

Features

- 60 addresses available on this analog addressable system
- Additional system capacity achieved via multi-point SLC modules
- 99 software zones
- NFPA 72 Compliant Smoke Sensitivity Test Built-In
- System Operates as Class A or Class B for SLC, P-Link and NACs
- 5 Amp Power Supply, Expandable to 310 amps
- 2 NACS, Regulated, Rated at 3 Amps each, expandable to 188
- 2 Input/Output (I/O) Circuits for system flexibility rated at 1 Amp each, ideal for manual release and abort
- Strobe Synchronization and System Wide Sync for Potter/AMSECO®, Gentex®, Cooper Wheelock® and System Sensor® strobes
- Dedicated Alarm, Supervisory and Trouble Relays
- 4,000 Event History Buffer
- Cabinet will house up to 18 AH batteries
- Optional two line DACT with UD-2000 that can report General, Zone or Point Information
- Built in IP Communicator
- Ethernet Port for Programming and Network Connectivity
- E-Mail System Status, Reports and Event Information
- Product includes 5 year warranty.
- UUKL Listed for Smoke Control



NYC Fire Dept.
Certificate of Approval
6266



Description

The IPA-60 is an analog/addressable releasing fire alarm system with a total system capacity of 60 addresses. Additional capacity on the system is achieved using multi-point SLC modules. The control panel utilizes the exclusive Potter protocol that includes a complete line of sensors and modules. Each SLC may be comprised of any combination of smoke sensor, heat detectors or modules and allows for a total of 50 ohms of impedance and may use any wire compliant with the National Electrical Code (NEC).

The IPA-60 has a 5 Amp power supply with two Notification Appliance Circuits (NACs) and two Input/Output (I/O) circuits. The NACs are rated at 3 Amps each and the I/Os are rated at 1 Amp each. Each output is regulated and power limited. In addition, each output is uniquely programmable and may be configured for steady signal, strobe synchronization, constant power, door holder power, or releasing. The strobe synchronization includes Potter/AMSECO, Gentex, System Sensor and Cooper/Wheelock and with the exclusive Quadrasync each output may have a unique brand and all strobes will flash together. The I/Os are designed for inputs such as manual release stations and abort switches that will not require polling and react nearly instantaneously.

The IPA-60 is listed for releasing of fire suppression systems. The software allows cross zones, counting zones, and timers for suppression. The system is capable of multiple release outputs across multiple hazards. In addition, the PSN-1000 may be used to extend releasing capability. The NACs may be expanded using the PSN-1000 series intelligent power supplies. Each PSN-1000 adds another 10 Amps of power, 2 additional input circuits and the IPA-60 will support up to 31 power supplies. The system will synchronize the strobes system wide. In addition, the PSN-1000E has space to allow the installation of up to six expansion cards. The cards mount on a stacker bracket that allows access to all SLC circuit connections.

Technical Specifications

Dimensions	16"W x 17"H x 3 7/8"D
AC Mains	3.0 Amps @ 120 VAC 50/60 HZ 2.0 Amps @ 240 VAC 50/60 HZ
Enclosure	16 gauge cold rolled steel with removable locked door with Lexan viewing window
Battery	Standby Current-130 mA Alarm Current-200 mA • 5 Amps power for NACs, I/O, and P-Link • 3 Amps per NAC, regulated • 1 Amp per I/O circuit, regulated • Battery Charger range 8-55 Ah • Battery Charger voltage 27.3 VDC • P-Link maximum current of 1 Amp
Temperature and Humidity Range	32° to 120° (0°C to 49°C) with a maximum humidity of 93% non-condensing.
Standards	• NFPA 12, 12A, 13, 15, 16, 17, 17A, 70, 72, 92, 750, and 2001 • ANSI/UL 864 - Local (L), Remote Station (RS), Central Station (CS), Propriety (PPU), Auxiliary (AUX). Type of Service: Automatic (A), Manual (M), Water flow (WF) Sprinkler Supervisory (SS) Type of Signaling: Digital Alarm Communicator (DAC), March Time (March), Non Coded (NC), Reverse Polarity (Rev Pol), Other Technologies (OT) • IBC (International Building Code)

SLC Loop Accessories

The control panel may be connected with up to 60 addressable devices or modules in any combination. The SLC is not restricted by any special wire requirements and may be wired with any wire that complies with the NEC.

