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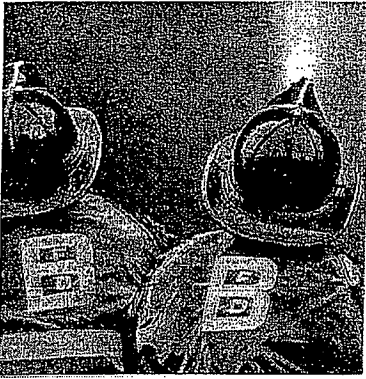
FIRE ALARM SUBMITTAL

Home Depot
Replacement Program
Portland, ME
Store #2401

IntelliKnight® 5808 Single Loop Addressable Fire Alarm Control System

The convenience of an addressable fire alarm control panel in a cost-effective easy to use package.

IntelliKnight Model 5808 is a 127 point class leading single loop addressable fire alarm control/communicator system. 5808 provides you with the revolutionary value and performance of addressable sensing technology combined with exclusive, built-in digital communication, distributed intelligent power, 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 1-800-446-6444, or in Minnesota, call 763-493-6435.

Description

5808 performs drift compensation and calibration checks on each of the sensors in the system.

The basic 5808 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. 5808 also features a powerful built-in dual line fire communicator that allows for reporting of all system activity to a remote monitoring location.

Features

- Up to 127 addressable points
- 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 can be configured as 2 Class A (Style Z) or 4 Class B (Style Y), or auxiliary power for resettable, constant, or door holder power
- Built-in annunciator with 80-character LCD display
- RS-485 bus provides communication to system accessories
- Built-in RS-232 and USB interface for programming via a PC
- Upload or download programming, event history, or detector status via remote or direct connection
- Improvements in SKSS deliver five times faster upload/downloads

- Built-in synchronization for appliances from AMSECO, Gentex®, Faraday, System Sensor®, and Wheelock®
- One Form C trouble relay rated at 2.5A at 27.4 VDC and two Form C programmable relays rated at 2.5A at 27.4 VDC
- Programmable date setting for Daylight Saving Time
- Plex-2 door option combines a dead front cabinet door with a clear window, limiting access to the panel while providing single button operation of the reset and silence functions

Electrical Specifications

Primary AC: 120 VRMS at 50/60 Hz, 2.75A

Total Accessory Load: 6A @ 27.4 VDC

Notification Power: 6A @ 27.4 VDC, power-limited

Standby Current: 170 mA

Alarm Current: 325 mA

Notification & Auxiliary Circuits: 3A @ 27.4 VDC per circuit, power-limited

Battery Charging Capacity: 7.0-35.0 AH

Battery Size: 18 AH max. allowed in FACP. Larger capacity batteries can be housed in an RBB accessory cabinet

Mechanical Specifications

Flush Mount Dimensions:
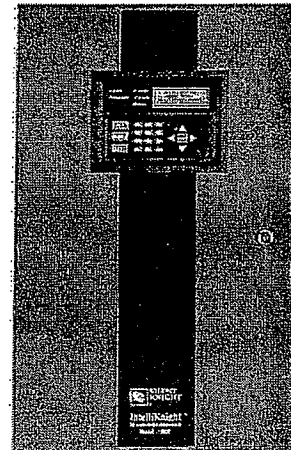14.5" W x 24.75" H x 3.5" D
(36.8 W x 62.9 H x 8.73 D cm)

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

Weight: 28 lbs. (12.8 kg)

Color: Red

Telephone Requirements:

Model 5808

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: 142; MEA 429-92-E Vol. XIV

SILENT KNIGHT

by Honeywell

SLC Detectors

SD505-APS
Addressable photoelectric smoke detector.

SD505-AIS
Addressable ionization smoke detector.

SD505-AHS
Absolute temperature heat detector that goes into alarm immediately if the temperature exceeds the programmable trip point. Trip point range from 135°F–150°F(0°C–37°C).

SD505-6AB
Six inch base for use with detector heads SD505-APS, SD505-AIS and SD505-AHS.

SD505-4AB
Four inch base for use with detector heads SD505-APS, SD505-AIS, and SD505-AHS.

SD505-6SB
Six-inch sounder base for use with existing sensor and base. Operates in single and multi-station modes and/or as a system sounder. Requires 2 additional wires for power.

SD505-6IB
Short circuit isolator base for SD505-APS, SD505-AIS, and SD505-AHS detectors.

SD505-6RB
Six-inch relay base for use with existing sensor and base. Provides one Form C contact.

SD505-ADH
Duct housing that detects smoke in HVAC ducts.

SD505-ADHR
Duct detector base with relay. Provides Form C alarm contact. For use with SD505-APS and SD505-AIS sensors. Compatible with SD505-DTS remote test switch.

SD500-PS/SD500-PSDA
SD500-PS is a single action pull station and SD500-PSDA is a dual action pull station.

SLC Modules

Model SD500-AIM
Dry contact input module for use with normally open dry contacts. It features an indicator LED to show alarm status.

SD500-MIM
Mini dry contact input module is a small version of the SD500-AIM. For use with pull stations and other normally open dry contact inputs.

SD500-ANM
Addressable notification module providing a single Class A or Class B notification circuit on the SLC.

SD500-ARM
Addressable relay module that features two Form C output relays. Provides indicator LED to show output status.

SD500-SDM
Two-wire detector input module. Allows for the connection of conventional 2-wire detectors on the SLC loop. Requires two additional wires for power.

SD500-LIM
A short circuit isolator module for SLC devices. When a short occurs on the SLC loop, it is detected as a trouble, but all SLC devices protected by the isolator module continue to operate.

SD500-LED
An LED driver capable of driving 80 LEDs through the SLC loop. Up to 40 SD500-LEDs can be used per system.

S-BUS Accessories

5860/R Remote Fire Annunciator
Features the same 80 character backlit LCD display keypad and firefighter's key switch as the 5808. 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.

Miscellaneous Accessories

5660 Silent Knight Software Suite
PC-base software for FACP programming. 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.
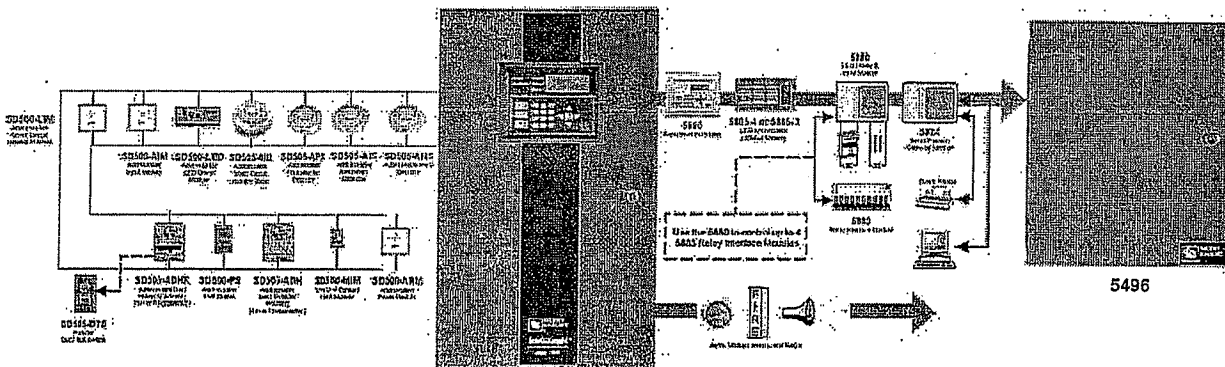
Plex-2 Door
Dead front cabinet door with clear window to limit access to the FACP.

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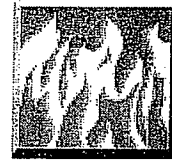

5496

5499 Distributed Power Module

The NAC expander that packs quite a combination punch, a whopping nine amps and built-in synchronization for appliances

The 5499 Distributed Power Module by Silent Knight is the most-powerful and cost-effective power supply available today. It delivers 9 amps of notification appliance circuit power and built-in synchronization for appliances from System Sensor®, AMSECO, Faraday, Gentex®, and Wheelock® — what you need to drive power-hungry components like ADA notification appliances. The 5499's advanced microprocessor design is years ahead of the competition. Its switch mode power supply design is up to 50% more efficient than competitive linear mode power supplies. And, ADA retrofits are easier and less expensive with the 5499 because it integrates into current systems without the costly investment in new components.

For the most sophisticated and cost-effective notification power supply available, you need the 5499. Call Silent Knight today for more information at 1-800-446-6444.

Description

The 5499 is a 9 amp notification power expander that provides its own AC power connection, battery charging circuit, and backup battery for use with fire and security controls that have 9-32 VDC outputs, such as the Silent Knight Model 5208 Fire Control/Communicator. The 5499 is the cost-effective solution for powering notification appliances required by the Americans with Disabilities Act (ADA). The 5499 has built-in ANSI cadence pattern, which can upgrade older control panels that lack cadence capability.

Features

- UL Listed for 9 amps of notification power
- Built-in synchronization for appliances from System Sensor®, AMSECO, Faraday, Gentex®, and Wheelock®
- Power supply's advanced switch mode design reduces damaging heat and manages power up to 50% more efficiently than other systems
- Dip switches allow for easy reconfiguration
- 24 VDC filtered output voltage
- Four power-limited notification outputs; 2 Class A (Style Z) or 4 Class B (Style Y), or 1 Class A and 2 Class B
- Additional continuous auxiliary output
- 3 amps per output circuit

- 2 inputs; 2 Class B (Style B) or 2 Class A (Style D)
- Ground fault detector/indicator
- Independent trouble relay
- AC loss delay option shuts off power to non-essential high-current accessories like magnetic door holders
- Stand alone operation.
- Lightweight design adds to ease of installation and reduces shipping costs
- Operates with most polarized, UL Listed notification devices
- ANSI Cadence pattern output capability built-in

Connection to Local Fire Control

Firepower 5499 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 5499. The control panel's notification circuit end-of-line resistor is also connected across two terminals on the Firepower 5499, which provides supervision between the 5499 and the fire control panel. Polarized audible and/or visual notification devices are then connected to the 5499 signal circuits using the 4.7kW end-of-line resistors provided. Since the 5499 draws very little power from the control, it is possible to connect one Firepower
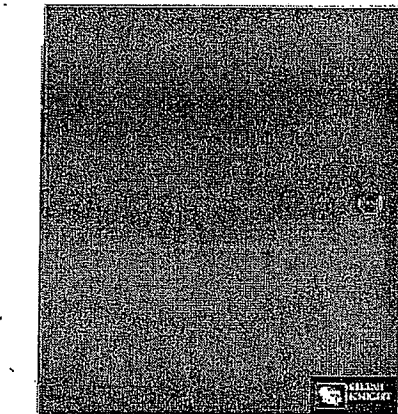
5499

5499 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.

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by Honeywell

5499 Distributed Power Module

Supervision

The 5499 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, Firepower 5499 creates a trouble condition on the host control signal circuits to which it is connected. Firepower 5499 still maintains the ability to be activated by the host control. In addition, the 5499 provides a Form C trouble relay output as an alternative to using the notification circuit trouble.

Electrical Specifications

AC Input: 120 VAC at 3.0A

Output: 24 VDC at 9 A

Current
  Standby: 75 mA
  Alarm: 205 mA

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)

Amps Per Output: 3.0 (9.0 amps total)

Notification Circuit Output: 20.4 to 27.3 VDC @ 3.0 amps each, 4.7 kΩ EOL resistor required on each Class B circuit

No. of Inputs: 2

Input Configuration: 2 Class B (Style Y) or 2 Class A (Style Z)

Input Voltage Range: 9 - 32 VDC

Battery charging Capacity: 35.0 AH

Mechanical Specifications

Dimensions: 12.25" W x 16" H x 3" D
30.88 cm W x 40.64 cm H x 7.62 D cm

Operating Temp:
  32° to 120° F (0° to 49° C)

Humidity: 93% non-condensing max.

Indicator Lights

AC power on :   Green

Battery trouble: Yellow

Ground fault: Yellow

Aux Trouble: Yellow

Output
troubles (1-4):   Yellow

Installation

Surface mount

Approvals
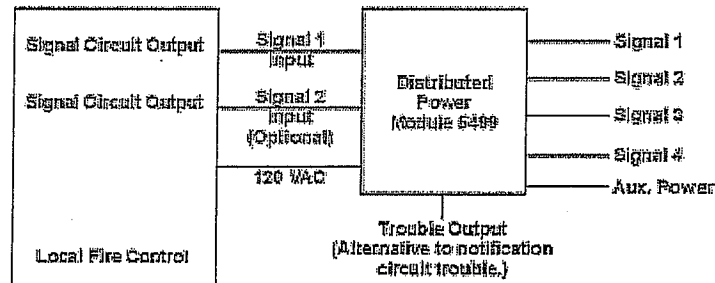
NFPA 72
UL Listed
CSFM 7300-0559: 123
MEA 429-92-E Vol. XII

Ordering Information
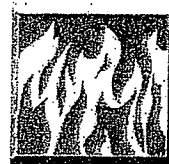
5499
Distributed Power Module

Model 5499 Block Diagram

MADE IN AMERICA

FORM# 350396 Rev D 09/06

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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

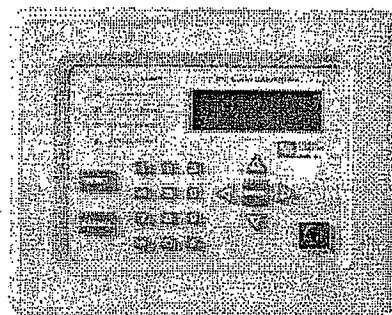Standby Current: 20 mA max

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
5680R: Red
5680: 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

SILENT KNIGHT
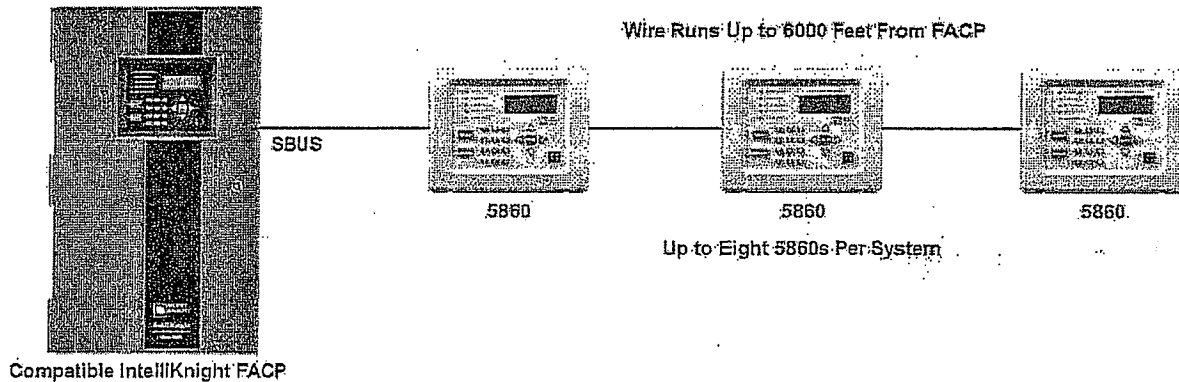by Honeywell

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.

