

PRODUCT DATA SHEETS
FIRE ALARM DETECTION SYSTEM

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PSE-6/PSE-10 Series 6/10 Amp, 24 Volt Power Supply Expanders

General

The PS Series is a remote power supply line from NOTIFIER and is a direct replacement for the FCPS-24S6/8 Series. The PSE-6(C)(E) is a 6 amp and the PSE-10(C)(E) is a 10 amp, remote power supply with battery charger that may be connected to any 12 or 24 volt fire alarm control panel (FACP) or used as a standalone power supply. The PS Series provides 24 VDC power for NACs (notification appliance circuits) configured as either Class B or Class A (requires the ZNAC-PS option card) with multiple sync protocol options. The PS Series also provides auxiliary power, constant or resettable, suited for detectors, annunciators, door holders, and other fire alarm system peripherals. The PS Series cabinet can hold two 7 AH or 18 AH batteries and can charge up to 33 AH batteries in a separate cabinet. The PSE-6E and PSE-10E are models rated for 240V operation.

Features

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



- Battery charger may be disabled via DIP switch for applications requiring larger batteries and external battery charger
- Removable terminal blocks accommodate up to 12 AWG (3.1mm²) wire
- Works with any UL 864 FACP which utilizes an industry-standard reverse-polarity notification circuit
- Optional devices include addressable control, monitor, and relay modules and power-supervision relay (EOLR-1)

Standards and Codes

The PSE Series comply with the following standards:

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

Agency Listings and Approvals

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

- **UL Listed:** S635, S674
- **ULC Listed:** S635 (PSE-6/10C)
- **CSFM Approved:** 7315-0028:0513
- **FDNY Approved**
- **FM Approved**

Primary (AC) Power:

- **PSE-6(C):** 120 VAC, 50/60 Hz, 5.0A maximum
- **PSE-10(C):** 120VAC, 50/60 Hz, 6.2 A maximum
- **PSE-6E:** 240 VAC, 50/60 Hz, 2.7A maximum
- **PSE-10E:** 240 VAC, 50/60 Hz, 3.5A maximum
- **Wire Size:** #12-14 AWG with 600 V insulation

Command Input Circuit:

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

Trouble Contact Rating: 4 A at 24 VDC

Output Circuits:

- 24 VDC filtered, regulated
- PSE-6: TB8-TB9 – 1A Regulated, 3A special applications; TB10-TB12 – 0.3A Regulated, 3A special applications
- PSE-10: TB8-TB11 – 1.5A Regulated, 3A special applications; TB12-TB14 – 0.3A Regulated, 3A special applications
- 6.0 A (PSE-6) or 10.0 A (PSE-10) maximum total continuous current for all outputs

Secondary Power (Battery) Charging Circuit:

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

Physical:

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

Ordering Information

PSE-6: 6.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure

PSE-6C: Same as above, ULC-listed model

PSE-6R: Same as PSE-6 with red enclosure

PSE-6E: 6.0 A, 240 VAC remote charger power supply in a lockable, metal enclosure

PSE-10: 10.0 A, 120 VAC remote charger power supply in a lockable, metal enclosure

PSE-10C: Same as above, ULC-listed model

PSE-10R: Same as PSE-10 with red enclosure

PSE-10E: 10.0 A, 240 VAC remote charger power supply in a lockable, metal enclosure

ZNAC-PS: Optional Class A output converter module

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

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

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

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

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

XP6-C: Six-circuit supervised control module

XP6-R: Six Form-C relay control module

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

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

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

BAT-12330: Battery, 12 volt, 33AH

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



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.

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Country of Origin: USA

NOTIFIER

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FSP-951 Series Addressable Photoelectric Smoke Detectors

The NOTIFIER® FSP-951 Series intelligent plug-in smoke detectors are designed for both performance and aesthetics, and are direct replacements for the FSP-851 Series. A new modern, sleek, contemporary design and enhanced optical sensing chamber is engineered to sense smoke produced by a wide range of combustion sources in accordance with more stringent code standards.

The FSP-951 Series detector sensitivity can be programmed in the control panel software. Sensitivity is continuously monitored and reported to the panel. Point ID capability allows each detector's address to be set with rotary, decimal address switches, providing exact detector location for selective maintenance when chamber contamination reaches an unacceptable level. Dual electronic thermistors add 135°F (57°C) fixed temperature thermal sensing on the FSP-951T. The FSP-951R is a remote test capable detector for use with DNR Series duct detector housings. FSP-951 series detectors are available for both FlashScan® and CLIP applications as designated.

Features

SLC LOOP:

- Two-wire SLC loop connection
- Unit uses base for wiring
- Compatible with FlashScan® and CLIP protocol systems
- Stable communication technique with noise immunity

ADDRESSING:

- Addressable by device
- Rotary, decimal addressing
(Refer to the *NOTIFIER panel manuals* for device capacity.)

ARCHITECTURE:

- Sleek, low-profile, stylish design
- Unique single-source design to respond quickly and dependably to a broad range of fires
- Integral communications and built-in device-type identification
- Built-in tamper resistant feature
- Remote test feature from the panel
- Walk test with address display (an address on 121 will blink the detector LED: 12-[pause]-1 (*FlashScan systems only*))
- Built-in functional test switch activated by external magnet
- Removable cover and insect-resistant screen for simple field cleaning
- Expanded color options

OPERATION:

- Designed to meet UL 268 7th Edition
- Factory preset at 1.5% nominal sensitivity for panel alarm threshold level
- LED “blinks” when the unit is polled (communicating with the fire panel) and latches in alarm.
- Low standby current

MECHANICALS:

- Sealed against back pressure
- SEMS screws for wiring of the separate base
- Designed for direct-surface or electrical-box mounting
- Plugs into separate base for ease of installation and maintenance



- Separate base allows interchange of photoelectric, ionization and thermal sensors

OPTIONS:

- Optional relay, isolator, and sounder bases

Installation

FSP-951 Series plug-in intelligent smoke detectors use a detachable base to simplify installation, service and maintenance. Installation instructions are shipped with each detector.