SLC Loop Devices

Device	Description
PAD Series-PD	Analog Photoelectric Smoke Detector is a smoke detector with a listed obscuration of 1.1 to 3.5%/foot. UL 268 7th Edition.
PAD Series-PHD	Combination Analog Photoelectric Smoke/Heat Detector – a smoke detector with a listed obscuration of 1.1 to 3.5 %/foot obscuration and a fixed temperature range of 135° to 185° F heat detector. Smoke detection compliant with UL 268 7th Edition.
PAD Series-PCD	Combination Photoelectric Smoke/Carbon Monoxide Detector. Smoke detection compliant with UL 268 7th Edition. Carbon Monoxide detection compliant with UL 2075.
PAD200-PCHD	Combination Photoelectric Smoke/Heat/Carbon Monoxide Detector. Smoke detection compliant with UL 268 7th Edition. Heat detection with a fixed temperature range of 135° to 185° F and UL 521 7th Edition compliant. Carbon Monoxide detection compliant with UL 2075.
PAD Series-HD	Analog Fixed Temperature (135° - 185°F) or Rate-of-Rise Heat Detector (software selectable).
PAD Series-DUCTR	Addressable Duct Smoke Detector with Form C Relay rate at 10Amps @ 250/120VAC or 8 Amps at 30VDC.
PAD Series-DUCT	Addressable Duct Smoke Detector.
PAD100-6DB	6” round base that is mountable to an electrical box and wired for connection to the PAD100/200 devices.
PAD100-4DB	4” round base that may be mounted to an electrical box and wired for connection to the PAD100/200 devices.
PAD100-IB	Isolator base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop and used for connection to the PAD100/200 devices.
PAD100-RB	Addressable Relay Base that contains one relay controlled by the SLC. Relay at rated at 2 amps at 30 VDC or 0.5A at 125VAC. For PAD100/200 devices only.
PAD100-SB	Addressable Sounder Base that contains an addressable sounder module which allows for configuration of local, group, and/or all call. For PAD100/200 devices only.
PAD Series-CD	Addressable CO gas detector.
PAD200-DD	Addressable photoelectric smoke detector for use in DUCT/DUCTR enclosure.
PAD300-DD	Addressable photoelectric smoke detector for use in DUCT/DUCTR enclosure or pendant mount applications.
PAD100-LFSB	Addressable Low Frequency Sounder Base that contains an addressable sounder module which allows for configuration of local, group, and/or all call. The LFSB complies with the Low Frequency Signal Requirements (520 Hz) and used for connection to the PAD100/200 devices.
PAD100-SPKB	Speaker base is a wall or ceiling mount speaker capable of 25 or 70.7 VRMS and is field selectable from 1/8W to 4W and used for connection with the PAD100/200 devices.
PAD300-6DB	6” round base which is mountable to an electrical box and wired for connection to the PAD300 devices.
PAD300-4DB	4” round base which is mountable to an electrical box and wired for connection to the to the PAD300 devices.
PAD300-IB	Isolator base that interrupts a short in a SLC and prevents the short from affecting protected devices on the loop. Used for connection to the PAD300 devices.
PAD300-RB	Addressable Relay Base that contains one relay controlled by the SLC. The Relay is rated 2 amps at 30 VDC or 0.5A at 125VAC and used for connection to the PAD300 devices
PAD300-SB	Addressable Sounder Base that contains an addressable sounder module which allows for configuration of local, group, and/or all call; and used for connection to the PAD300 devices.
PAD300-LFSB	Addressable Low Frequency Sounder Base that contains an addressable sounder module which allows for configuration of local, group, and/or all call. The LFSB complies with the Low Frequency Signal Requirements (520 Hz) and used for a connection to the PAD300 devices.

Modules

Device	Description
PAD100-MIM	Micro Input Module provides a small foot print contact module for mounting inside an enclosure.
PAD100-PSSA	Single Action Addressable Pull Station.
PAD100-PSDA	Dual Action Addressable Pull Station.
PAD100-SIM	Single Input Module is a standard contact module with an LED that mounts into a 4" square electrical box.
PAD100-DIM	Dual Input Module is a device that can monitor two distinct inputs with a single device or in a Class A mode.
PAD100-TRTI	Two Relay Two Input module provides two form C relays that are individually controlled by the control panel. Each relay is rated for 2 amps at 30VDC or 0.5 amps at 125VAC. Also provides two contact inputs.
PAD100-NAC	Notification Appliance Circuit module is an addressable remote appliance circuit controlled by the panel.
PAD100-ZM	Zone Module is used to connect conventional 2-wire smoke detectors to the system.
PAD100-IM	Module interrupts a short on the SLC and prevents the short from affecting protected devices on the loop.
PAD100-RM	Relay Module that provides one form C relay controlled by the control panel. Relay is rated for 2 amps at 30VDC or 0.5 amps at 125VAC.
PAD100-LED	Module provides a single addressable LED that is controlled by the control panel.
PAD100-SM	Speaker Module provides switching for two audio channels.
PAD100-LEDK	Addressable LED and key switch that mounts in a single gang box.
PAD100-DRTS	DUCTR Remote Test Switch that mounts in a single gang box and optionally supervised.
PAD100-OROI	One Relay One Input Module provides one form C relay and one input. The relay is rated at 2 amps at 30VDC or 0.5 amps at 125VAC.

SLC Features

The Potter protocol is a digital protocol with a proven design for reliability and noise immunity. The system does not require special cable or conductors for connection of the Signaling Line Circuit as long as the cable is compliant with NFPA 70 and NFPA 72.