Wire Runs Up to 6000 Feet From FACP

SBUS

5860   5860   5860

Up to Eight 5860s Per System

Compatible IntelliKnight FACP

Compatibility
IntelliKnight 5820XL FACP

IntelliKnight 5808 FACP

IntelliKnight 5700 FACP

Ordering Information
5680R Remote Annunciator
Four line LCD annunciator with 20 characters per line. Red.

5680 Remote Annunciator.
Four line LCD annunciator with 20 characters per line. Gray.

Accessories
5860TR Red Trim Ring
For surface mounting.

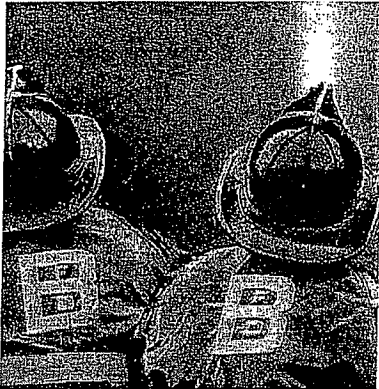**5860TG Gray Trim Ring**
For surface mounting.

SD500-LIM
Line Isolator Module

Isolate SLC loop problems without losing the entire loop.

Isolate a short circuit wiring fault on a SLC loop using a SD500-LIM. Normally if a short on the SLC loop occurs, communication on the loop can be disrupted. When isolator modules are used and a short occurs on the SLC loop, it will be detected as a trouble but all the SLC devices that are protected by a line isolator module will continue to operate.

SD500-LIM
Line Isolator Module

The SD500-LIM Line Isolator Module is compatible with Silent Knight's Addressable Fire control panels.

The SD500-LIM can be used on Style 7 (Class A), and Style 4 (Class B) wiring configurations.

The SD500-LIM mounts in a standard dual gang or 4" square electrical box.

Specifications

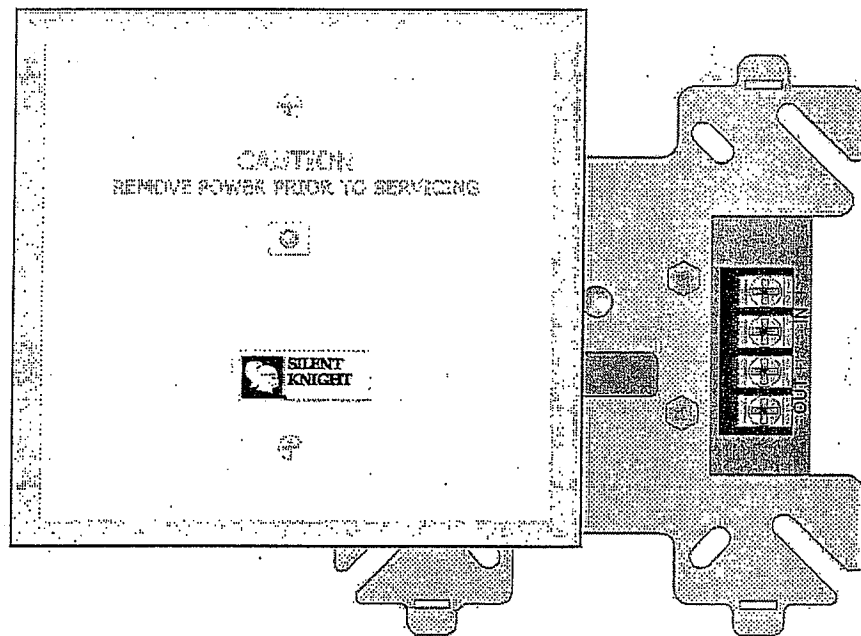|	
Operation Temperature:	32° - 120°F (0° - 49°C)
Dimensions:	
Length:	4-7/8" (12.38 cm)
Width:	4-7/8" (12.38 cm)
Depth:	7/8" (2.22 cm)
Operating Voltage:	32 VDC
Battery Current Draw During AC Loss:	.092 mA
SLC Current:	.092 mA
Max. SLC Loop Resistance:	50Ω

Features
- Isolates short circuits on an SLC loop.
- Protects other modules on the loop so other devices continue to operate.
- Can be used on Style 7 (Class A), and Style 4 (Class B) wiring configurations.
- Mounts in a standard dual gang or 4" square electrical box.

Listings/Approvals
- UL Listed
- CSFM listed 7170-0559:143
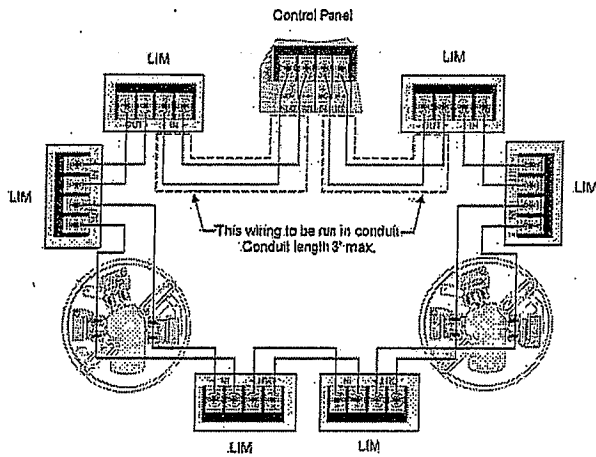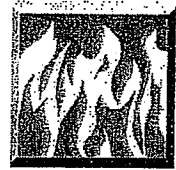- MEA approval 429-92-E volume XI

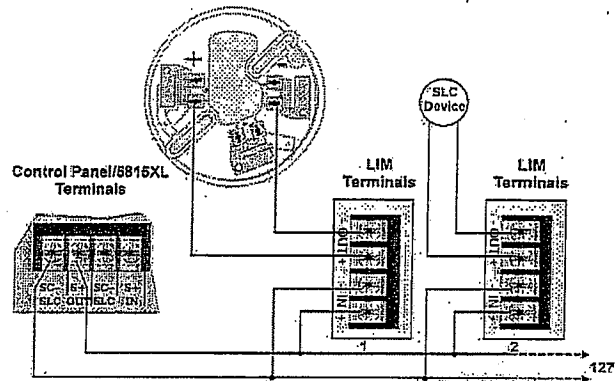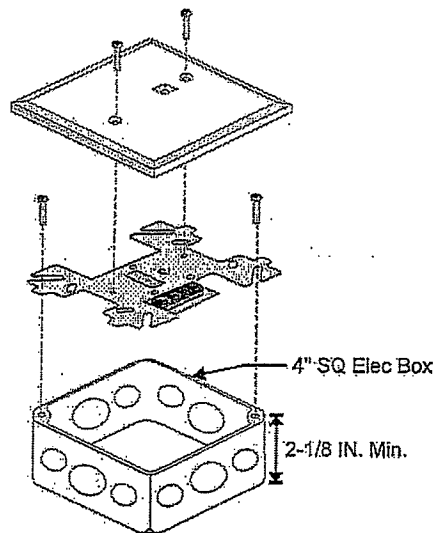### Compatible Control Panels
5820XL
5808
5700

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by Honeywell

SD500-LIM
Line Isolator Module

Style 7 (Class A)

Style 4 (Class B)

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.
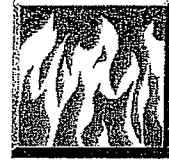Phone: (800) 328-0103, Fax: (763) 493-6475. http://www.silentknight.com
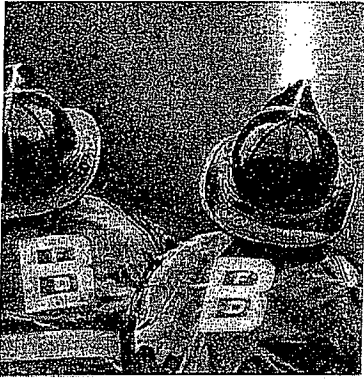
Addressable Photoelectric Type Smoke Detector

Detect smoldering fires quickly and get help fast with IntelliKnight® photoelectric smoke detectors.

IntelliKnight addressable photoelectric smoke detectors are the clear choice for commercial settings where smoldering fires are a threat. In addition to accurately detecting a smoldering fire, each SD505-APS photoelectric detector has a unique address, which is recognized by the IntelliKnight panel. No precious seconds are wasted in determining location of an alarm.

The SD505-APS compensates automatically for contamination in the environment. And detector testing is simple—even from a remote site. Like other IntelliKnight detector models, the SD505-APS offers a low profile for pleasing aesthetics. The IntelliKnight family of detectors has been designed to use a common base, Model SD505-6AB, allowing complete application and placement flexibility. Combine all this with the features you've come to expect from Silent Knight smoke detectors—easy installation, stable operation, RF/transient protection, and vandal-resistant locking—and it adds up to a flexible solution for all your fire protection needs.

Model SD505-APS
Analog / Addressable Photoelectric Type Smoke Detector

The SD505-APS is particularly suited to detecting dense smoke typical of fires involving materials such as soft furnishings, plastic, foam or other similar materials which tend to smolder and produce large visible particles.

The detector features automatic compensation for contamination and a simple detector calibration test procedure that can be run from the panel or remotely (using the Windows™ based downloading software).
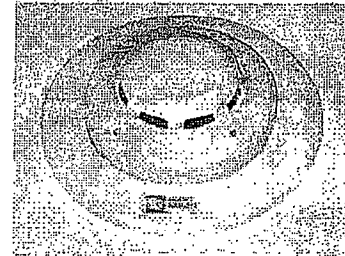
Operation

The SD505-APS units made up of an LED light source and a silicon photo diode receiving element. In a normal standby condition, the receiving element receives no light from the pulsing light source. In the event or fire, smoke enters the detector and light is reflected from the smoke particles to the receiving element.

The light received is converted into an electronic signal. Under normal conditions, the status LED blinks approximately every 15 seconds, indicating that the head is communicating with the loop. The LED lights continuously during the alarm period.

Features

- Low profile, 2 inches, including base
- Simple and reliable addressing without mechanical switches
- Automatic compensation for sensor contamination
- Built-in fire test feature
- Simple detector calibration testing through the control panel or remotely through a Windows™ based computer software.
- Vandal-resistance locking features
- Field cleanable
- UL listed, meets NFPA 72 Ch 7 requirements
- CSFM approved
- MEA approved
- FM Approved

SD505-APS Smoke Detector
Specifications

|	
Operating Voltage:	17-41 VDC
Current Consumption:	
Standby:	.55 mA
Alarm:	.55 mA
Ambient Temperature:	32°F to 120°F (0°C to 49°C)
Mounting:	4" Square, 4" OCT, Single gang mud ring
Relative Humidity:	85% noncondensing
Air Velocity:	0 - 300 FPM
Compatible Bases: (Sold Separately)	SD505-6AB (6" Base) SD505-4AB (4" Base)

SILENT KNIGHT

by Honeywell

Model SD505-APS
Addressable Photoelectric Type
Smoke Detector
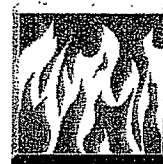
Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable photoelectric smoke detector Silent Knight SD505-APS. The combination detector head, and twist-lock base, shall be UL® listed compatible with Silent Knight's IntelliKnight fire control panels.
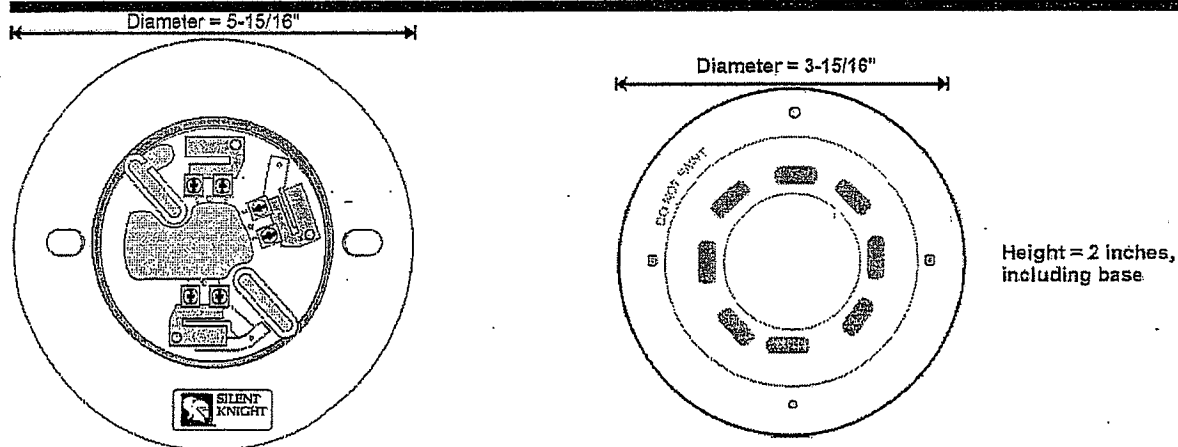
The base shall permit direct interchange with Silent Knight SD505-AIS Ionization Smoke Detector, or SD505-AHS Heat Detector. Base shall be the appropriate twist-lock base SD505-6AB.