Mount detector base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep. For a chart of compatible junction boxes, see *DN-60054*.

NOTE: Because of the inherent supervision provided by the SLC loop, end-of-line resistors are not required. Wiring “T-taps” or branches are permitted for Class “B” wiring only. When using relay or sounder bases, consult the ISO-X(A) installation sheet 156-1380 for device limitations between isolator modules and isolator bases.

Construction

These detectors are constructed of fire-resistant plastic. The FSP-951 Series plug-in intelligent smoke detectors are designed to commercial standards and offer an attractive appearance.

Operation

Each FSP-951 Series detector uses one of the panel's addresses (total limit is panel dependent) on the NOTIFIER Signaling Line Circuit (SLC). It responds to regular polls from the control panel and reports its type and the status. If it receives a test command from the panel (or a local magnet test), it stimulates its electronics and reports an alarm. It blinks its LEDs when polled and turns the LEDs on when commanded by the panel. The FSP-951 Series offers features and performance that represent the latest in smoke detector technology.

Product Line Information

NOTE: “-IV” suffix indicates CLIP and FlashScan device.

FSP-951: White, low-profile intelligent photoelectric sensor, FlashScan only

FSP-951A: Same as FSP-951 but with ULC listing

FSP-951-IV: Ivory, low-profile intelligent photoelectric sensor

FSP-951A-IV: Same as FSP-951-IV but with ULC listing

FSP-951T: White, same as FSP-951 but includes a built-in 135°F (57°C) fixed-temperature thermal device, FlashScan only

FSP-951TA: Same as FSP-951T but with ULC listing

FSP-951T-IV: Ivory, same as FSP-951T but includes a built-in 135°F (57°C) fixed-temperature thermal device

FSP-951TA-IV: Same as FSP-951T-IV but with ULC listing

FSP-951R: White, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW, FlashScan only

FSP-951RA: Same as FSP-951R but with ULC listing, for use with DNRA

FSP-951R-IV: Ivory, low-profile intelligent photoelectric sensor, remote test capable, for use with DNR/DNRW

FSP-951RA-IV: Same as FSP-951R-IV but with ULC listing, for use with DNRA

INTELLIGENT BASES

NOTE: For details on intelligent bases, see DN-60981.

B300-6: White, 6" base, standard flanged low-profile mounting base (CSFM: 7300-1653:0109)

B300-6-IV: Ivory, 6" base, standard flanged low-profile mounting base (CSFM: 7300-1653:0109)

B300A-6: Same as B300-6, ULC listed

B300A-6-IV: Ivory, 6" standard flanged low-profile mounting base, ULC listed

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

B501-WHITE: White, 4" standard European flangeless mounting base. UL/ULC listed (CSFM: 7300-1653:0109)

B501-BL: Black, 4" standard European flangeless mounting base. UL/ULC listed (CSFM: 7300-1653:0109)

B501-IV: Ivory color, 4" standard European flangeless mounting base. UL/ULC listed (CSFM: 7300-1653:0109)

B501-WHITE-BP: Bulk pack of B501-WHITE contains 10

B224RB-WH: White, relay base (CSFM: 7300-1653:0216)

B224RB-IV: Ivory, relay base (CSFM: 7300-1653:0216)

B224RBA-WH: White, relay base, ULC listing

B224RBA-IV: Ivory, relay base, ULC listing

B224BI-WH: White, isolator detector base (CSFM: 7300-1653:0216)

B224BI-IV: Ivory isolator detector base (CSFM: 7300-1653:0216)

B224BIA-WH: White, isolator detector base, ULC listing

B224BIA-IV: Ivory isolator detector base, ULC listing

B200S-WH: White, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone. Uses FlashScan protocol. (CSFM: 7300-1653:0213)

B200S-IV: Ivory, Intelligent addressable sounder base capable of producing sound output in high or low volume with ANSI Temporal 3, ANSI Temporal 4, continuous tone, marching tone, and custom tone. Uses FlashScan protocol. (CSFM: 7300-1653:0213)

B200SA-WH: Same as B200S-WH, ULC listing

B200SA-IV: Same as B200S-IV, ULC listing

B200SCOA-WH: White, Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with CO Series detector applications)

B200SCOA-IV: Ivory Intelligent, programmable sounder base in English/French (required in Canada for ULC applications with CO Series detector applications, ULC listing)

B200S-LF-WH: White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. (CSFM: 7300-1653:0238)

B200S-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. (CSFM: 7300-1653:0238)

B200SR-WH: White, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications. (CSFM: 7300-1653:0213)

B200SR-IV: Ivory, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications. (CSFM: 7300-1653:0213)

B200SRA-WH: Same as B200SR-WH with, ULC listing

B200SRA-IV: Same as B200SR-IV in Ivory color, ULC listing

B200SR-LF-WH: White, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (CSFM: 7300-1653:0238)

B200SR-LF-IV: Ivory, Low Frequency Intelligent, programmable sounder base. Produces a fundamental frequency of 520 Hz +/- 10% with a square wave or its equivalent; designed to meet the NFPA 72 sleeping space requirement. Intended for retrofit applications. (CSFM: 7300-1653:0238)

MOUNTING KITS AND ACCESSORIES

TR300: White, replacement flange for B210LP(A) base

TR300-IV: Ivory, replacement flange for B210LP(A) base

RA100Z(A): Remote LED annunciator. 3-32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501(A) and B300-6(A).