The system allows for Class A or Class B installations as well as “T-Taps”, with a max wiring distance of 10,000 Ft.

Sensor Features

The sensors through the fire alarm control panel provide a real time status as to the condition of the system. The smoke detector sensitivity, heat detector temperature level and drift compensation are all programmable options. The system also allows for a day/night mode where the panel automatically adjusts the sensitivity depending on the time of day. To assist in the reduction of false alarms, the smoke detectors also have a maintenance warning that sends a trouble signal when a detector is dirty to the point that it can no longer maintain the programmed sensitivity.

User Interface

The fire alarm control panel has a 4 x 20 LCD display to provide information to the system status. The keypad has navigation keys to allow manipulation of the Menu on board the panel. The panel is shipped standard with the following LEDs:

- AC Power - Green
- Alarm - Red
- Earth Fault - Amber
- Supervisory - Amber
- Silenced - Amber
- Trouble - Amber
- Pre-Release - Amber
- Release - Red

The common buttons include a Silence, Reset, Acknowledge, and Drill. All of the buttons are accessible once the locked door is opened.

P-Link

The IPA-60 has a proprietary communication protocol that communicates through a RS-485 connection to field devices. Up to 64 devices may be connected to a single P-Link connection. The P-Link includes the communication terminals and regulated 24 VDC connection for the field devices. The field devices may be any of the following:

RA-6075R – 2 x 16 LCD annunciator with a key pad in a locked metal enclosure.

RA-6500R(F) – 4 x 40 LCD annunciator with a key pad in a locked metal enclosure. Flush mount version available.

LED-16(F) – 16 LED annunciator with common indicators in a locked metal enclosure. Flush mount version available.

PSN-1000(E) – 10 amp, remote intelligent power supply with 6 NACs, 2 Inputs and a P-Link repeater. This panel is listed in conjunction with the IPA-60 as releasing circuits.

CA-6075 – Class A convertor that converts the SLC, NACs and P-Link connection

UD-2000 – UL listed, Dual line telephone alarm communicator

DRV-50 – LED driver expander, used to connect up to 50 LEDs in a graphic display

FCB-1000 – Fire communication bridge, provides remote mounting of the Ethernet connection

FIB-1000 – Fiber interface module, used to extend P-Link to multi-mode fiber (2 required)

RLY-5 – Relay module, provides 5 form C relay contacts rated at 3.0 amps 24VDC/125AC

SPG-1000 – Serial parallel gateway, allows for the connection to a serial or parallel printer

The **FIB-1000**, **FCB-1000** and the **SPG-1000** may be installed in the stacker bracket or ordered with the optional rack mount enclosure.

MC-1000 Multi-Connect allows up to sixty-three IPA series panels to share a single reporting technology.