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 SD505-APS 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.

Diameter = 5-15/16"

Diameter = 3-15/16"

Height = 2 inches, including base

Model SD505-6AB Detector Base
(front view)

Model SD505-APS Detector Head
(front view)

Addressable Heat Detector

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

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

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

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

Model SD505-AHS Addressable Heat Detector

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

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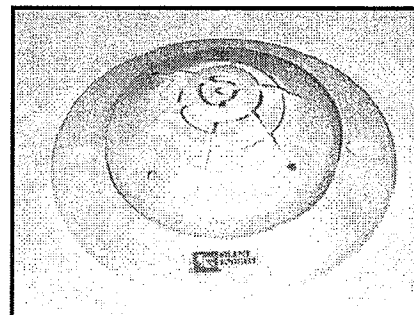
Operation

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

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

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

Features

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

SILENT KNIGHT
by Honeywell

SD505-AHS Heat Detector
Specifications

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

Model SD505-AHS
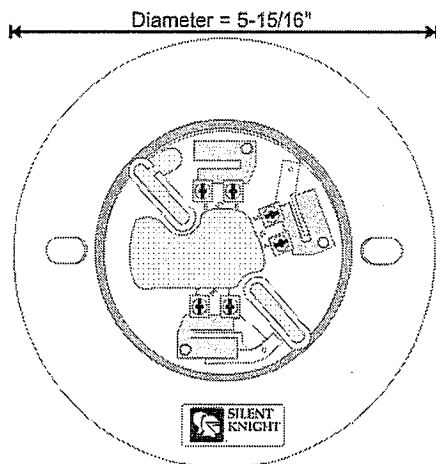# Addressable Heat Detector
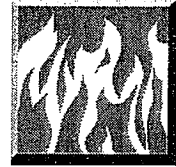
Engineering Specifications

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

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

The 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.

Diameter = 5-15/16"

Diameter = 3-15/16"

Height = 2 inches, including base

Model SD505-6AB Detector Base
(Front View)

Model SD505-AHS Detector Head
(Front View)

Model SD505-DUCT
Duct Smoke Detector

Detect smoke in air handling systems and air handeling equipment with Silent Knight's addressable duct smoke detector

The SD505-DUCT addressable duct smoke detector including the SD505-APS Analog Photoelectric Smoke Sensor is used 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 IntelliKnight control panel. The panel, in turn, depending on programming and wiring, turns off fans, blowers, and other devices. Now there's even more power and flexibility available to the IntelliKnight family of products!

Model SD505-DUCT
Duct Smoke Detector

The Model SD505 DUCT Duct Smoke Detector is a heavy duty detector housing with the SD505-APS Analog Photoelectric Smoke Sensor pre-installed. It provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial and Industrial applications.

The SD505-DUCT is in a heavy duty gray steel back box with a clear cover. It installs quickly and easily.

Operation

Air sampling is accomplished by two tubes which protrude into the duct. An exhaust tube of one standard length (7.5") is provided with the detector housing. Intake sampling tubes (ordered separately) are supplied in three standard lengths. Duct mounting is accomplished through a template and 4 sheet metal screws (provided).
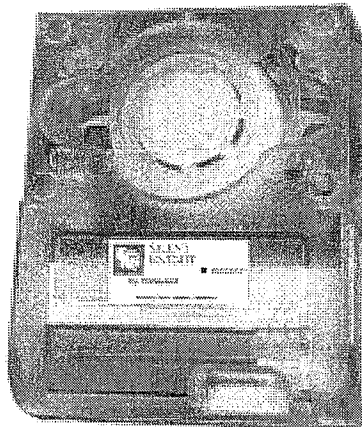
SD505-DUCT

Features

- Two-wire connection to SLC
- LED alarm indication and communication on sensor head
- Detects and limits the spread of smoke
- Rugged steel backbox with clear plastic cover
- Installation template included
- Large terminal connection screws
- 3 standard tube lengths
- UL 268A listed, complies with NFPA 72 and 101

Specifications

Included Parts:	Metal housing with 7.5" exhaust tube
	SD505-APS analog Photoelectric sensor
	Installation template
	4 mounting screws

Accessory models:	(parts not included with SD505-DUCT)
SD505-T2	Sampling tube for 6" to 2.5' duct width
SD505-T5	Sampling tube for 2.5' to 5.0' duct width
SD505-T10	Sampling tube for 5.0' to 10.0' duct width

Current:	.55 mA (alarm and standby)
Air Velocity:	300 to 4000 fpm
Ambient Temperature:	32°F to 120°F (0°C to 49°C)
Humidity:	10 to 85% RH
Dimensions:	9 1/8" H x 7.25" W x 2.25" D
Color:	Gray backbox with clear cover

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by Honeywell

Model SD505-DUCT
Duct Smoke Detector
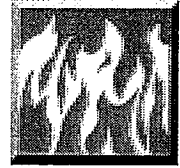
Engineering Specifications

The air duct smoke detector shall be Silent Knight Model SD505-DUCT. The housing shall contain a Analog Photoelectric Smoke Sensor , Silent Knight model SD505-APS. The detector head must perform an automatic sensitivity check every 3 hours.

The duct detector housing shall be of metal construction. Complete mechanical installation must be able to be performed without removal of the detector cover. Terminal connections shall be screw type using a minimum of #6 screw.

SD505-DUCT Dimensions

Front View

Side View

9 1/8"

Air sampling tube

7.25"

2.25"

2.75"

SD500-PS and SD500-PSDA Addressable Pull-Station

IntelliKnight's addressable pull stations combine fast response with pin-point location ID.

The SD500-PS and SD500-PSDA are a single action or dual action addressable manual fire alarm pull station for use with Silent Knight's IntelliKnight fire control panel. Extremely easy to operate, the SD500-PS/PSDA 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. The SD500-PS/PSDA mounts to a single gang box and features a rugged metal construction that lasts and lasts.
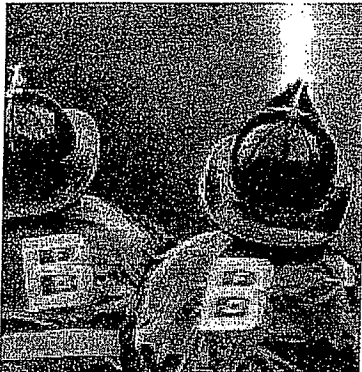
Combine all this with the features you've come to expect from Silent Knight - easy installation and stable operation - and it adds up to a flexible solution for all your fire protection needs.

Model SD500-PS & SD500-PSDA Addressable Pull Station

The SD500-PS is a single action addressable fire pull station, and the SD500-PSDA is a dual action addressable fire pull station. The SD500-PS/PSDA feature rugged metal construction A terminal strip on back of the pull station allows interconnection of the pull station to the SLC of an IntelliKnight control panel. The SD500-PS/PSDA is designed for indoor use in non-explosive environments. The normally open initiating point contacts are gold-plated to avoid risk of corrosion. The SD500-PS/PSDA has been tested by UL for compliance to the requirements of the Americans with Disabilities ACT (ADA).

Features

- UL Listed
- CSFM listed
- ADA compliant
- Key reset (Same key as Silent Knight enclosures)
- Surface mount back box available
- Terminals - accept up to 14 gauge wire

- Extremely easy to operate
- Corrosion-resistant gold-plated contacts.
- Reflective label makes it easier to locate in low light

Operation

The SD500-PS/PSDA single action pull stations are operated by a pull on the front pull cover of the station. A plunger switch, wired to a self contained addressable module, is released as the pull station opens to initiate the alarm. Once operated, the cover hangs down and can be seen up to 100 feet away. The pull station is reset by returning the front cover to the normal upright position and relocking the station with a reset key. The reset keys are the same keys used on Silent Knight enclosures.

The SD500-PS/PSDA includes a status LED which blinks, indicating that the addressable module is communicating with the loop. The status LED lights continuously during an alarm. A dip switch on the addressable module is used to set the unique address.

Specifications

Operating Voltage:	24VDC
Standby Current:	.55mA
Alarm Current:	.55mA
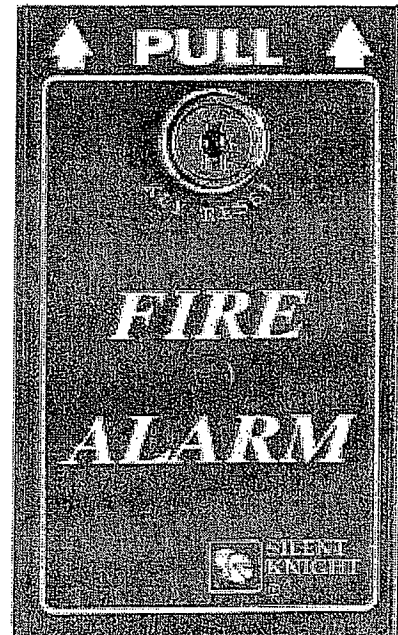
SD500-PS

Ambient Temperature:	32°F to 120°F (0°C to 49°C)
Mounting:	Single gang box -

Optional Red Surface Mount Box PS-SMBB

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A Honeywell Company

SD500-PS and SD500-PSDA Addressable Pull-Station
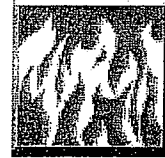
Engineering Specifications

Manual pull station shall be addressable Module SD500-PS/SD500-PSDA. Equipment shall be made of 14 gauge C.R.S.(Cold Rolled Steel), painted with a red enamel . The label shall contain the words Fire Alarm and be made of a reflective material embossed text 3/8 inches tall. Operating instruction shall .be clearly visible on the same label. Manual station Shall contain a key operated test and reset lock using a lock plate actuator, the key shall match the control panel.

Manual station shall contain four terminal blocks with two connected to the addressable module and two connect to the SLC loop. Manual station shall provide data to the control panel with an ID address programmed by dip switch settings .

Manual stations shall be Underwriters Laboratories Inc. listed and installed within the limits defined in the American Disabilities Act.
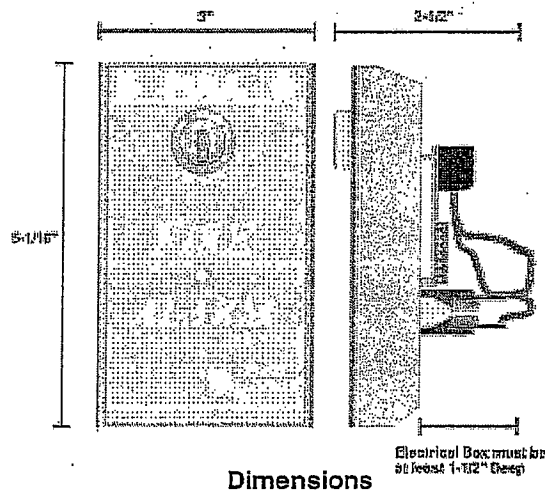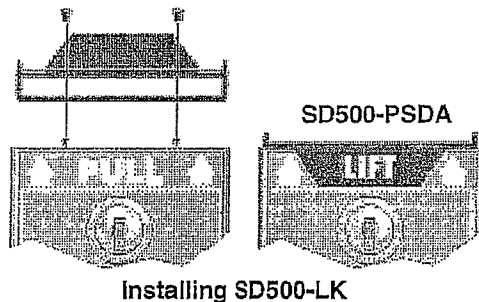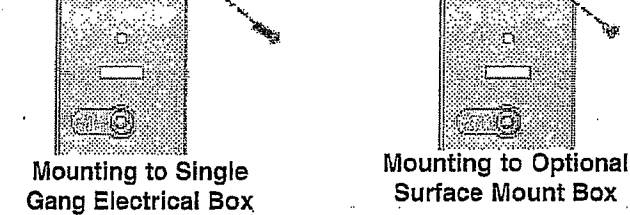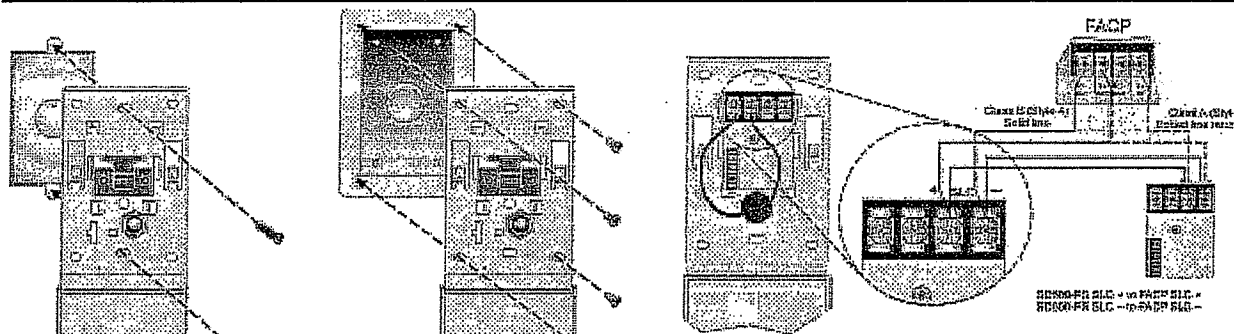
Mounting to Single Gang Electrical Box

Mounting to Optional Surface Mount Box

Wiring

SD500-PSDA

Installing SD500-LK

Dimensions

SD500-AIM & SD-500-MIM Addressable Input Modules

IntelliKnight's addressable contact monitor modules combine fast response with pinpoint location ID. A combination that saves lives and property.