M02-04-00: Test magnet

M02-09-00: Test magnet with telescoping handle

CK300: Color Kit (includes cover and trim ring), white, 10-pack

CK300-IV: Color Kit (includes cover and trim ring), ivory, 10-pack

CK300-BL: Color Kit (includes cover and trim ring), black, 10-pack

Sensitivity:

- UL Applications: 0.5% to 4.0% per foot obscuration.
- ULC Applications: 0.5% to 3.5% per foot obscuration

Size: 2.0" (51mm) high; base determines diameter

- **B300-6 series:** 6.1" (15.6 cm) diameter
- **B501 series:** 4" (10.2 cm) diameter

For a complete list of detector bases see DN-60981

Shipping weight: 3.4 oz. (95 g)

Operating temperature range:

- FSP-951 Series: 32°F to 122°F (0°C to 50°C)
- FSP-951T Series: 32°F to 100°F (0°C to 38°C)
- FSP-951R Series installed in DNR/DNRA/DNRW, -4°F to 158°F (-20°C to 70°C)

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

Relative humidity: 10% – 93% non-condensing

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

ELECTRICAL SPECIFICATIONS

Voltage range: 15 - 32 volts DC peak

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

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

DETECTOR SPACING AND APPLICATIONS

NOTIFIER recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceiling, space detectors 30 feet (9.1m). For specific information regarding detector spacing, placement, and special applications refer to NFPA 72. A *System Smoke Detector Application Guide*, document SPAG91, is available at www.systemsensor.com.

Listings and Approvals

Listings and approvals below apply to the FSP-951 Series detectors. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL/ULC Listing: S1115
- FM Approved
- CSFM: 7272-0028:0503



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We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

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Country of Origin: Mexico

NOTIFIER

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Indoor Selectable-Output Strobes and Horn Strobes for Ceiling Applications



Audio/Visual Devices

General

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

The System Sensor L-Series offers the most versatile and easy-to-use line of horns, strobes, and horn strobes in the industry with lower current draws and modern aesthetics. With white and red plastic housings, wall and ceiling mounting options, System Sensor L-Series can meet virtually any application requirement.

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

To further simplify installation, the L-Series utilizes a universal mounting plate so installers can mount them to a wide array of back boxes. With an onboard shorting spring, installers can test wiring continuity before the device is installed.

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

Features

- Plug-in design with minimal intrusion into the back box
- Tamper-resistant construction
- Automatic selection of 12- or 24-volt operation at 15 and 30 candela
- Field-selectable candela settings on ceiling units: 15, 30, 75, 95, 115, 150, and 177
- Horn rated at 88+ dBA at 16 volts
- Rotary switch for horn tone and two volume selections
- Universal mounting plate for ceiling units
- Mounting plate shorting spring feature checks wiring continuity before device installation
- Electrically compatible with legacy SpectrAlert and SpectrAlert Advance devices
- Compatible with MDL3 sync module
- Listed for ceiling mounting only



SCRL

PC2WL

Architect/Engineer Specifications

GENERAL

L-Series ceiling-mount 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, L-Series products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal 12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated notification appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unfiltered power supply. Ceiling strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 115, 150, and 177.

STROBE

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

HORN STROBE COMBINATION

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

SYNCHRONIZATION MODULE

The module shall be a System Sensor Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize L-Series strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a $4^{11/16} \times 4^{11/16} \times 2^{1/8}$ inch back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

PHYSICAL/ELECTRICAL SPECIFICATIONS

- **Standard Operating Temperature:** 32°F to 120°F (0°C to 49°C)
- **Humidity Range:** 10 to 93% non-condensing
- **Strobe Flash Rate:** 1 flash per second
- **Nominal Voltage:** Regulated 12VDC or regulated 24DC/FWR¹
- **Operating Voltage Range²:** 8 to 17.5V (12V nominal) or 16 to 33V (24V nominal)
- **Operating Voltage Range with MLD3:** 8.5 to 17.5V (12V nominal) or 16.5 to 33V (24V 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)
- **Ceiling-Mount Surface Mount Back Box Skirt Dimensions (SBBCR, SBBCW):** 6.9" diameter x 3.4" high (175 mm diameter x 86 mm high)

Notes:

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

UL Current Draw Data

UL MAX. STROBE CURRENT DRAW (MA RMS)

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

*This data represents coding at 3 chimes per second. Actual current draw will vary depending upon coding selected.

UL MAX. CHIME/STROBE CURRENT DRAW (MA RMS), 2-WIRE HORN STROBE

The 3.1k is the sound of the mini-horns. The EM (which stands for Electro-mechanical) is the sound of the SpectrAlert Advance line which uses an algorithm that hops frequencies between 2Hz and 4Hz.

Candela	8 VDC		16 VDC						
	15	30	15	30	75	95	115	150	177
Temporal High	103	167	71	90	143	165	187	217	254
Temporal Low	96	165	54	71	137	161	185	211	249
Non-Temporal High	106	173	71	90	141	165	187	230	273
Non-Temporal Low	95	166	54	71	124	161	170	216	258
3.1K Temporal High	111	164	69	94	147	163	184	229	257
3.1K Temporal Low	103	163	54	88	143	155	185	212	252
3.1K Non-Temporal High	111	172	69	94	144	164	202	229	271
3.1K Non-Temporal Low	103	169	54	88	131	155	187	217	259

