
FM Approved



## 5860 Remote Annunciator



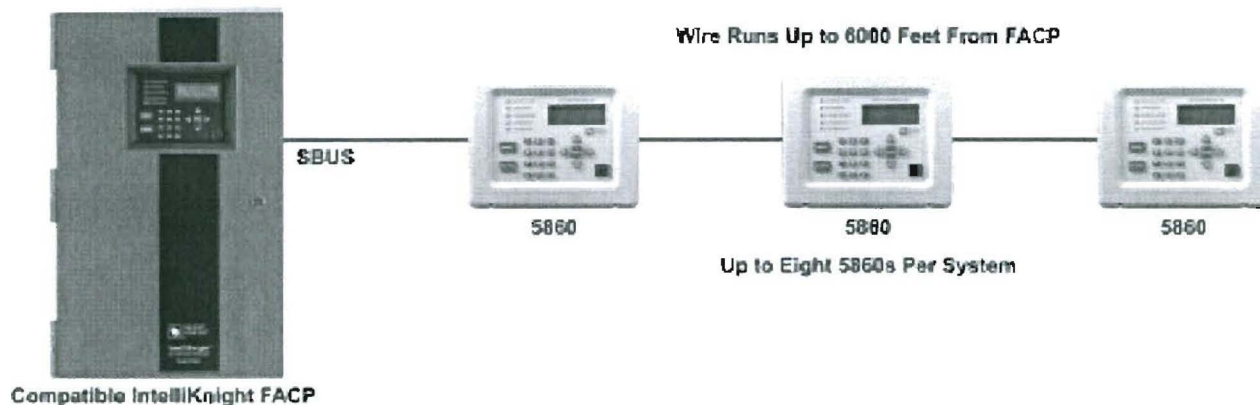
### Engineering Specifications

The main control must have a built-in annunciator and must support up to eight remote annunciators. Remote annunciators shall have the same control and display layout so as to match the appearance of the built-in annunciator. Remote annunciators shall be available in two colors, red or light gray.

Remote annunciators shall have identical functionality and operation as the built-in annunciator. All annunciators must have an 80-character LCD display and must feature five LEDs for: General Alarm, Supervisory, System Trouble, System Silence, and System Power.

All controls and programming keys are silicone mechanical type with tactile and audible feedback. Keys have a travel of .040 inches. No membrane style buttons will be permissible.

The annunciator must be able to silence and reset alarms through the use of a code entered on the annunciator keypad or by using a firefighter's key. The annunciator must have two levels of user codes that will limit the operating system programming to authorized individuals. The control panel must allow all annunciators to accommodate multiple user input simultaneously.



#### Compatibility

IntelliKnight 5820XL FACP

IntelliKnight 5808 FACP

IntelliKnight 5700 FACP

#### Ordering Information

##### 5860R Remote Annunciator

Four line LCD annunciator with 20 characters per line. Red

##### 5860 Remote Annunciator.

Four line LCD annunciator with 20 characters per line. Gray.

#### Accessories

##### 5860TR Red Trim Ring

For surface mounting

##### 5860TG Gray Trim Ring

For surface mounting



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 7550 Meridian Circle Suite 100, Maple Grove, MN 55369-4927  
Phone: (800) 328-0103, Fax: (763) 493-6475.

**MADE IN AMERICA**

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