The SD500-AIM and SD500-MIM are addressable input modules for use with Silent Knight IntelliKnight fire alarm control panels (FACP). The SD500-AIM and SD500-MIM are designed to be used with pull stations, water flow switches, and other applications requiring dry contact alarm initiation devices.

The SD500-AIM addressable input module mounts to a 4"-square box. The SD500-MIM mini input module fits inside a single gang box. The modules are supervised, single input contact monitors. Using an EOL resister, they monitor for alarm contact closures and for open circuit wiring fault conditions.

The SD500-AIM and SD500-MIM offer a compact design for adaptability and pleasing aesthetics as well as easy installation and stable operation—a flexible solution for all your fire protection needs.

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.
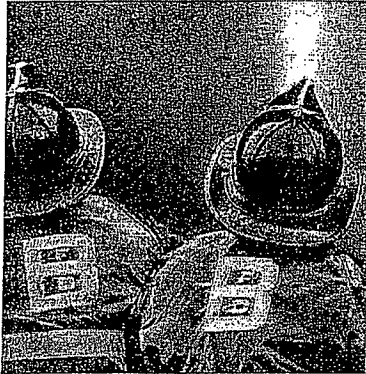
Description

The SD500-AIM and SD500-MIM are addressable input modules for use with the Intelliknight fire alarm control panels (FACPs). The SD500-AIM addressable input module mounts to a 4"-square box. The SD500-MIM mini input module fits inside a single gang box. Both input modules are designed to be used with pull stations, water flow switches, and other applications requiring dry contact alarm initiation devices.

These modules are supervised, single input contact monitors. Using an EOL resistor, they monitor for alarm contact closures and for open circuit wiring fault conditions. If a fault occurs in the wiring, the module alerts the FACP. Each addressable input module is programmed with a unique signal line circuit (SLC) loop address.

Features

- Single contact monitor
- Support for Class A (Style 6 & Style 7) or Class B (Style 4) wiring
- Attractive ivory cover plate with the SD500-AIM
- Small and lightweight size allows for flexible mounting options with the SD500-MIM
- DIP switch programmable for fast installation

- Up to 2500 ft wiring distance from either input module to contact
- Use up to 14 gauge wire
- UL listed

Electrical Specifications

Standby Current: 0.55 mA

Alarm Current: 23 mA max for one device; 46 mA max for two devices; 0.55 mA for each additional device

Line Resistance: 50Ω max

Mechanical Specifications

SD500-AIM Physical Description
Dimensions: .
4.9" W x 4.9" H x 1" D
(12.4 W x 12.4 H x 2.5 D cm)
Weight: 3.6 oz (120.1 g)
Color: Ivory cover plate

SD500-MIM Physical Description
Dimensions:
1.5" W x 2.5" H x 0.7" D
(3.8 W x 6.4 H x 1.8 D cm)
Weight: 1.6 oz (45.4 g)

Environmental

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

Humidity:
10% – 93% non-condensing
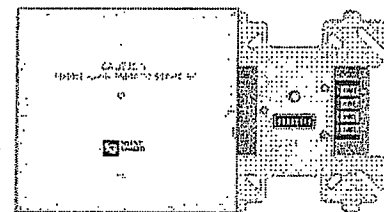
SD500-AIM

SD500-MIM

Approvals

NFPA 71 & NFPA 72
UL 864
CSFM 7300-0559: 132
MEA 429-92-E Vol. IX
FM Approved for use with the 5820XL

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by Honeywell
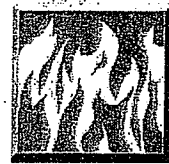
SD500-AIM & SD500-MIM
Addressable Input Modules

Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable input modules Silent Knight SD500-AIM or SD500-MIM. The modules shall be UL listed and compatible with Silent Knight's IntelliKnight FACPs.

The SD500-MIM shall fit inside a single gang electrical box. The SD500-AIM shall be supplied with a plastic cover and shall be suitable for mounting to a 4"-square or double gang electrical box. The SD500-AIM addressable input module must provide a monitor LED that is visible from outside the cover plate

Compatibility
IntelliKnight 5820 FACP
IntelliKnight 5808 FACP
IntelliKnight 5700 FACP

Ordering Information
SD500-AIM Input Module
Addressable input module with ivory cover plate.

SD500-MIM Mini Input Module
Addressable mini input module.

MADE IN AMERICA

FORM# 350231 Rev.C, 05/06

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Model SD500-ARM
Addressable Relay Module

Place relay applications anywhere on the IntelliKnight loop with the SD500-ARM Addressable Relay Module.

The SD500-ARM is an addressable device that adds great flexibility to the IntelliKnight system. Providing two Form C contacts rated at 2.0 amps @ 30 VDC or .6 amp @ 120 VAC. The SD500-ARM allows you to control a wide variety of normally open and normally closed applications, including elevator recall, door closing, fan operation, and auxiliary notification. And, because the relay module is addressable, these applications can be located at any point in the signaling line circuit.

Like other IntelliKnight SLC devices, the SD500-ARM is compact for adaptability and pleasing aesthetics. Combine this with the features you've come to expect from Silent Knight fire protection devices—easy installation and stable operation—and it adds up to a flexible solution for all your fire protection needs.

Model SD500-ARM
Addressable Relay Module

The SD500-ARM provides two Form C contacts rated at 2A @ 30 VDC or .6A @ 120 VAC. These contacts can be used for virtually any normally open or normally closed application.

Operation

Each relay module is programmed with a unique SLC loop address. When an event that controls the relay module occurs, the relay is triggered by the IntelliKnight panel.

Features

- Two sets of Form C contacts.
- Contacts are rated at 2A @ 30 VDC or .6A @ 120 VAC.
- Up to 127 relays can be used on each SLC loop.
- Relay programming is completely flexible—can be mapped to zone conditions.
- Polling LED visible through cover plate.
- UL listed, complies with NFPA 72.
- CSFM approved
- MEA Approved, 429-92-E, Vol. 9
- FM approved
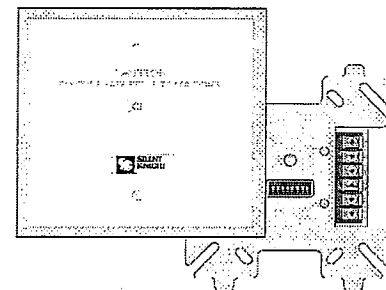
Model SD500-ARM

Specifications

Contact Rating:	Form C
	2A @ 30 VDC
	.6A @ 120 VAC

Standby Current:	.55 mA
Alarm Current:	.55 mA

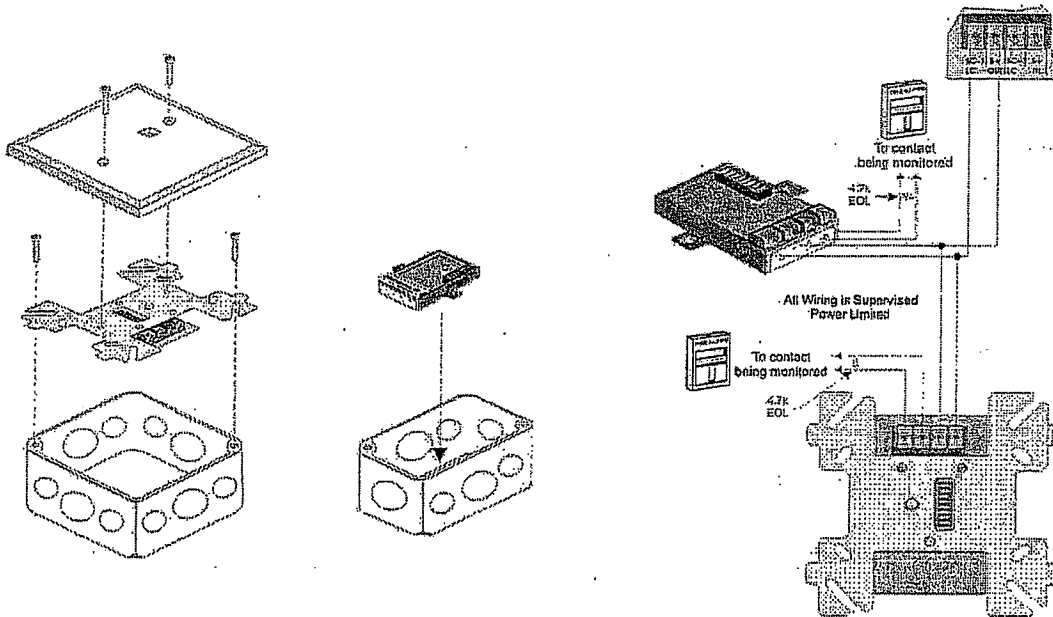| Ambient Temperature	32°F to 120°F (0°C to 49°C)
Mounting	4-square electrical box

Model SD500-ARM
Addressable Relay Module
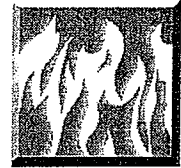
Engineering Specifications

The contractor shall furnish and install where indicated on the plans, addressable relay modules, Silent Knight SD500-ARM. The modules shall be UL listed compatible with Silent Knight's Intelliknight FACPs.

The relay module must provide two Form C dry contacts rated at 2.0 amps at 30 VDC or .6 amp at 120 VAC.

The relay module must be suitable for mounting in a standard 4-square electrical box and must include a plastic cover plate. The relay module board must provide an LED that is visible from the outside of the cover plate.

The relay must be fully programmable for such applications as are required by the installation.

FRONT VIEW

CAUTION
REMOVE POWER PRIOR TO SERVICING

SILENT KNIGHT

4-7/8"

1/4"

1"
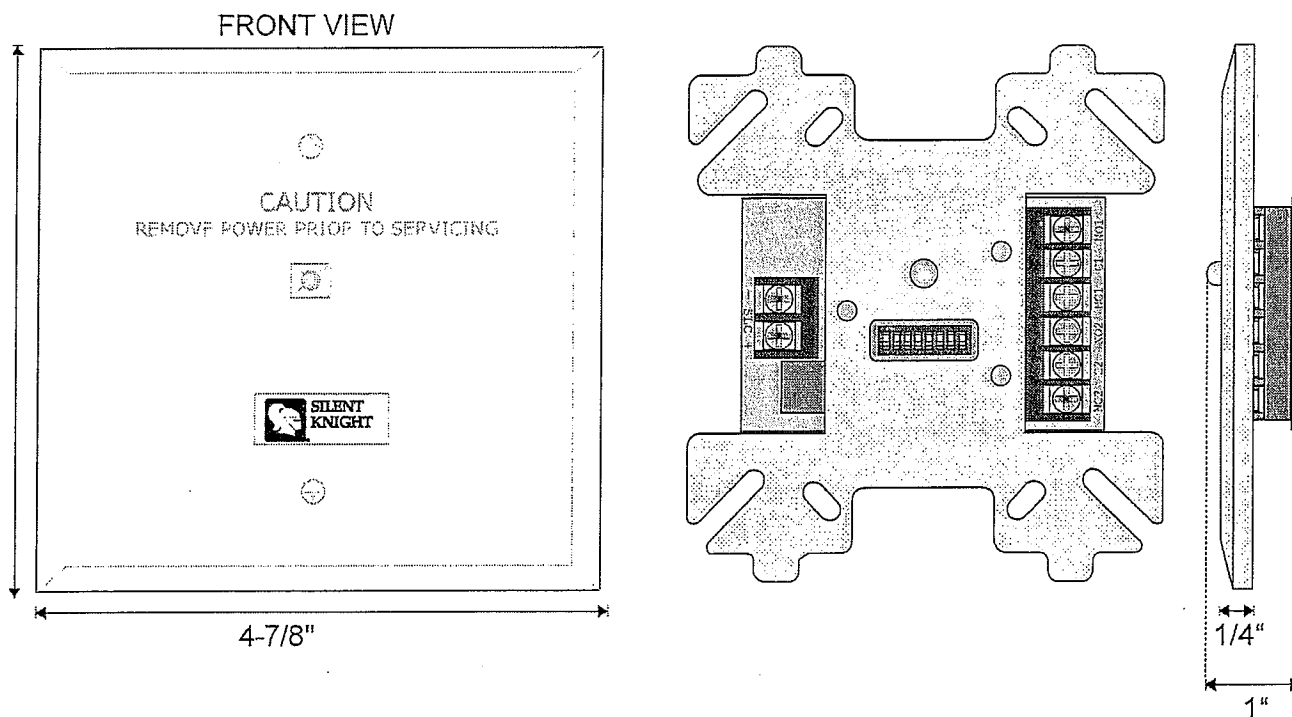
Model SD500-ARM Addressable Relay Module Dimensions

SYSTEM SENSOR®

Selectable Output Horns, Strobes, and Horn/Strobes

SpectrAlert® Advance selectable-output horns, strobes, and horn/strobes are rich with features guaranteed to cut installation times and maximize profits.
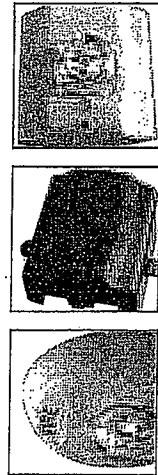
SPECTRAlert
ADVANCE

The SpectrAlert Advance series of notification appliances is designed to simplify installations, with features such as plug in designs, instant feedback messages to ensure correct installation of individual devices, and 11 field-selectable candela settings for wall and ceiling strobes and horn/strobes.