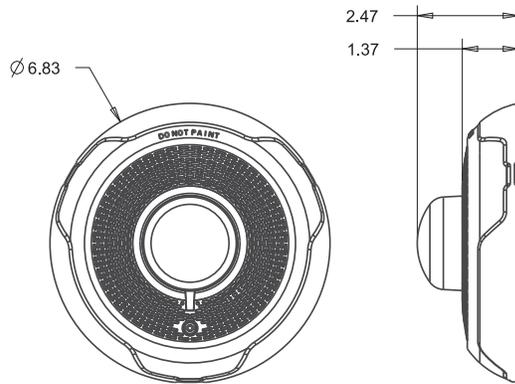
Candela	16VFWR							
	15	30	75	95	115	150	177	
Temporal High	107	135	179	198	223	254	286	
Temporal Low	78	101	151	172	199	229	262	
Non-Temporal High	107	135	179	198	223	254	286	
Non-Temporal Low	78	101	151	172	199	229	262	
3.1K Temporal High	108	135	179	200	225	255	289	
3.1K Temporal Low	79	101	150	171	196	229	260	
3.1K Non-Temporal High	108	135	179	200	225	255	289	
3.1K Non-Temporal Low	79	101	150	171	196	229	260	

Horn Strobe Tones and Sound Output Data

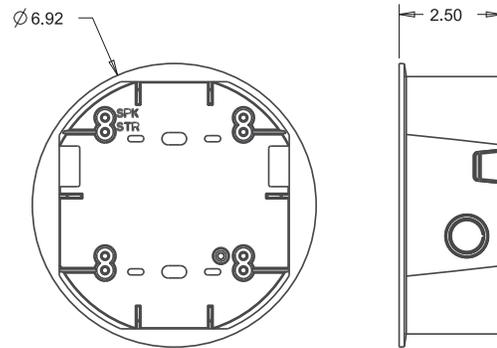
HORN AND HORN STROBE OUTPUT (DBA)

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

Product Drawings: L-Series Dimensions



Horn Strobes (Ceiling)



Surface Mount Back Box (Ceiling)

oly_cel_horn_strobe_datasheet_08152016_OL.eps

Agency Listings and Approvals

The listings and approvals below apply to L-series devices. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL/ULC-Listed**
 - S4011 Ceiling horn strobes
 - S5512 Ceiling strobes
 - S5512 Strobe-only ALERT devices
- **FM Approved** (All except ALERT models)
- **CSFM Listed:** 7135-1653:0503 (Ceiling Horns and Ceiling Horn Strobes), 7125-1653:0504 (Ceiling Strobes)

Product Line Information

CEILING HORN STROBES

PC2WL(A) (-E)(-F), PC2RL(A) (-E)(-F). 2-Wire, Horn Strobe (White, Red).

CEILING STROBES

SCWL(A) (-E)(-F), SCRL(A) (-E)(-F). Strobe (White, Red).

SCWL-CLR-ALERT. Strobe, ALERT (White).

ACCESSORIES

TR-2W, TR-2. Universal Ceiling Trim Ring (White, Red).

SBBCWL, SBBCLR. Ceiling Surface Mount Back Box (White, Red).

NOTE: "A" suffix indicates ULC-Listed model. ULC-listed devices include required French labeling. See Agency Listings for listing details.

NOTE: "A" suffix indicates ULC-listed models, ULC models have FIRE/FEU marking on cover.

NOTE: ULC-listed models add "-E" suffix for English only "FIRE" marking on cover.

NOTE: ULC-listed models add "-F" suffix for French only "FEU" marking on cover.

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We cannot cover all specific applications or anticipate all requirements.
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www.notifier.com

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



Audio/Visual Devices

General

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

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

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

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

Features

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

Architectural/Engineering Specifications

General: L-Series standard horns, strobes, and horn strobes shall mount to a standard 2" x 4" x 1⁷/₈" back box, 4" x 4" x 1¹/₂" back box, 4" octagon back box, or double-gang back box. L-Series compact products shall mount to a single-gang 2" x 4" x 1⁷/₈" back box. A universal mounting plate shall be used for mounting ceiling and wall products for all standard-size models and a separate universal mounting plate shall be used for mounting compact wall models. The notification appliance circuit wiring shall terminate at the universal mounting plate. Also, L-Series products, when used with the Sync•Circuit™ Module accessory, shall be powered from a non-coded notification appliance circuit output and shall operate on a nominal



P2RL



P2GWL



SGWL



HWL

12 or 24 volts. When used with the Sync•Circuit Module, 12-volt-rated notification appliance circuit outputs shall operate between 8.5 and 17.5 volts; 24-volt-rated c appliance circuit outputs shall operate between 16.5 and 33 volts. Indoor L-Series products shall operate between 32 and 120 degrees Fahrenheit from a regulated DC or full-wave rectified unaltered power supply. Strobes and horn strobes shall have field-selectable candela settings including 15, 30, 75, 95, 110, 135, and 185.

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

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

Synchronization Module. The module shall be a Sync•Circuit model MDL3 listed to UL 464 and shall be approved for fire protective service. The module shall synchronize SpectraAlert strobes at 1 Hz and horns at temporal three. Also, while operating the strobes, the module shall silence the horns on horn strobe models over a single pair of wires. The module shall mount to a 4^{11/16}" x 4^{11/16}" x 2^{1/8}" back box. The module shall also control two Style Y (class B) circuits or one Style Z (class A) circuit. The module shall synchronize multiple zones. Daisy chaining two or more synchronization modules together will synchronize all the zones they control. The module shall not operate on a coded power supply.