IDC-6 – Initiating device circuit provides 6 programmable inputs

AE-2 – Two card expansion cabinet

AE-8 – Eight card expansion cabinet

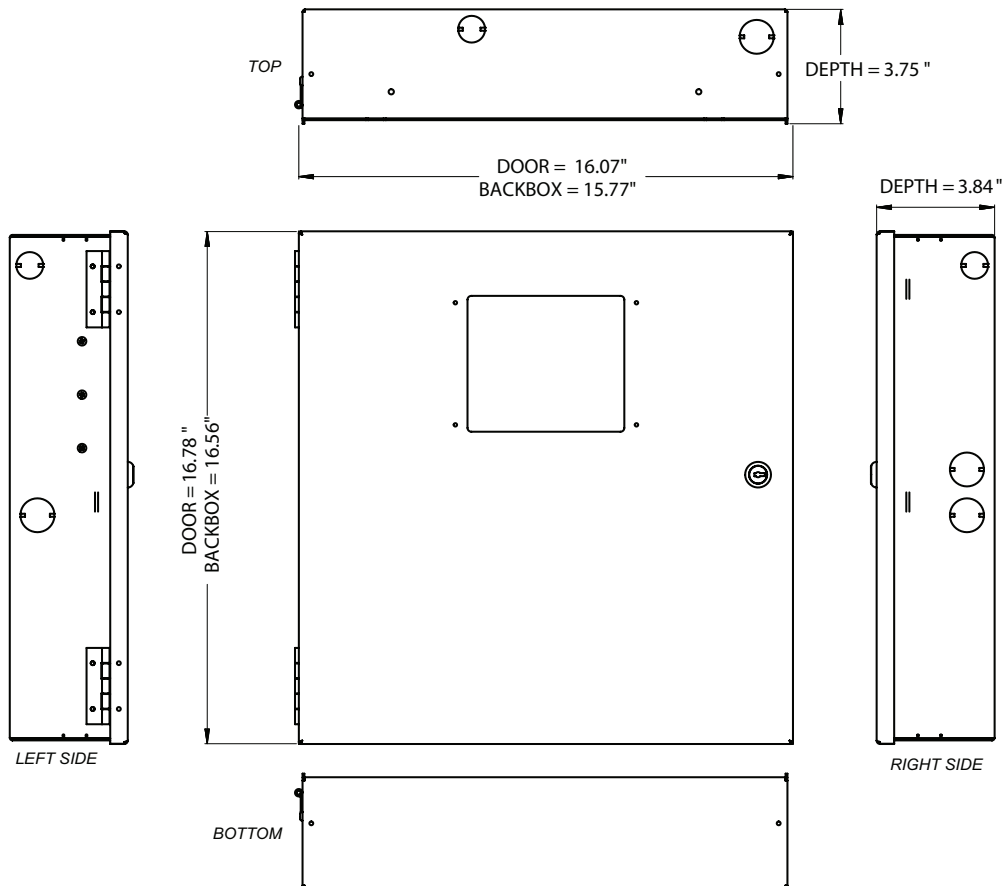
AE-14 – Fourteen card expansion cabinet

Ethernet/I.P. Connection

The IPA-60 is shipped standard with an Ethernet connection. This connection is the programming port and may be connected to a building Wide Area Network (WAN) or Local Area Network (LAN). Once connected to the Internet, the panel may be selectively programmed to e-mail alarm conditions, trouble conditions, supervisory conditions, test, Event History and detector status. An e-mail may be sent to the panel and the panel will e-mail the event history, detector status, configuration file or server status to an authorized E-mail account. In addition, reminders may be set to send an e-mail for service, testing or other conditions.

In addition, the Ethernet connection is UL listed as an IP communicator. The IP communicator is listed to report to the UL listed Sur-Gard III IP receiver. The IP communicator replaces the traditional less reliable alarm communicator transmitter that utilized telephone lines. The IP communicator is an active method of connection and communication to the monitoring station.

Dimensions



DWG #593-1

Compatible Releasing Devices

Note: For releasing applications please order the Potter EOLD (3005012) for circuits connected to a releasing solenoid or actuator.

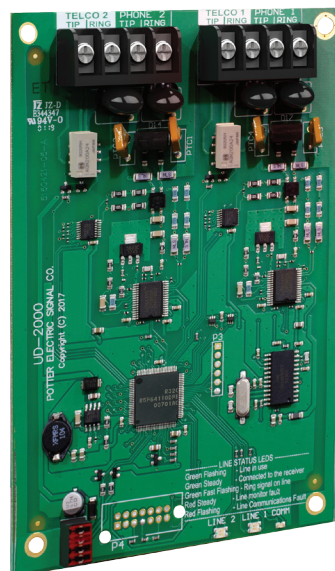
Brand	Description
Skinner	73218BN4UNLVN0C112CZ 73212BN4TNLVN0C322C2
Victaulic	753-E Series
Mini Max	MX123 & MX200 w/ 8876677 & 889323
Viking	11591, 11601, 11602, 13843, & 13844
TLX	PA0036

Ordering Information

Model	Description	Stock No.
IPA-60	Fire Alarm Releasing Control Panel	3992714
	Replacement Board IPA-60	3992738

Features

- Allows for communication to Monitoring Station
- Communicates using SIA-DCS or Ademco Contact ID Protocols
- For use with IPA, AFC, and ARC series Addressable Panels and PFC-4064 Conventional Panel
- Status LEDs indicate operation of DACT card
- Installs with ease behind main panel LCD display via User Interface bracket
- Device address is set internally to address 1
- Includes two (2) RJ45 phone cords



Description

The UD-2000 Digital Alarm Communicator Transmitter (DACT) provides for up to two (2) phone lines for communication to a monitoring station. The UD-2000 communicates using the SIA-DCS or Ademco Contact ID protocols. When enabled, the DACT automatically monitors each phone line or voltage and has the ability to seize the line and connect with a remote receiver. Once the communication is complete, the DACT will hang up.

The DACT is provided with terminal blocks for each phone line and two RJ45 cords. In order for the DACT to work properly, it must be installed on a plain old telephone service (POTS) line or equivalent deemed by the authority having jurisdiction. The DACT must be installed before any other equipment to ensure it can seize the phone line.