When installing Advance products, first attach a universal mounting plate to a four-inch square, four-inch octagon or double-gang junction box. The two-wire mounting plate attaches to a single-gang junction box.

Next, connect the notification appliance circuit wiring to the SEMS terminals on the mounting plate.

Finally, attach the horn, strobe or horn/strobe to the mounting plate by inserting the product's tabs in the mounting plate's grooves. The device will rotate into position, locking the product's pins into the mounting plate's terminals. The device will temporarily hold in place with a catch until it is secured with a captured mounting screw.

The SpectrAlert Advance series includes outdoor notification appliances. Outdoor strobes and horn/strobes (two wire and four wire) are available for wall or ceiling. Outdoor horns are available for wall only. All System Sensor outdoor products are rated between minus 40 degrees Fahrenheit and 151 degrees Fahrenheit in wet or dry applications.

Features

- Electrically compatible with existing SpectrAlert products
- Automatic selection of 12- or 24-volt operation at 15 and 15/75 candela
- Plug-in design
- Field selectable candela settings on wall and ceiling units: 15, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185
- Same mounting plate for wall- and ceiling-mount units
- Shorting spring on mounting plate for continuity check before installation
- Tamper resistant construction
- Outdoor wall and ceiling products rated from −40°F to 151°F
- Design allows minimal intrusion into the back box
- Horn rated at 88+ dbA at 16 volts
- Rotary switch for horn tone and three volume selections
- Outdoor products UL listed to UL 1638 (strobe) and UL 464 (horn) outdoor requirements
- Outdoor products NEMA 4X rated
- Compatible with MDL sync module

Agency Listings

SIGNALING

UL LISTED
S4011
S5512
S3593

FM APPROVED
3023572

MEA approved
MEA452-05-E

7125-1653:186 (indoor strobes)
7300-1653:187 (outdoor strobes)
7125-1653:188 (horn/strobes, chime/strobes)
7135-1653:189 (horns, chimes)

SpectrAlert Advance Specifications

General

SpectrAlert Advance horns, strobes and horn/strobes shall mount to a standard 4 × 4 × 1½-inch back box, 4-inch octagon back box or double-gang back box. Two-wire products shall also mount to a single-gang 2 × 4 × 1⅞-inch back box. 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, SpectrAlert Advance 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 nine and 17.5 volts; 24-volt rated notification appliance circuit outputs shall operate between 17 and 33 volts. Indoor SpectrAlert Advance 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, 15/75, 30, 75, 95, 110, 115, 135, 150, 177, 185.

Strobe

The strobe shall be a System Sensor SpectrAlert Advance 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 SpectrAlert Advance 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 three 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. On four-wire products, the strobe shall be powered independently of the sounder. The horn on horn/strobe models shall operate on a coded or non-coded power supply.

Outdoor Products

SpectrAlert Advance outdoor horns, strobes and horn/strobes shall be listed for outdoor use by UL and shall operate between minus 40 degrees and 151 degrees Fahrenheit. The products shall be listed for use with a System Sensor outdoor/weatherproof back box with half inch and three-fourths inch conduit entries.

Synchronization Module

The module shall be a System Sensor Sync-Circuit model MDL listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectrAlert 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 4¹¹/₁₆ × 4¹¹/₁₆ × 2⅛-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.

Standard Operating Temperature	32°F to 120°F (0°C to 49°C)
K Series Operating Temperature	−40°F to 151°F (−40°C to 66°C)
Humidity Range	10 to 93% non-condensing (indoor products)
Strobe Flash Rate	1 flash per second
Nominal Voltage	Regulated 12DC/FWR or regulated 24DC/FWR[1]
Operating Voltage Range[2]	8 to 17.5 V (12V nominal) or 16 to 33 V (24 nominal)
Input terminal wire gauge	12 to 18 AWG
Ceiling mount dimensions (including lens)	6.8" diameter × 2.5" high (173 mm diameter × 64 mm high)
Wall mount dimensions (including lens)	5.6"L × 4.7"W × 2.5"D (142 mm L × 119 mm W × 64 mm D)
Horn dimensions	5.6"L × 4.7"W × 1.3"D (142 mm L × 119 mm W × 33 mm D)
Wall-mount back box skirt dimensions (BBS-2, BBSW-2)	5.9"L × 5.0"W × 2.2"D (151 mm L × 128 mm W × 56 mm D)
Ceiling-mount back box skirt dimensions (BBSC-2, BBSCW-2)	7.1" diameter × 2.25" high (180 mm diameter × 57 mm high)
Wall-mount weatherproof back box dimensions (SA-WBB)	5.7"L × 5.1"W × 2.0"D (145 mm L × 130 mm W × 51 mm D)
Ceiling-mount weatherproof back box dimensions (SA-WBBC)	7.1" diameter × 2.0" high (180 mm diameter × 51 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 15/75 cd.

UL Current Draw Data

UL Max. Strobe Current Draw (mA RMS)

	Candela	8–17.5 Volts DC	FWR	16–33 Volts DC	FWR
Standard Candela Range	15*	123	128	66	71
	15/75*	142	148	77	81
	30*	NA	NA	94	96
	75*	NA	NA	158	153
	95*	NA	NA	181	176
	110	NA	NA	202	195
	115	NA	NA	210	205
High Candela Range	135	NA	NA	228	207
	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

UL Max. Horn Current Draw (mA RMS)

Sound Pattern	dB	8–17.5 Volts DC	FWR	16–33 Volts DC	FWR
Temporal	High	57	55	69	75
Temporal	Medium	.44	49	58	69
Temporal	Low	38	44	44	48
Non-temporal	High	57	56	69	75
Non-temporal	Medium	42	50	60	69
Non-temporal	Low	41	44	50	50
Coded	High	57	55	69	75
Coded	Medium	44	51	56	69
Coded	Low	40	46	52	50

UL Max. Current Draw (mA RMS) 2-wire Horn/Strobe, Standard Candela Range (15–115 cd)

	8–17.5 Volts		16–33 Volts						
DC Input	15	15/75	15	15/75	30	75	95	110	115
Temporal High	137	147	79	90	107	176	194	212	218
Temporal Medium	132	144	69	80	97	157	182	201	210
Temporal Low	132	143	66	77	93	154	179	198	207
Non-temporal High	141	152	91	100	116	176	201	221	229
Non-temporal Medium	133	145	75	85	102	163	187	207	216
Non-temporal Low	131	144	68	79	96	156	182	201	210
FWR Input									
Temporal High	136	155	88	97	112	168	190	210	218
Temporal Medium	129	152	78	88	103	160	184	202	206
Temporal Low	129	151	76	86	101	160	184	194	201
Non-temporal High	142	161	103	112	126	181	203	221	229
Non-temporal Medium	134	155	85	95	110	166	189	208	216
Non-temporal Low	132	154	80	90	105	161	184	202	211

UL Max. Current Draw (mA RMS) 2-wire Horn/Strobe, High Candela Range (135–185 cd)

DC Input	16–33 Volts 135	150	177	185	FWR Input	16–33 Volts 135	150	177	185
Temporal High	245	259	290	297	Temporal High	215	231	258	265
Temporal Medium	235	253	288	297	Temporal Medium	209	224	250	258
Temporal Low	232	251	282	292	Temporal Low	207	221	248	256
Non-temporal High	255	270	303	309	Non-temporal High	233	248	275	281
Non-temporal Medium	242	259	293	299	Non-temporal Medium	219	232	262	267
Non-temporal Low	238	254	291	295	Non-temporal Low	214	229	256	262

Candela Derating

For K series products used at low temperatures, listed candela ratings must be reduced in accordance with this table.
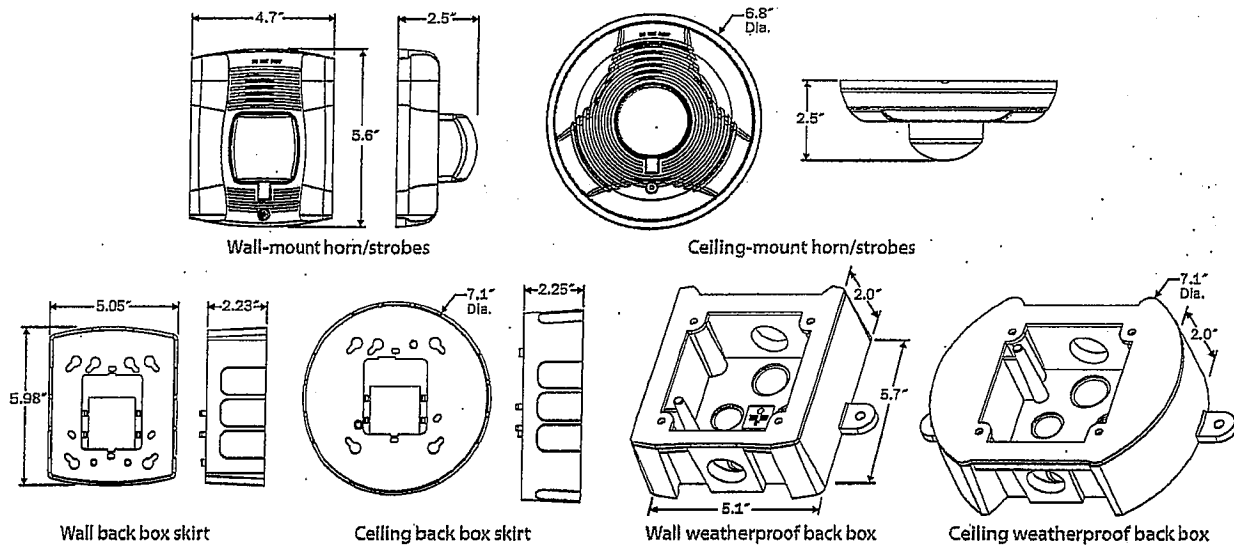
Strobe Output (cd)

Listed Candela	Candela rating at –40°F
15	
15/75	Do not use below 32°F
30	
75	44
95	70
110	110
115	115
135	135
150	150
177	177
185	185

Horn Tones and Sound Output Data

Horn and Horn/Strobe Output (dBA)

Switch Position	Sound Pattern	dB	8–17.5 Volts DC	FWR	16–33 Volts DC	FWR	24 Volt Nominal Reverberant DC	FWR	Anechoic DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	89
4	Non-temporal	High	82	82	88	88	93	92	100	100
5	Non-temporal	Medium	78	78	85	85	90	90	98	98
6	Non-temporal	Low	75	75	81	81	88	84	96	92
7†	Coded	High	82	82	88	88	93	92	101	101
8†	Coded	Medium	78	78	85	85	90	90	97	98
9†	Coded	Low	75	75	81	81	88	85	96	92

†Settings 7, 8, and 9 are not available on 2-wire horn/strobe.

SpectrAlert Advance Dimensions

Wall-mount horn/strobes

Ceiling-mount horn/strobes

Wall back box skirt — Ceiling back box skirt — Wall weatherproof back box — Ceiling weatherproof back box

SpectrAlert Advance Ordering Information

Model	Description	Model	Description
Wall Horn/Strobes		**Ceiling Horn/Strobes (cont'd.)**	
P2R*†	2-wire Horn/Strobe, Standard cd‡, Red	PC2W*†	2-wire Horn/Strobe, Standard cd, White
P2RH*	2-wire Horn/Strobe, High cd, Red	PC2WH*†	2-wire Horn/Strobe, High cd, White
P2RK*¤	2-wire Horn/Strobe, Standard cd, Red, Outdoor	PC4R	4-wire Horn/Strobe, Standard cd, Red
P2RHK¤	2-wire Horn/Strobe, High cd, Red, Outdoor	PC4RH	4-wire Horn/Strobe, High cd, Red
P2W*	2-wire Horn/Strobe, Standard cd, White	PC4RK	4-wire Horn/Strobe, Standard cd, Red, Outdoor
P2WH*	2-wire Horn/Strobe, High cd, White	PC4RHK¤	4-wire Horn/Strobe, High cd, Red, Outdoor
P4R*	4-wire Horn/Strobe, Standard cd, Red	PC4W	4-wire Horn/Strobe, Standard cd, White
P4RH*	4-wire Horn/Strobe, High cd, Red	PC4WH	4-wire Horn/Strobe, High cd, White
P4RK¤	4-wire Horn/Strobe, Standard cd, Red, Outdoor	**Ceiling Strobes**	
P4RHK¤	4-wire Horn/Strobe, High cd, Red, Outdoor	SCR*	Strobe, Standard cd, Red
P4W*	4-wire Horn/Strobe, Standard cd, White	SCRH*	Strobe, High cd, Red
P4WH*	4-wire Horn/Strobe, High cd, White	SCRK¤	Strobe, Standard cd, Red, Outdoor
Wall Strobes		SCRHK¤	Strobe, High cd, Red, Outdoor
SR*†	Strobe, Standard cd, Red	SCW*†	Strobe, Standard cd, White
SRH*†	Strobe, High cd, Red	SCWH*†	Strobe, High cd, White
SRK¤	Strobe, Standard cd, Red, Outdoor	**Horns**	
SRHK	Strobe, High cd, Red, Outdoor	HR	Horn, Red
SW*	Strobe, Standard cd, White	HRK¤	Horn, Red, Outdoor
SWH*	Strobe, High cd, White	HW	Horn, White
Ceiling Horn/Strobes		**Accessories**	
PC2R*	2-wire Horn/Strobe, Standard cd, Red	BBS-2	Back Box Skirt, Wall, Red
PC2RH*	2-wire Horn/Strobe, High cd, Red	BBSW-2	Back Box Skirt, Wall, White
PC2RK¤	2-wire Horn/Strobe, Standard cd, Red, Outdoor	BBSC-2	Back Box Skirt, Ceiling, Red
PC2RHK¤	2-wire Horn/Strobe, High cd, Red, Outdoor	BBSCW-2	Back Box Skirt, Ceiling, White

Notes:

* Add "-P" to model number for plain housing (no "FIRE" marking on cover), e.g., P2R-P.