PHYSICAL/ELECTRICAL SPECIFICATIONS

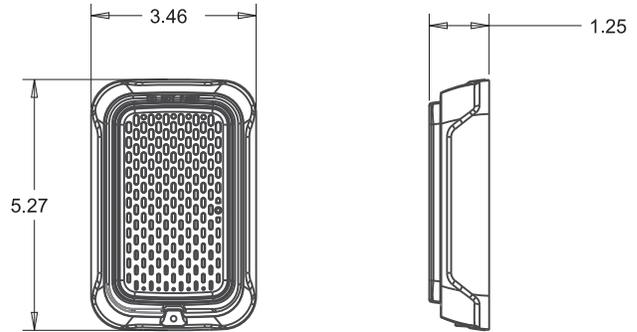
- **Standard Operating Temperature:** 32°F to 120°F (0°C to 49°C).
- **Humidity Range:** 10 to 93% non-condensing.
- **Strobe Flash Rate:** 1 flash per second.
- **Nominal Voltage:** Regulated 12 DC or regulated 24 DC/ FWR¹ (full wave rectified).
- **Operating Voltage Range²:** 8 to 17.5 V (12 V nominal) or 16 to 33 V (24 V nominal).
- **Operating Voltage Range:** MDL3 Sync Module 8.5 to 17.5 V (12 V nominal) or 16.5 to 33 V (24 V nominal).
- **Input Terminal Wire Gauge:** 12 to 18 AWG.
- **Wall-Mount Dimensions (including lens):** 5.6" L x 4.7" W x 1.25" D (143 mm L x 119 mm W x 32 mm D).
- **Compact Wall-Mount Dimensions (including lens):** 5.26" L x 3.46" W x 1.93" D (133 mm L x 88 mm W x 49 mm D).
- **Horn Dimensions:** 5.6" L x 4.7" W x 1.25" D (143 mm L x 119 mm W x 32 mm D).
- **Compact Horn Dimensions:** 5.25" L x 3.45" W x 1.25" D (133mm L x 88mm W x 32mm D).

NOTE:

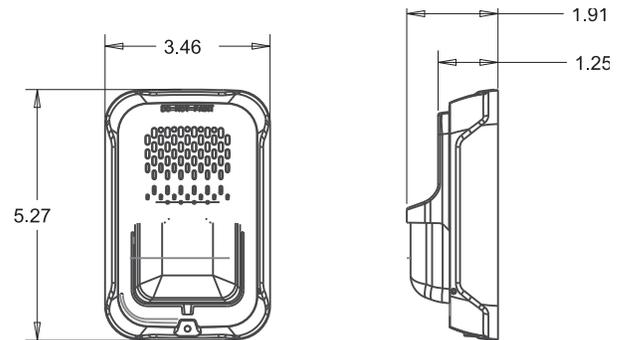
1. Full Wave Rectified (FWR) voltage is a non-regulated, time-varying power source that is used on some power supply and panel outputs.
2. P, S, PC, and SC products will operate at 12 V nominal only for 15 cd and 30 cd.

L-Series Drawings

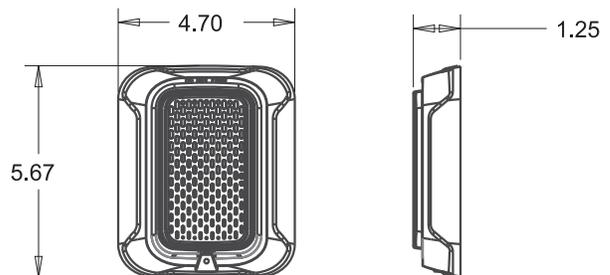
Compact Horn



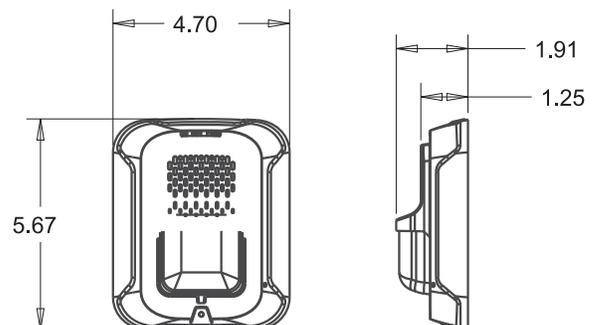
Compact Combo



Horn



Combo



UL Current Draw Data

UL MAX. STROBE CURRENT DRAW (MA RMS)

Candela	8-17.5 Volts	16-33 Volts	
	DC	DC	FWR
15	88	43	60
30	143	63	83
75	N/A	107	136
95	N/A	121	155
110	N/A	148	179
135	N/A	172	209
185	N/A	222	257

UL MAX. HORN CURRENT DRAW (MA RMS)

The 3.1k is the sound of the mini-horns. The EM (which stands for Electro-mechanical) is the sound of the SpectrAlert Advance line which uses an algorithm that hops frequencies between 2Hz and 4Hz.

Sound Pattern	dB	8-17.5 Volts	16-33 Volts	
		DC	DC	FWR
Temporal	High	39	44	54
Temporal	Low	28	32	54
Non-Temporal	High	43	47	54
Non-Temporal	Low	29	32	54
3.1 KHz Temporal	High	39	41	54
3.1 KHz Temporal	Low	29	32	54
3.1 KHz Non-Temporal	High	42	43	54
3.1 KHz Non-Temporal	Low	28	29	54
Coded	High	43	47	54
3.1 KHz Coded	High	42	43	54

UL MAX. CURRENT DRAW (MA RMS), 2-WIRE HORN STROBE, CANDELA RANGE (15-115 CD)

The 3.1k is the sound of the mini-horns. The EM (which stands for Electro-mechanical) is the sound of the SpectrAlert Advance line which uses an algorithm that hops frequencies between 2Hz and 4Hz.

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

HORN TONES AND SOUND OUTPUT DATA: HORN AND HORN STROBE OUTPUT (DBA)

The 3.1k is the sound of the mini-horns. The EM (which stands for Electro-mechanical) is the sound of the SpectrAlert Advance line which uses an algorithm that hops frequencies between 2Hz and 4Hz.

In the coded positions, temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output will remain constantly on.