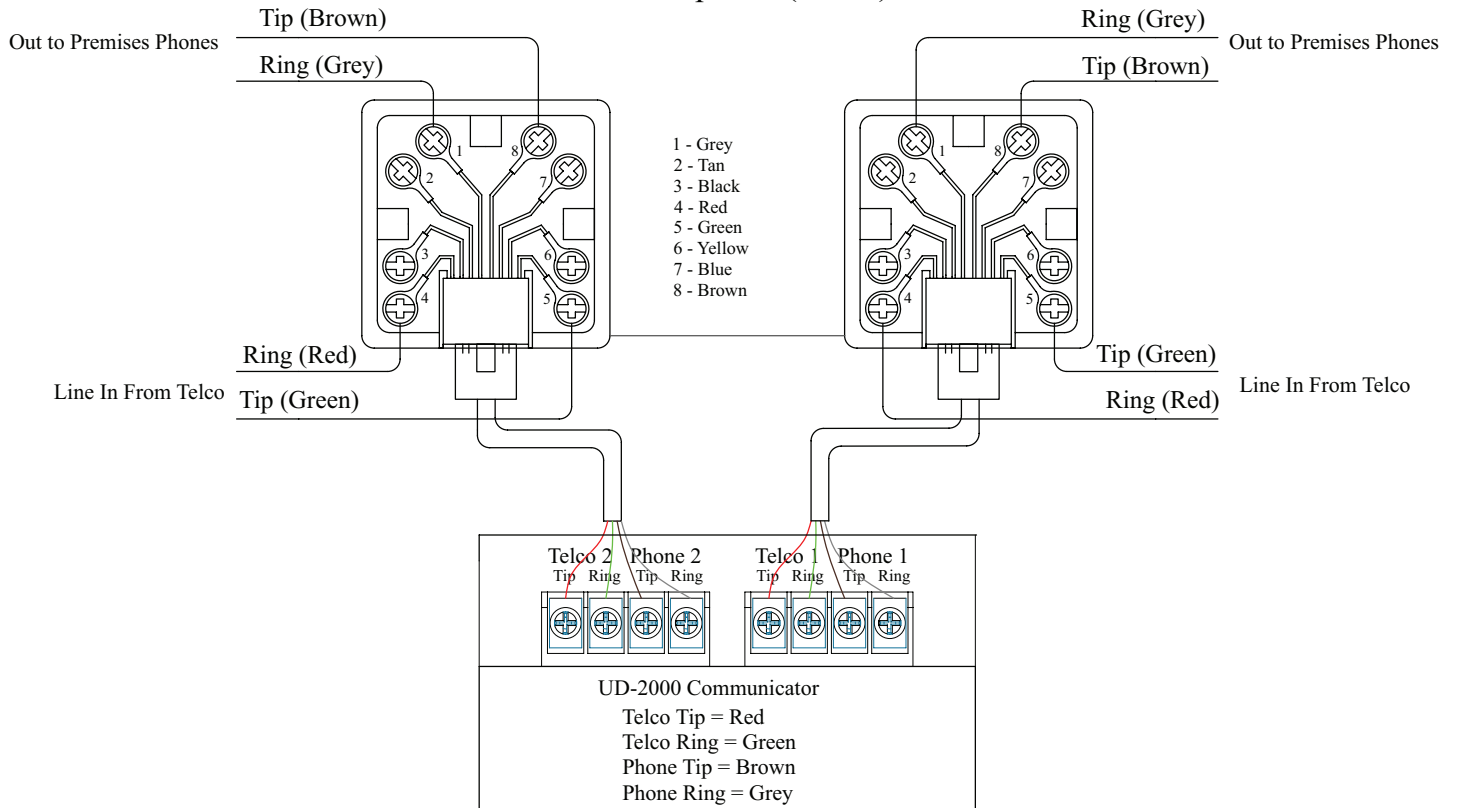
Phone lines are high voltage and should be run in a separate conduit from other circuits. The wire conductors connecting the DACT to the phone system should be 26 AWG or larger.

Technical Specifications

Operating Voltage	22.0-24.0V
Standby Current	16mA
Alarm Current	23mA
Max UD-2000s per panel	1
Dimensions	4"W * 6"H * 1-5/8"D
Operating Temperatures	0°C - 49°C (32°F- 120°F)
Operating Humidity Range	10% - 93% @ 30°C (86°F) (non-condensing)
Mounting Options	In FACP Behind keypad
Shipping Weight	0.47 lbs

RJ31X Phone Jack to UD-2000

Plain Old Telephone (POTS) lines



NOTICE

Install in accordance with compatible fire alarm control panel installation manual