† Add "-SP" to model number for "FUEGO" marking on cover, e.g., P2R-SP.

‡ "Standard cd," refers to strobes that include 15, 15/75, 30, 75, 95, 110, and 115 candela settings. "High cd," refers to strobes that include 135, 150, 177, and 185 candela settings.

All outdoor units ending in "K" include a weatherproof back box.

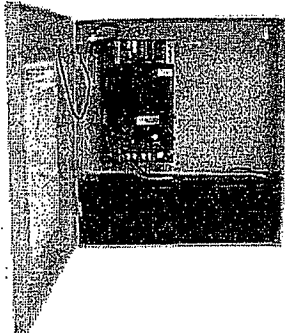¤ Add "-R" to model number for weatherproof replacement device (no back box included).

Altronix® AL300ULX(R) Power Supply/Charger

Overview

- These multi-agency approved single output power supply/chargers convert a 115VAC/60Hz input into one (1) Class 2 Rated 12VDC or 24VDC power limited outputs.

AL300ULX
- Grey enclosure.

AL300ULXR
- Red enclosure.

Specifications

- 12VDC or 24VDC selectable output.
- 2.5 amp supply current.
- Class 2 Rated power limited output.
- Input 115VAC / 60Hz, 1.45 amp.
- Input fuse rated @ 3.5 amp/250V.
- Filtered and electronically regulated output.
- Short circuit and thermal overload protection.
- Built-in charger for sealed lead acid or gel type batteries.
- Maximum charge current .7 amp.
- Automatic switch over to stand-by battery when AC fails (zero voltage drop).
- AC fail supervision (form "C" contacts).

- Low battery supervision (form "C" contacts).
- Battery presence supervision (form "C" contacts).
- AC input and DC output LED indicators.
- Enclosure:
  - Combination knockouts are 1/2" and 3/4"
  - Accommodates up to two (2) 12VDC/7AH batteries.
- Product weight:
  - AL300ULX: 7.7 lbs.
  - AL300ULXR: 7.3 lbs.
- Shipping weight:
  - AL300ULX: 8.7 lbs.
  - AL300ULXR: 8.3 lbs.

Agency Approvals

UL 294   UL Listed for Access Control System Units.

UL 603   UL Listed Standard for Power Supplies for Use with Burglar-Alarm Systems.

UL 1069   UL Listed Hospital Signaling and Nurse Call Equipment.

UL 1481   UL Listed Standard for Safety for Fire Protective Signaling Systems.

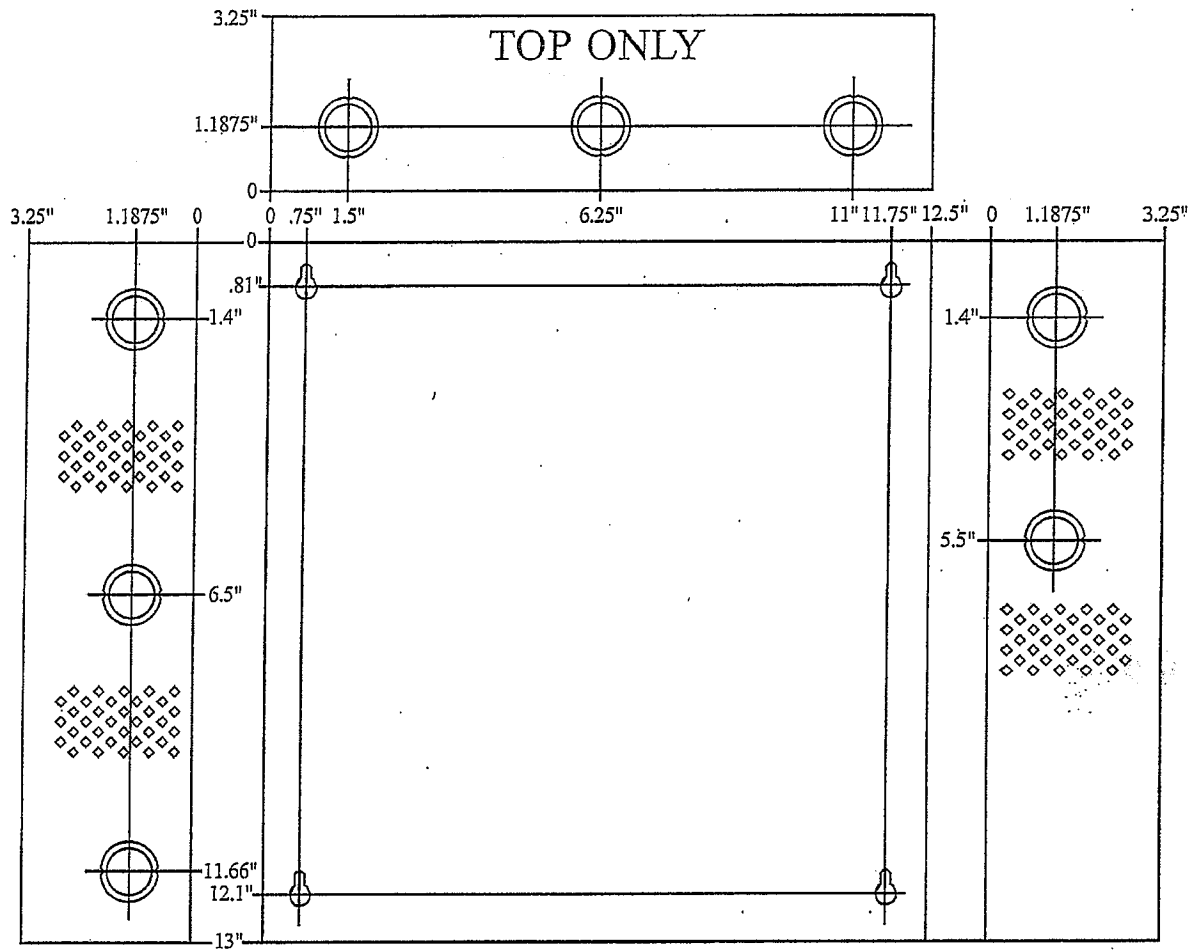CUL Listed - CSA Standard C22.2 No.205-M1983, Signal Equipment.

MEA Approved   MEA - NYC Department of Buildings Approved.

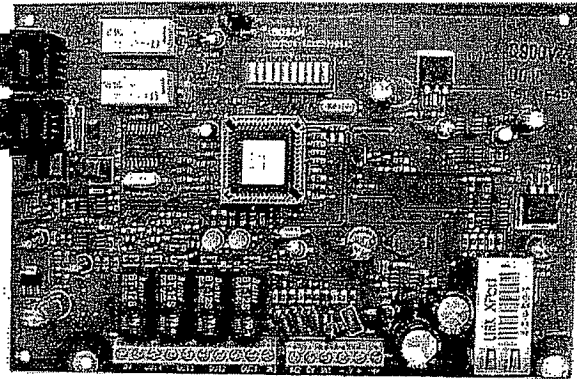CSFM - California State Fire Marshal Approved.

Enclosure Dimensions
13.5"H x 13"W x 3.25"D

TOP ONLY

Conettix C900V2 Dialer Capture Ethernet Module

- ► Captures alarm and event data from dialer-based control panels using CONTACT ID, SIA, Modem II, Modem IIe, Modem IIIa^2, Pulse, and other formats
- ► Performs full data transmissions without changing the data
- ► 12 VDC to 24 VDC voltage range
- ► Re-routes signals using UDP/IP-based data networks
- ► Convenient connection (RJ-45 Jack) to Ethernet networks
- ► Integrated 10/100 Network Interface Module (NIM)
- ► Provides acknowledgement from the receiver to the control panel
- ► Supports 128-bit AES Rijndael encryption

The Conettix C900V2 Dialer Capture Ethernet Module works with most control panels using a standard digital dialer format and provides end-to-end security. The module links the digital dialer to the Public Switched Telephone Network (PSTN), the digital dialer's telephone interface, and an Ethernet network. With the Ethernet link, the C900V2 can:

- Communicate with the control panel dialer
- Decode and deliver signals to a Conettix D6600 Communications Receiver/Gateway
- Relay a confirmation message back to the control panel dialer

Whether a control panel dials through a telephone line or through the C900V2, the data remains the same. The C900V2 empowers digital dialer control panels to work over an IP network such as a Local Area Network (LAN), a Wide Area Network (WAN), or the Internet.

System Overview

When the dialer has a message to report, the C900V2 simulates dial tone and line voltages, causing the dialer to behave as though it is connected to a monitoring center digital receiver through the PSTN. The C900V2 decodes and converts the transmitted dialer message to data for transport over any UDP/IP network.

After the Conettix D6600 Communications Receiver/Gateway receives a message or event, it sends an acknowledgement message to the C900V2. The C900V2 returns an appropriate response to the dialer, maintaining end-to-end acknowledgment.

The C900V2 operates in Intercept Mode, connecting the dialer to the network under normal circumstances. If the C900V2 loses contact with the Conettix D6600 Communications Receiver/Gateway, the unit goes into Fallback Mode, connecting the dialer to the PSTN telephone line.
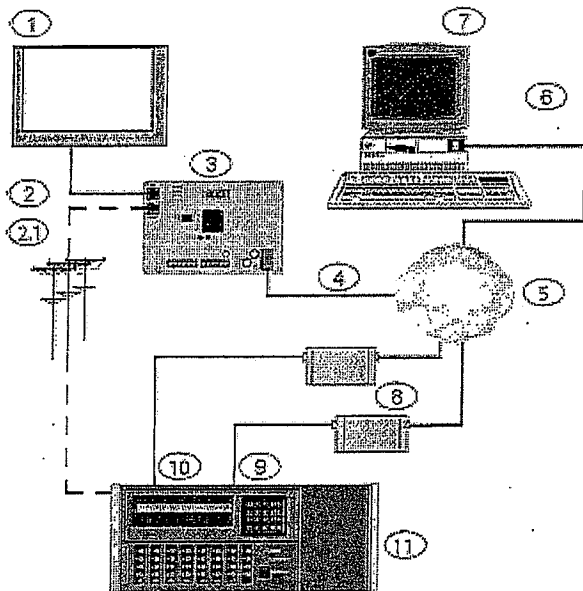
1. Control Panel
2. Dialer Connection
   2.1 Dialer Output to RJ-31x Jack and PSTN
3. Conettix C900V2 Dialer Capture Ethernet Module
4. Ethernet or LAN Connection
5. LAN, WAN, or the Internet
6. Connection To Ethernet Network Interface Card (NIC)
7. Host PC with Conettix D6200 Programming/Administration Software
8. Conettix D6680 Ethernet Network Adapter
9. Com 1 (Optional)
10. Com 4
11. Conettix D6600 Communications Receiver/Gateway

Functions

Communication Formats

ADT-SIA
BFSK (2300Hz ACK Tone or 1400Hz ACK Tone)
DTMF (Contact ID, High Speed and 4/2 Express)
FBI Superfast DTMF (1400 Hz ACK Tone or 2300 Hz ACK Tone)
Pulse 3/1, 3/1 Checksum, 4/2 (1400 Hz ACK Tone or 2300 Hz ACK Tone)
Radionics Modem II, Radionics Modem IIe , and Modem IIIa[2]
Seriee FSK and DTMF
SIA V.21, 110/300 baud
SIA Bell 103, 110/300 baud
Robofon
Telim

Inputs

Input	Description
1	Used as an end-of-line (EOL) supervised loop. Detects open, short, and normal states. Terminate this input with a 10 kΩ EOL resistor.
2	Used for intercept inhibit to force the C900V2 into Fallback mode for at least two minutes.
3	Used for intercept override, allowing users to switch between intercept and fallback modes.

Outputs

Output	Description
1	Provides local annunciation if the power to the C900V2 is lost or the CPU fails.
2	Provides local annunciation if the connection to the monitoring center is lost.
3	Provides local annunciation whenever the C900V2 is in intercept mode.
4	Controllable from the monitoring center and the Conettix D6200 Programming/Administration Software (default is open).

Intercept and Fallback Modes

- Intercept Mode: The C900V2 connects the dialer to the network. Intercept mode remains on as long as the C900V2 remains in continuous contact with the Conettix D6600 Communications Receiver/Gateway.
- Fallback Mode: The C900V2 connects the dialer to the telephone line, removing itself from the telephone circuit. Fallback mode occurs if the C900V2 loses contact with the Conettix D6600 Communications Receiver/Gateway, loses power, or stops operating correctly.

LED Indicators

The C900V2 has two dual-colored LEDs that indicate the module's status (the SYSTEM LED and the DIALER LED).