Pos.	Sound Pattern	dB	8-17.5 Volts	16-33 Volts	
			DC	DC	FWR
1	Temporal	High	84	89	89
2	Temporal	Low	75	83	83
3	Non-Temporal	High	85	90	90
4	Non-Temporal	Low	76	84	84
5	3.1 KHz Temporal	High	83	88	88
6	3.1 KHz Temporal	Low	76	82	82
7	3.1 KHz Non-Temporal	High	84	89	89
8	3.1 KHz Non-Temporal	Low	77	83	83
9†	Coded	High	85	90	90
10†	3.1 KHz Coded	High	84	89	89

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

Agency Listings and Approvals

The listings and approvals below apply to L-series devices. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL/ULC-Listed**
 - S4011 Wall Horn Strobes
 - S5512 Wall Strobes
 - S5512 Wall Horns
 - S5512 Strobe-only ALERT devices
- **FM Approved** (All except ALERT models)
- **CSFM Listed:** 7135-1653:0503 (Wall Horns and Wall Horn Strobes), 7125-1653:0504 (Wall Strobes)

Product Line Information

WALL HORN STROBES

P2WL(A)(-E)(-F), P2RL(A)(-E)(-F). 2-Wire, Horn Strobe (White, Red).

P2GWL(A)(-E)(-F), P2GRL(A)(-E)(-F). 2-Wire, Compact Horn Strobe (White, Red).

P2WL(A)-P, P2RL(A)-P. 2-Wire, Horn Strobe, Plain (White, Red).

P2WL-SP, P2RL-SP. 2-Wire, Horn Strobe, FUEGO (White, Red).

WALL STROBES

SWL(A)(-E)(-F), SRL(A)(-E)(-F). Strobe, Red (White, Red).

SGWL(A)(-E)(-F), SGRL(A)(-E)(-F). Compact Strobe (White, Red).

SWL(A)-P, SRL(A)-P. Strobe, Plain (White, Red).

SRL-SP. Strobe, FUEGO (Red).

SWL-CLR-ALERT. Strobe, ALERT (White).

SWL-ALERT. Strobe, Wall, Amber Lens, ALERT (White).

HORNS

HWL(A), HRL(A). Horn (White, Red).

HGWL(A), HGRL(A). Compact Horn (White, Red).

ACCESSORIES

TR-2W, TR-2. Universal Wall Trim Ring (White, Red).

SBBWL, SBBRL. Wall Surface Mount Back Box (White, Red).

SBBGWL, SBBGRL. Compact Wall Surface Mount Back Box (White, Red).

NOTE: "A" suffix indicates ULC-Listed model. ULC-listed devices include required French labeling. See Agency Listings for listing details.

NOTE: "A" suffix indicates ULC-listed models, ULC models have FIRE/FEU marking on cover.

NOTE: ULC-listed models add "-E" suffix for English only "FIRE" marking on cover.

NOTE: ULC-listed models add "-F" suffix for French only "FEU" marking on cover.

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FMM-1(A), FMM-101(A), FZM-1(A) & FDM-1(A)

Monitor Modules with FlashScan®



Intelligent/Addressable Devices

General

Four different monitor modules are available for Notifier's intelligent control panels for a variety of applications. Monitor modules supervise a circuit of dry-contact input devices, such as conventional heat detectors and pull stations, or monitor and power a circuit of two-wire smoke detectors (FZM-1(A)).

FMM-1(A) is a standard-sized module (typically mounts to a 4" [10.16 cm] square box) that supervises either a Style D (Class A) or Style B (Class B) circuit of dry-contact input devices.

FMM-101(A) is a miniature monitor module a mere 1.3" (3.302 cm) H x 2.75" (6.985 cm) W x 0.65" (1.651 cm) D that supervises a Style B (Class B) circuit of dry-contact input devices. Its compact design allows the FMM-101(A) to be mounted in a single-gang box behind the device it monitors.

FZM-1(A) is a standard-sized module that monitors and supervises compatible two-wire, 24 volt, smoke detectors on a Style D (Class A) or Style B (Class B) circuit.

FDM-1(A) is a standard-sized dual monitor module that monitors and supervises two independent two-wire Style B (Class B) dry-contact initiating device circuits (IDCs) at two separate, consecutive addresses in intelligent, two-wire systems.

FlashScan® (U.S. Patent 5,539,389) is a communication protocol developed by NOTIFIER that greatly increases the speed of communication between analog intelligent devices. Intelligent devices communicate in a grouped fashion. If one of the devices within the group has new information, the panel CPU stops the group poll and concentrates on single points. The net effect is response speed greater than five times that of other communication protocols.

FMM-1(A) Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the control panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct-dial entry of address: 01 – 159 on FlashScan loops; 01 – 99 on CLIP loops.
- LED flashes green during normal operation (programmable option) and latches on steady red to indicate alarm.

The FMM-1(A) Monitor Module is intended for use in intelligent, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. It provides either a two-wire or four-wire fault-tolerant Initiating Device Circuit (IDC) for normally-open-contact fire alarm and supervisory devices. The module has a panel-controlled LED indicator. The FMM-1(A) can be used to replace MMX-1(A) modules in existing systems.

FMM-1(A) APPLICATIONS

Use to monitor a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-



FMM-1(A) (Type H)

open dry-contact alarm activation devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 47K Ohm End-of-Line Resistor (provided) terminates the Style B circuit. No resistor is required for supervision of the Style D circuit.

FMM-1(A) OPERATION

Each FMM-1(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

FMM-1(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.0 mA (LED on).

Average operating current: 375 µA (LED flashing), 1 communication every 5 seconds, 47k EOL.

Maximum IDC wiring resistance: 1500 Ohms.

Maximum IDC Voltage: 11 Volts.

EOL resistance: 47K Ohms.