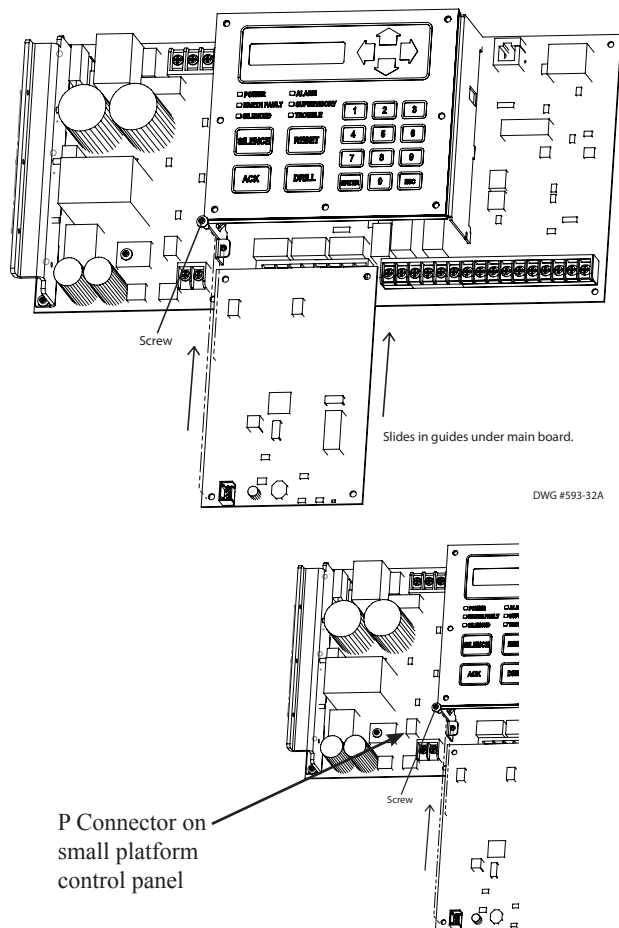
Installation

The UD-2000 DACT is connected to the control panel using the provided four-wire cable connection (P/N 5210514) between P4 and UD-2000 P1. The connection is power limited and supervised.

1. Power system down.
2. Slide the UD-2000 into the card guides located under the User Interface bracket.
3. Secure the UD-2000 to the User Interface bracket using the provided #6-32x3/8" screw
4. Install the provided four-wire conductor jumper between UD-2000 P1 and P4.

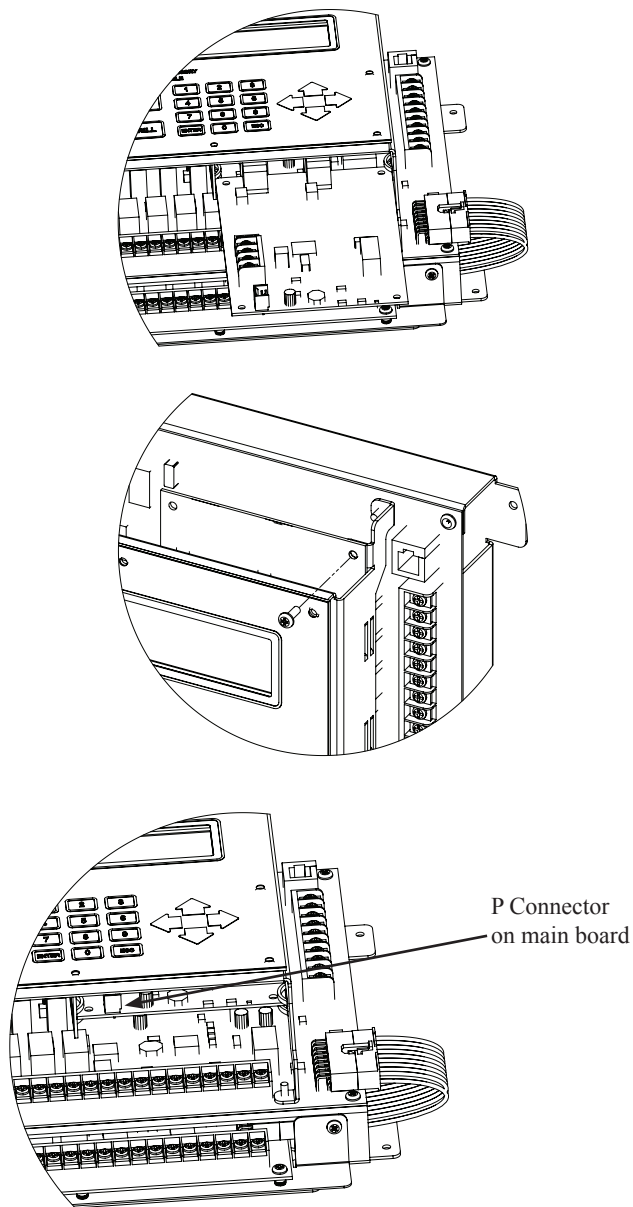
UD-2000 DACT Installation on Small Platform Panel

Fig 1



UD-2000 DACT Installation on Large Platform Panel

Fig 2

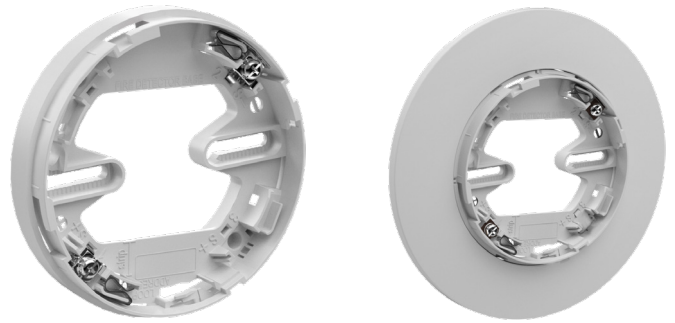


Ordering Information

Model	Description	Stock No.
UD-2000	Digital Alarm Communicator	3992769

Features

- Terminals marked with polarity to assist with installation
- Duplicate Terminals for In-and-out SLC Wiring
- Terminals accept 22 to 12 AWG wire sizes
- Installs on Single Gang, Double Gang, 3-1/2" Octagon Box or 4" Square Box
- Locking tab prevents unauthorized detector removal
- Product includes 5-year warranty
- 6" mounting base comes with trim plate cover



Application

The Potter PAD300-6DB and PAD300-4DB detector bases are used to install PAD300 series detectors. The PAD300-6DB will mount on a single gang, double gang, octagon, 4" square, 50mm, 60mm, and 70mm electrical box.