Modular Jacks

The C900V2 module has three modular jacks.

- Panel Jack: Connects to a dialer through a modular telephone cord (D162).
- TELCO Jack: Connects to a PSTN line through a modular telephone cord (D162).
- Ethernet Jack: Connects to the Ethernet data network through an Ethernet cable. For 10BASE-T, the cable must be Category 3 or better. For 100BASE-T, the cable must be Category 5 or better.

Polling and Supervision

Conettix C900V2 polling helps the Conettix D6600 Communications Receiver/Gateway to perform supervision.

Web Programming Tool
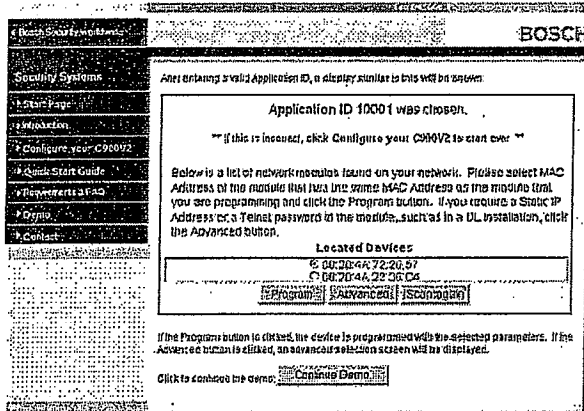
The web programming tool makes the C900V2 configuration process simple and convenient, similar to browsing a web site. After obtaining an Application ID, installers can go to www.c900v2.com from a computer with Internet access and configure the C900V2 for the preferred central station.

Certifications and Approvals

UL Standards

UL294, Access Control Systems Units

UL864, UL Commercial Fire Alarm signaling

UL365, Police Station Burglar Alarm Units and Systems

UL609, Local Burglar Alarm Units and Systems

UL985, Household Fire Warning System Units

UL1023, Household Burglar-alarm System Units

UL1076, Proprietary Burglar Alarm Units and Systems

UL1610, Central Station Burglary, Line Security (Grade AA)

ULC Standards

CAN/ULC-S303-M91, Local Burglar Alarm Units and Systems

CAN/ULC-S304-M88, Central and Monitoring Station Burglar Alarm Units

CAN/ULC-S545, Residential Fire Warning System Control Units

ULC/ORD-C1076-M1986, Proprietary Burglar Alarm Units and Systems Communicator

ULC-C1023-1974, Household Burglar Alarm Systems

Approvals

CE

FCC, Part 15 Radiated/Conducted Emissions

IC

A-Tick

FM[1]

1 - When used with the Conettix D6600 Communications Receiver/Gateway.

Installation/Configuration Notes

Compatibility Information

Compatible Panels	Easy Series, D9412G, D7412G, D7212G, D9412GV2, D7412GV2, D7212GV2, D6412, D4412, D2212B, D2212BE

Technical Specifications

Connectors

Control Panel:	RJ-45 Modular Jack
Telco:	RJ-45 Modular Jack
LAN/WAN:	RJ-45 Modular Jack
Ethernet Cable:	Unshielded twisted pair 100 m (328 ft) For 10BASE-T, use Category 3 or better. For 100BASE-T, use Category 5 or better.

Environmental Considerations

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

Indicators

Module Status LEDs:	2 dual-colored

Module

Dimensions:	17.8 cm x 11.4 cm (7 in. x 4.5 in.)
Interface:	IEEE 802.3

Power Requirements

Current (Maximum):	280 mA
Voltage Range:	12 VDC to 24 VDC nominal
Alarm Outputs:	Normally-open (NO) dry contacts

Protocols

Output To LAN or WAN:	UDP/IP packets

Ordering Information

Conettix C900V2 Dialer Capture Ethernet Module	**C900V2**
Compatible with control panels using a standard digital dialer format. Provides end-to-end security. Allows digital dialer control panels to work over an IP network (such as LAN, WAN, or the Internet).	
Accessories	
D162 Modular Telephone Cord	**D162**
A 61 cm (2 ft) telephone cord with a standard plug on one end.	

Ordering Information

AE1 Standard Enclosure (Gray)   AE1
Standard gray enclosure made of 1.0 mm
cold-rolled steel. Includes a keyed lock. The
dimensions are 35.6 cm x 31.8 cm x 7.6 cm
(14 in. x 12.5 in. x 3 in.).

AE4 Large Enclosure (Red)   AE4
Large red enclosure made of 1.2 mm cold-
rolled steel. Includes a keyed lock. Measures
52.7 cm x 38.1 cm x 10.8 cm (20.7 in. x
15 in. x 4.25 in.).

POWER PS SONIC

PS-6100 6 Volt 12.0 AH
Rechargeable Sealed Lead Acid Battery
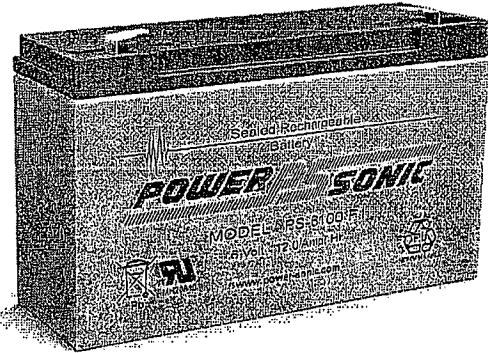
We've Got The Power.™

Features

- Absorbent Glass Mat (AGM) technology for superior performance

- Valve regulated, spill proof construction allows safe operation in any position

- Power/volume ratio yielding unrivaled energy density

- Rugged impact resistant ABS case and cover (UL94-HB)

- Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified

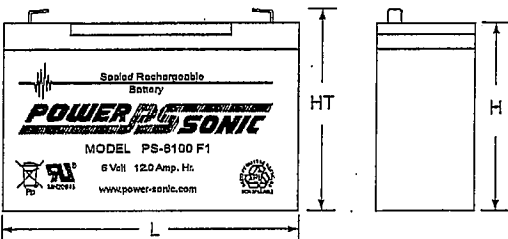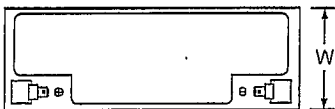- U.L. recognized under file number MH 20845

Terminals   (mm)

- F1 - Quick disconnect tabs, 0.187" x 0.032"- Mate with AMP. INC. FASTON "187" series

- F2 - Quick disconnect tabs, 0.250" x 0.032" Mate with AMP. INC FASTON "250" series
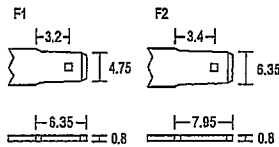
Physical Dimensions: in (mm)

L: 5.95 (151) W: 2.00 (51) H: 3.70 (94) HT: 3.86 (98)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/-0.08 in. (+/-2mm) for height dimensions. All data subject to change without notice.

Performance Specifications

Nominal Voltage	6 volts (3 cells)

Nominal Capacity

20-hr.	(600mA to 5.25 volts)	12.00 AH
10-hr.	(1.15A to 5.25 volts)	11.50 AH
5-hr.	(2.1A to 5.10 volts)	10.50 AH
1-hr.	(7.3A to 4.50 volts)	7.30 AH
15-min.	(22.3A to 4.50 volts)	5.58 AH

Approximate Weight	4.30 lbs. (1.95 kg)
Energy Density (20-hr. rate)	1.64 W-h/in3 (99.79 W-h/l)
Specific Energy (20-hr. rate)	16.74 W-h/lb (36.91 W-h/kg)
Internal Resistance (approx.)	10 milliohms
Max Discharge Current (7 Min.)	36.0 amperes
Max Short-Duration Discharge Current (10 Sec.)	120.0 amperes

Shelf Life (% of nominal capacity at 68°F (20°C))

1 Month	97%
3 Months	91%
6 Months	83%

Operating Temperature Range

Charge	-4°F (-20°C) to 122°F (50°C)
Discharge	-40°F (-40°C) to 140°F (60°C)
Case	ABS Plastic
Power-Sonic Chargers	PSC-61000A, 61000A-C

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. All data subject to change without notice.

www.power-sonic.com

Shelf Life & Storage

Charging is not necessary unless 100% of capacity is required.

Charging before use is necessary to help recover full capacity.

Charge may fail to restore full capacity. Do not let batteries reach this state.
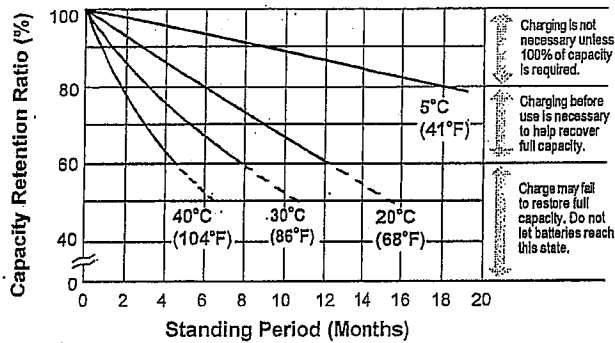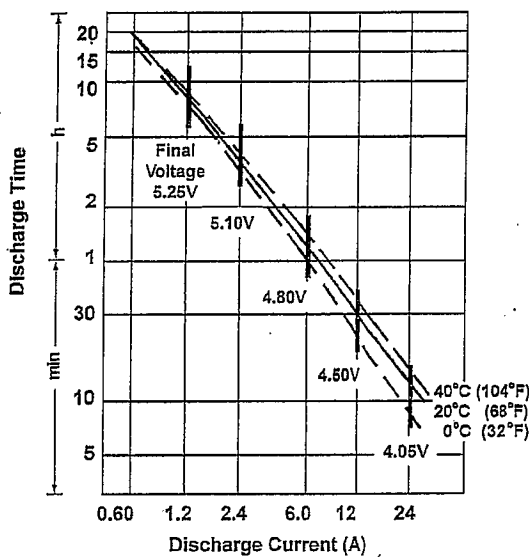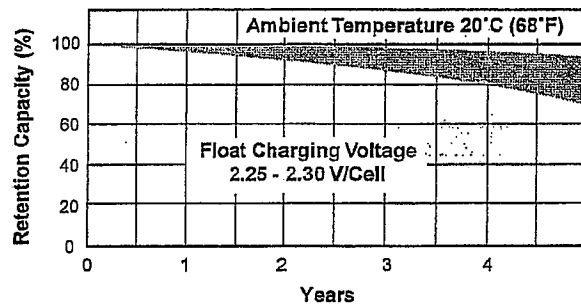
Discharge Characteristics
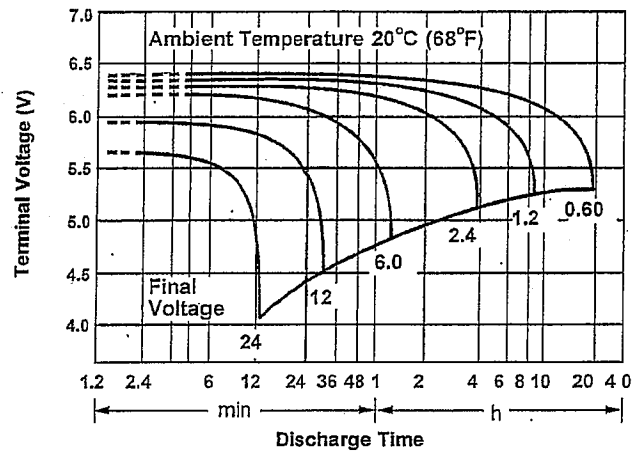
Discharge Time vs. Discharge Current

Life Characteristics in Stand-By Use

Life Characteristics in Cyclic Use

1. Discharge Current 0.2C (Final Voltage 1.7V/Cell)
2. Charge Current: 0.1C
3. Ambient Temperature: 20°C to 25°C (68°F to 77°F)
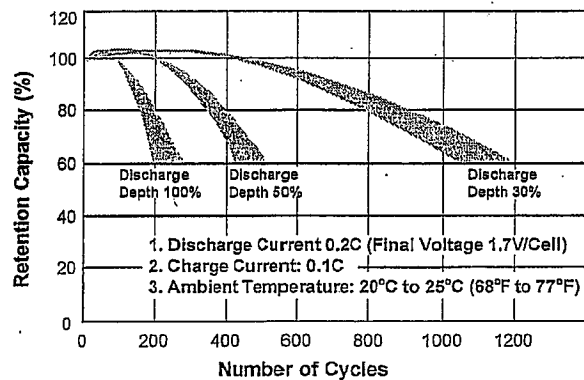
Charging

Cycle Applications: Limit initial current to 3.6A. Charge until battery voltage (under charge) reaches 7.20 to 7.35 volts at 68°F (20°C). Hold at 7.20 to 7.35 volts until current drops to under 120mA. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

"Float" or "Stand-By" Service: Hold battery across constant voltage source of 6.75 to 6.90 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

Note: Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

Chargers

Power-Sonic offers a wide range of chargers suitable for batteries up to 100AH. Please refer to the Charger Selection Guide in our specification sheets for "C-Series Switch Mode Chargers" and "Transformer Type A and F Series". Please contact our Technical department for advice if you have difficulty in locating suitable models.