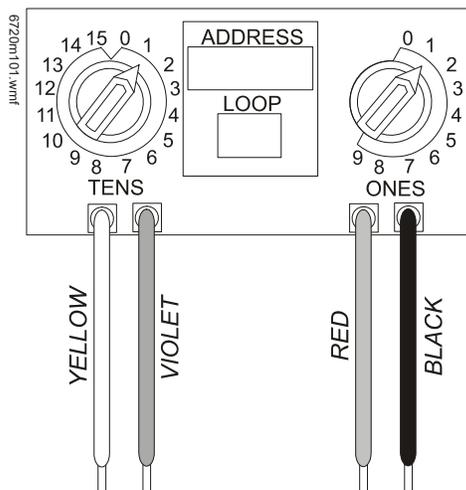
Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

FMM-101(A) Mini Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- Tinned, stripped leads for ease of wiring.
- Direct-dial entry of address: 01 – 159 on FlashScan loops; 01 – 99 on CLIP loops.



The FMM-101(A) Mini Monitor Module can be installed in a single-gang junction directly behind the monitored unit. Its small size and light weight allow it to be installed without rigid mounting. The FMM-101(A) is intended for use in intelligent, two-wire systems where the individual address of each module is selected using rotary switches. It provides a two-wire initiating device circuit for normally-open-contact fire alarm and security devices. The FMM-101(A) can be used to replace MMX-101(A) modules in existing systems.

FMM-101(A) APPLICATIONS

Use to monitor a single device or a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit/device is wired as an NFPA Style B (Class B) Initiating Device Circuit. A 47K Ohm End-of-Line Resistor (provided) terminates the circuit.

FMM-101(A) OPERATION

Each FMM-101(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC).

FMM-101(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Average operating current: 350 μ A, 1 communication every 5 seconds, 47k EOL; 600 μ A Max. (Communicating, IDC Shorted).

Maximum IDC wiring resistance: 1500 Ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 450 μ A.

EOL resistance: 47K Ohms.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 1.3" (3.302 cm) high x 2.75" (6.985 cm) wide x 0.65" (1.651 cm) deep.

Wire length: 6" (15.24 cm) minimum.

FZM-1(A) Interface Module

- Supports compatible two-wire smoke detectors.
- Supervises IDC wiring and connection of external power source.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct-dial entry entry of address: 01 – 159 on FlashScan loops, 01 – 99 on CLIP loops.
- LED flashes during normal operation; this is a programmable option.
- LED latches steady to indicate alarm on command from control panel.

The FZM-1(A) Interface Module is intended for use in intelligent, addressable systems, where the individual address of each module is selected using built-in rotary switches. This module allows intelligent panels to interface and monitor two-wire conventional smoke detectors. It transmits the status (normal, open, or alarm) of one full zone of conventional detectors back to the control panel. All two-wire detectors being monitored must be UL compatible with the module. The FZM-1(A) can be used to replace MMX-2(A) modules in existing systems.

FZM-1(A) APPLICATIONS

Use the FZM-1(A) to monitor a zone of two-wire smoke detectors. The monitored circuit may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 3.9 K Ohm End-of-Line Resistor (provided) terminates the end of the Style B or D (class B or A) circuit (maximum IDC loop resistance is 25 Ohms). Install ELR across terminals 8 and 9 for Style D application.

FZM-1(A) OPERATION

Each FZM-1(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

FZM-1(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.1 mA (LED on).

Maximum IDC wiring resistance: 25 Ohms.

Average operating current: 270 μ A, 1 communication and 1 LED flash every 5 seconds, 3.9k eol.

EOL resistance: 3.9K Ohms.

External supply voltage (between Terminals T10 and T11):

- DC voltage: 24 volts power limited.
- Ripple voltage: 0.1 Vrms maximum.
- Current: 90 mA per module maximum.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

FDM-1(A) Dual Monitor Module

The FDM-1(A) Dual Monitor Module is intended for use in intelligent, two-wire systems. It provides two independent two-wire initiating device circuits (IDCs) at two separate, consecutive addresses. It is capable of monitoring normally open contact fire alarm and supervisory devices; or either normally open or normally closed security devices. The module has a single panel-controlled LED.

NOTE: The FDM-1(A) provides two Style B (Class B) IDC circuits ONLY. Style D (Class A) IDC circuits are NOT supported in any application.

FDM-1(A) SPECIFICATIONS

Normal operating voltage range: 15 to 32 VDC.

Maximum current draw: 6.4 mA (LED on).

Average operating current: 750 μ A (LED flashing).

Maximum IDC wiring resistance: 1,500 Ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 240 μ A

EOL resistance: 47K Ohms.

Temperature range: 32° to 120°F (0° to 49°C).

Humidity range: 10% to 93% (non-condensing).

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

FDM-1(A) AUTOMATIC ADDRESSING

The FDM-1(A) automatically assigns itself to two addressable points, starting with the original address. For example, if the FDM-1(A) is set to address "26", then it will automatically assign itself to addresses "26" and "27".

NOTE: "Ones" addresses on the FDM-1(A) are 0, 2, 4, 6, or 8 only. Terminals 6 and 7 use the first address, and terminals 8 and 9 use the second address.



CAUTION:

Avoid duplicating addresses on the system.

Installation

FMM-1(A), FZM-1(A), and FDM-1(A) modules mount directly to a standard 4" (10.16 cm) square, 2.125" (5.398 cm) deep, electrical box. They may also be mounted to the SMB500 surface-mount box. Mounting hardware and installation instructions are provided with each module. All wiring must conform to applicable local codes, ordinances, and regulations. These modules are intended for power-limited wiring only.

The FMM-101(A) module is intended to be wired and mounted without rigid connections inside a standard electrical box. All wiring must conform to applicable local codes, ordinances, and regulations.

Agency Listings and Approvals

In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL:** S635.
- **ULC:** S635.
- **FM Approved.**
- **CSFM:** 7300-0028:0219, 7165-0028:0224, 7165-0028:0243.
- **MEA:** 457-99-E.
- **U.S. Coast Guard:** 161.002/50/0 (NFS2-640, NFS2-320, NFS2-3030).
- **Lloyd's Register:** 11/600013 (NFS2-640, NFS2-320, NFS2-3030).
- **Fire Dept. of New York:** COA #6121 (NFS2-640, NFS-320), COA# 6114 (NFS2-3030).