Description

The PAD300-6DB and PAD300-4DB are low-profile, surface-mount bases used with Potter's addressable detectors. The base uses screw clamp terminals that accept wire ranging from 22 to 12 AWG. When installed on recessed electrical boxes, the PAD300-6DB is wide enough to completely cover the back box and the immediate surrounding area. The base is equipped with a locking tab to deter unauthorized removal of the attached detector.

Technical Specifications

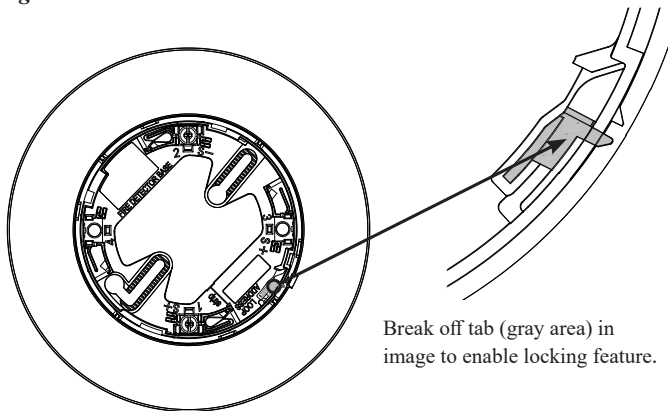
Installation Temp Range	32°F to 150°F (0°C to 66°C)
Operating Humidity Range	0% to 93% (Non-condensing)
Dimension	PAD300-4DB: 3.93 in / 100 mm PAD300-6DB: 6.3 in / 160 mm
Weight	PAD300-4DB: 1.34 oz / 38 g PAD300-6DB: 3.03 oz / 86 g
Height	0.76 in / 20 mm
Acceptable Wire Gauge	22 to 12AWG
Mounting Options	• Single Gang • Double Gang • 3-1/2" Octagon Box • 4" Octagon Box • 4" Square with Plaster Ring • 50 mm c/c Box • 60 mm c/c Box • 70 mm c/c Box

Locking Feature

The PAD300-6DB and PAD300-4DB include a locking feature that prevents removal of the detector without using a tool.

1. To enable this feature, break off the locking tab (See Figure 1), and then install the detector.

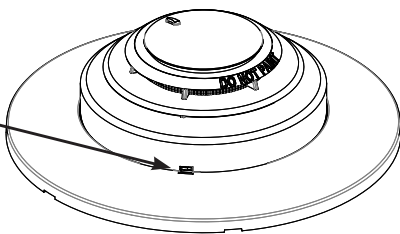
Fig. 1



2. To remove the detector from the base when the locking feature has been enabled, insert a small screwdriver into the slot on the base to push the plastic tab while simultaneously turning the detector head counter-clockwise.

Fig. 2

Insert small screwdriver into slot to remove detector from base.



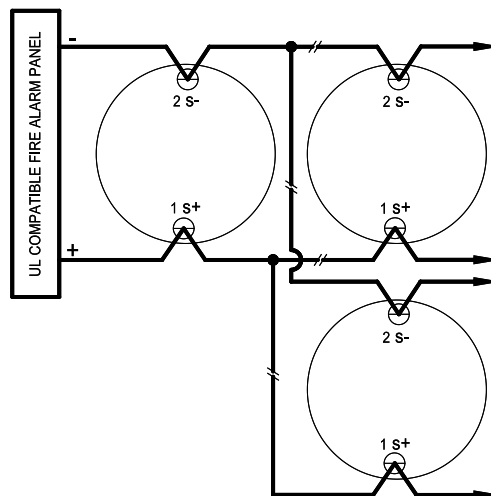
Ordering Information

Model	Description	Stock No.
PAD300-4DB	4" Detector Base	3992781
PAD300-6DB	6" Detector Base	3992782