Further Information

Please refer to our website www.power-sonic.com for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc..
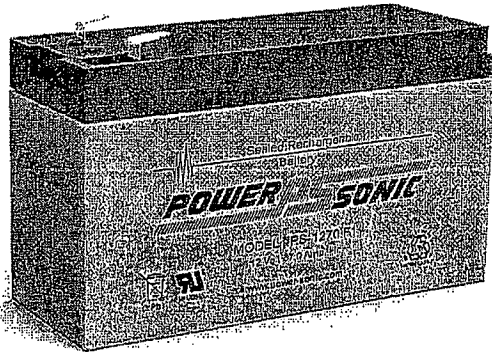
POWER PS SONIC

PS-1270 12 Volt 7.0 AH
Rechargeable Sealed Lead Acid Battery
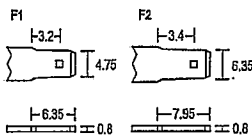
We've Got The Power.™

Features

- Absorbent Glass Mat (AGM) technology for superior performance

- Valve regulated, spill proof construction allows safe operation in any position

- Power/volume ratio yielding unrivaled energy density

- Rugged impact resistant ABS case and cover (UL94-HB)

- Approved for transport by air. D.O.T., I.A.T.A., F.A.A. and C.A.B. certified

- U.L. recognized under file number MH 20845

Terminals   (mm)

- F1 - Quick disconnect tabs, 0.187" x 0.032"- Mate with AMP. INC. FASTON "187" series
  — OR —
- F2 - Quick disconnect tabs, 0.250" x 0.032" - Mate with AMP. INC FASTON "250" series

Physical Dimensions: in (mm)

L: 5.95 (151) W: 2.56 (65) H: 3.70 (94) HT: 3.86 (98)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Performance Specifications

Nominal Voltage .... 12 volts (6 cells)

Nominal Capacity

20-hr.	(350mA to 10.50 volts)	7.00 AH
10-hr.	(650mA to 10.50 volts)	6.50 AH
5-hr.	(1.2A to 10.20 volts)	6.00 AH
1-hr.	(4.5A to 9.00 volts)	4.50 AH
15-min.	(14A to 9.00 volts)	3.50 AH

Approximate Weight .... 4.80 lbs. (2.18 kg)

Energy Density (20-hr. rate) .... 1.49 W-h/in3 (90.95 W-h/l)

Specific Energy (20-hr. rate) .... 17.50 W-h/lb (38.58 W-h/kg)

Internal Resistance (approx.) .... 23 milliohms

Max Discharge Current (7 Min.) .... 21.0 amperes

Max Short-Duration Discharge Current (10 Sec.).................. 70.0 amperes

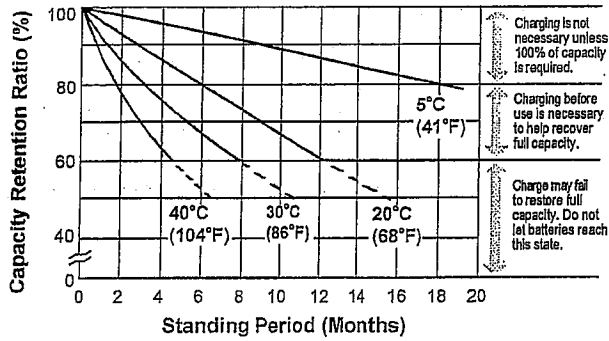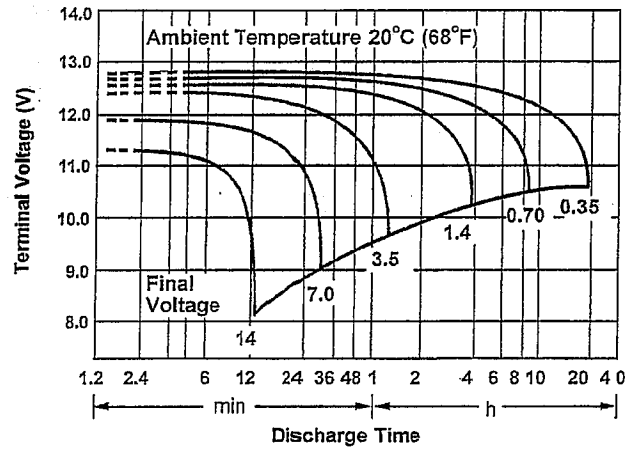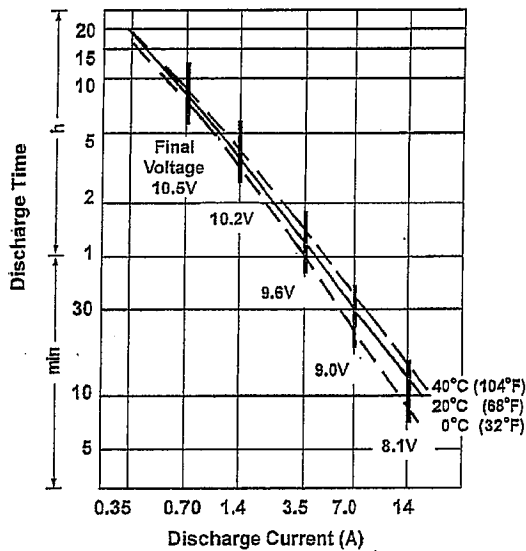**Shelf Life** (% of nominal capacity at 68°F (20°C))

1 Month	97%
3 Months	91%
6 Months	83%

Operating Temperature Range

Charge	-4°F (-20°C) to 122°F (50°C)
Discharge	-40°F (-40°C) to 140°F (60°C)

Case .... ABS Plastic

Power-Sonic Chargers PSC-12800A, 12800A-C

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. All data subject to change without notice.

www.power-sonic.com

Shelf Life & Storage

Charging is not necessary unless 100% of capacity is required.

Charging before use is necessary to help recover full capacity.

Charge may fail to restore full capacity. Do not let batteries reach this state.

Discharge Time vs. Discharge Current

Discharge Characteristics

Life Characteristics in Stand-By Use

Life Characteristics in Cyclic Use

1. Discharge Current 0.2C (Final Voltage 1.7V/Cell)
2. Charge Current: 0.1C
3. Ambient Temperature: 20°C to 25°C (68°F to 77°F)

Charging

Cycle Applications: Limit initial current to 2.1A. Charge until battery voltage (under charge) reaches 14.4 to 14.7 volts at 68°F (20°C). Hold at 14.4 to 14.7 volts until current drops to under 70mA. Battery is fully charged under these conditions, and charger should be disconnected or switched to "float" voltage.

"Float" or "Stand-By" Service: Hold battery across constant voltage source of 13.5 to 13.8 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

Note: Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged within 6 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

Chargers

Power-Sonic offers a wide range of chargers suitable for batteries up to 100AH. Please refer to the Charger Selection Guide in our specification sheets for "C-Series Switch Mode Chargers" and "Transformer Type A and F Series". Please contact our Technical department for advice if you have difficulty in locating suitable models.

Further Information

Please refer to our website www.power-sonic.com for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc..
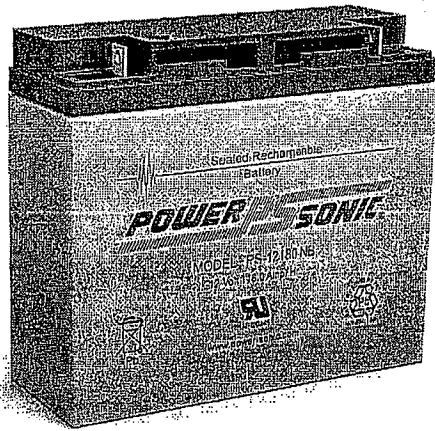
POWER PS SONIC®

PS-12180 12 Volt 18.0 AH
Rechargeable Sealed Lead Acid Battery

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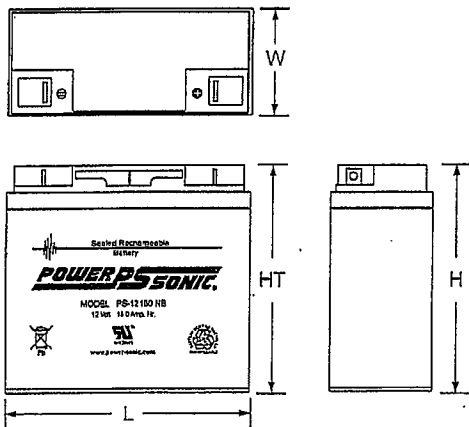
Terminals   (mm)

- PS-12180 F2: Quick disconnect AMP, INC. Faston tabs, 0.250" x 0.032"

- PS-12180 NB2: Tin plated brass post with 5mm nut & bolt connectors
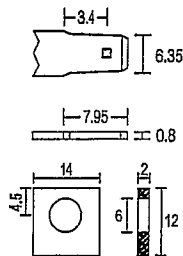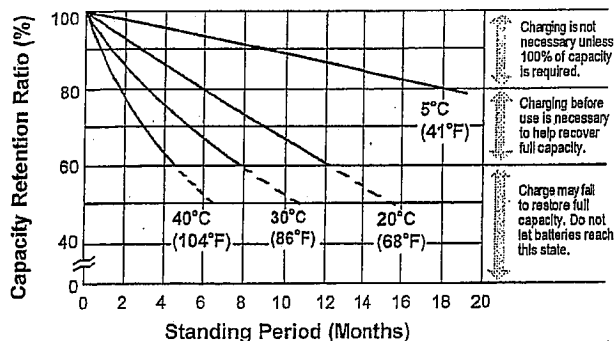

Physical Dimensions: in (mm)

L: 7.13 (181) W: 3.00 (76) H: 6.59 (167) HT: 6.59 (167)

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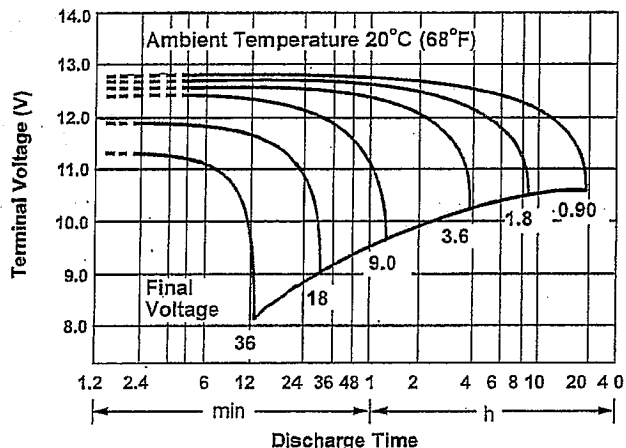
Performance Specifications

Nominal Voltage .... 12 volts (6 cells)

Nominal Capacity

20-hr.	(900mA to 10.50 volts)	18.0 AH
10-hr.	(1.7A to 10.50 volts)	17.0 AH
5-hr.	(3.2A to 10.20 volts)	16.0 AH
1-hr.	(11.1A to 9.00 volts)	11.1 AH
15-min.	(34.3A to 9.00 volts)	8.58 AH

Approximate Weight .... 12.60 lbs. (5.72 kg)

Energy Density (20-hr. rate) .... 1.53 W-h/in3 (93.51 W-h/l)

Specific Energy (20-hr. rate) .... 17.14 W-h/lb (37.79 W-h/kg)

Internal Resistance (approx.) .... 14 milliohms

Max Discharge Current (7 Min.) .... 54.0 amperes

Max Short-Duration Discharge Current (10 Sec.)................ 180.0 amperes

Shelf Life (% of nominal capacity at 68°F (20°C))

1 Month 97%

3 Months.. 91%

6 Months 83%

Operating Temperature Range

Charge.. .... -4°F (-20°C) to 122°F (50°C)

Discharge.. -40°F (-40°C) to 140°F (60°C)

Case .... ABS Plastic

Power-Sonic Chargers PSC-122000A, 124000A, 122000A-C, 124000A-C

Shelf Life & Storage
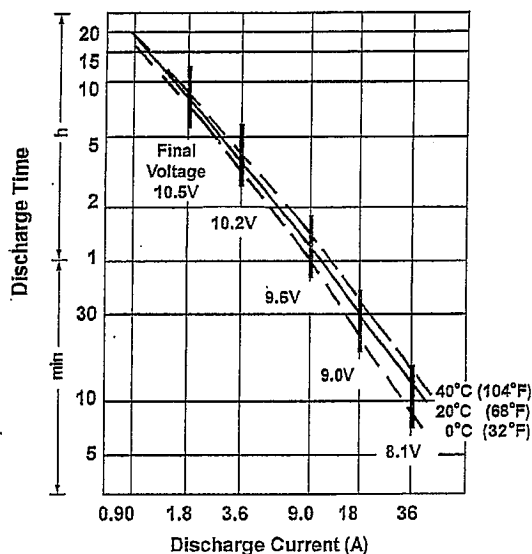
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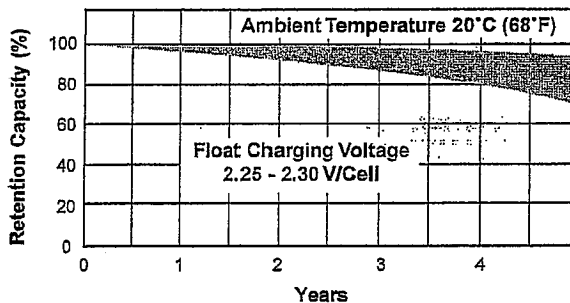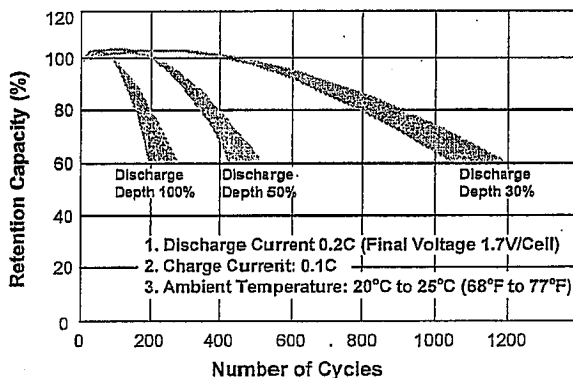
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