Product Line Information

NOTE: "A" suffix indicates ULC-listed model.

FMM-1(A): Monitor module.

FMM-101(A): Monitor module, miniature.

FZM-1(A): Monitor module, two-wire detectors.

FDM-1(A): Monitor module, dual, two independent Class B circuits.

SMB500: Optional surface-mount backbox.

NOTE: See installation instructions and refer to the SLC Wiring Manual, PN 51253.

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This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.

For more information, contact Notifier. Phone: (203) 484-7161, FAX: (203) 484-7118.
www.notifier.com

PART NUMBER 767962

UL Listed and Rated Type FPLP Multi-Conductor Non-Shielded Plenum Fire Alarm

■ 0275/0725 FT ● FIRE/LIFE SAFETY CONTROL CABLE INIT/IND DEVICE/ZONE ABCDE0123456789



CABLE SPECIFICATIONS

DESCRIPTION	14 AWG 2 Conductor Bare Copper, Twisted, Non-Shielded Plenum Fire Alarm, FPLP (UL)
CONDUCTOR	14 (Solid Bare Copper)
INSULATION	Low-Smoke PVC .010"
COLOR CODE	Black/Red
LAY LENGTH	3.75" LHL (3.2 TPF)
SHIELD	N/A
DRAIN WIRE	N/A
JACKET	Low-Smoke PVC .018"
JACKET COLOR	Red Jacket with Blue Stripe
MARKING	FIRE/LIFE SAFETY CONTROL CABLE INIT. / IND. DEVICE / ZONE A B C D E 0 1 2 3 4 5 6 7 8 9 14 AWG FPLP (UL) ROHS MADE IN THE USA
OVERALL DIAMETER	.206" Nom
CABLE WEIGHT	36 Lbs/Mft.
CAPACITANCE	26 pF/Ft. Nom.
IMPEDANCE	72 Ohms
DC RESISTANCE	2.57 Ohms/Mft @ 20 deg. C
TEMPERATURE RATING	0 C to 75 C / 300 Volt

INDUSTRY STANDARDS

FLAME RATING	Approved For Plenum Use Without Conduit Per NFPA 262 Flame Test
AGENCY APPROVALS	NEC Article 760; FPLP (UL), RoHS Compliant, Made in the USA



All specifications referenced are nominal measurements unless otherwise noted.

PART NUMBER 761367

UL Listed and Rated Type FPLP Multi-Conductor Non-Shielded Plenum Fire Alarm



CABLE SPECIFICATIONS

DESCRIPTION	16 AWG 2 Conductor Bare Copper, Twisted, Non-Shielded Plenum Fire Alarm, FPLP (UL)
CONDUCTOR	16 (Solid Bare Copper)
INSULATION	Low-Smoke PVC .010"
COLOR CODE	Black/Red
LAY LENGTH	3.5" LHL (approx. 3.4 TPF)
SHIELD	N/A
DRAIN WIRE	N/A
JACKET	Low-Smoke PVC .018"
JACKET COLOR	Red Jacket with Brown Stripe
MARKING	FIRE/LIFE SAFETY CONTROL CABLE INIT. / IND. DEVICE / ZONE A B C D E 0 1 2 3 4 5 6 7 8 9 16 AWG FPLP (UL) ROHS MADE IN THE USA
OVERALL DIAMETER	.178" Nom
CABLE WEIGHT	26 Lbs/Mft.
CAPACITANCE	26 pF/Ft. Nom.
IMPEDANCE	72 Ohms
DC RESISTANCE	4.10 Ohms/Mft @ 20 deg. C
TEMPERATURE RATING	0 C to 75 C / 300 Volt

INDUSTRY STANDARDS

FLAME RATING	Approved For Plenum Use Without Conduit Per NFPA 262 Flame Test
AGENCY APPROVALS	NEC Article 760; FPLP (UL), RoHS Compliant, Made in the USA



All specifications referenced are nominal measurements unless otherwise noted.

PART NUMBER 761360SLC

UL Listed and Rated Type FPLP Multi-Conductor Non-Shielded Plenum Fire Alarm

■ 0275/0725 FT • FIRE/LIFE SAFETY CONTROL CABLE INIT/IND DEVICE/ZONE SLC ABCDE0123456789



CABLE SPECIFICATIONS

DESCRIPTION	16 AWG 2 Conductor twisted Bare Copper, Non-Shielded Plenum Fire Alarm, FPLP (UL)
CONDUCTOR	16 (Solid Bare Copper)
INSULATION	Low-Smoke PVC .010"
COLOR CODE	Black/Red
LAY LENGTH	3.5" LHL (approx. 3.4 TPF)
SHIELD	N/A
DRAIN WIRE	N/A
JACKET	Low-Smoke PVC .018"
JACKET COLOR	Red Jacket
MARKING	FIRE/LIFE SAFETY CONTROL CABLE INIT. / IND. DEVICE / ZONE SLC A B C D E 0 1 2 3 4 5 6 7 8 9 16 AWG FPLP (UL) ROHS MADE IN THE USA
OVERALL DIAMETER	.178" Nom
CABLE WEIGHT	26 Lbs/Mft.
CAPACITANCE	26 pF/Ft. Nom.
IMPEDANCE	72 Ohms
DC RESISTANCE	4.10 Ohms/Mft @ 20 deg. C
TEMPERATURE RATING	0 C to 75 C / 300 Volt

INDUSTRY STANDARDS

FLAME RATING	Approved For Plenum Use Without Conduit Per NFPA 262 Flame Test
AGENCY APPROVALS	NEC Article 760; FPLP (UL), RoHS Compliant, Made in the USA



All specifications referenced are nominal measurements unless otherwise noted.