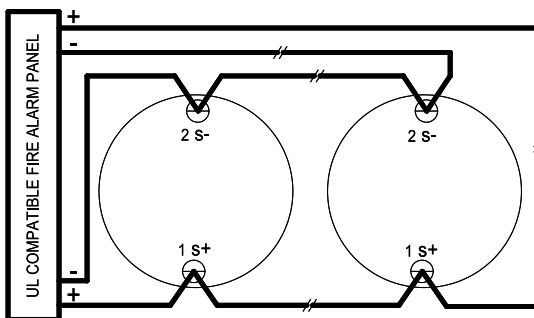
Wiring Diagrams

Fig. 3

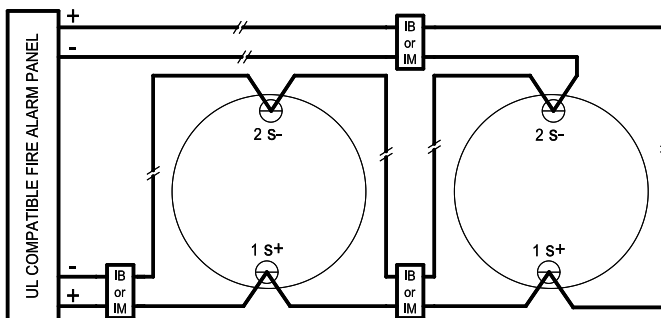
1) Class B Wiring:



2) Class A Wiring:



3) Class X Wiring:



Features

- Low profile, less than 2 inches with the base
- Wide selectable sensitivity range of 1.1 to 3.5%/foot
- Detector communicates sensitivity to control panel
- UL listed smoke calibration and sensitivity
- Optional locking tab to prevent unwanted removal
- Simple DIP switch address setting, no programming tool required
- Magnetic test switch
- LED alarm indicator
- Product includes 5-year warranty
- UUKL Listed for Smoke Control
- UL268 7th edition compliant



Description

The Photoelectric Smoke Detector is a listed Analog Addressable smoke detector compatible with fire alarm control panels that utilize the Potter Addressable Device (PAD) protocol. The PAD300-PD is a low profile smoke detector with a wide sensitivity range. The detector and base are made of a durable plastic in an off-white color to blend in with the ceiling.

The PAD300-PD has a sensitivity range of 1.1 to 3.5 % per foot and is UL listed. The PAD300-PD features drift compensation and has built in dirty detector warning as well. The PAD300-PD and the control panel communicate over a proven and robust digital communication path and the system analyzes the information at the particular device. The total polling speed is less than five (5) seconds, well under the UL requirements.

The detector is compatible with any of the PAD300 series detector bases and simply twists on. The PAD300-PD is addressed using DIP switches in the rear of the detector and can be easily programmed in the field without special tools.

Setting the Address

Each addressable device on the SLC loop must have a unique address from 1 to 127 to function properly. The address is set using DIP switches.

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to SLC or device. Verify the following:

1. Power to the device is removed.
2. Field wiring is correctly installed.
3. Field wiring has no open or short circuits.

Technical Specifications

Operating Voltage	24 VDC
Detector Current Draw	300 μ A
Alarm Indicator	1 LED
Alarm Set-point Range	1.1 to 3.5%/ft (3.6 to 11%/m)
Installation Temperature Range	32 to 120° F (0 to 49° C)
Operating Relative Humidity range	0% to 93% (Non-condensing)
Start-up Time	Max. 1 sec.
Maximum Number of Addresses Per Loop	127
Maximum Number of Lighted Indicators in Alarm Per Loop	30
Color	Eggshell White
Weight (without base)	91g (3.2oz)
Dimensions (without base)	Height: 1.42 in (36 mm) Diameter: 3.93 in (100 mm)

Air Velocity Ratings

The PAD300-PD has an Open Area of Protection air velocity rating of 0 to 300 feet per minute.

The system has a maximum of 30 LEDs that can be turned on simultaneously. If the system already has 30 LEDs on, the PAD300-PD will operate even though the LED may not illuminate.

Operation

The PAD300-PD is an analog addressable detector that uses one address on the Signaling Line Circuit (SLC) of a compatible fire alarm control panel. The unit communicates with the control panel as it is polled. The LEDs flash every time the unit is polled and they will flash at a fast rate if the unit is in an active status. The polling LED can be turned off if desired for less conspicuous operation.

The PAD300-PD with the PAD300-4DB or PAD300-6DB has a low profile of less than two (2) inches to blend into the surrounding environment. The detector includes an insect screen to prevent foreign objects from reaching the chamber and can be cleaned to restore operation of a dirty detector.

Detector Sensitivity

The PAD300-PD and the compatible control panel work in tandem to keep the sensitivity consistent. As the detector is installed over time, the detector compensates for the dirt in the unit until it is out of range. At that time, the panel will indicate a dirty detector. The detector will then have to be cleaned or replaced.

The PAD300-PD can be programmed to provide a maintenance alert prior to reaching the dirty detector level which will allow for intervention prior to the detector going into trouble. This allows for detector replacement or cleaning prior to a nuisance trouble occurs.

NOTE: As required by NFPA, do not install the detectors until all construction is complete and the work area has been thoroughly cleaned. If the detectors have been installed in a construction environment, they should be cleaned or replaced before the system is placed into service.

Spacing

The PAD300-PD is UL listed with a recommended maximum spacing of 30 feet. Refer to NFPA 72 for specific information regarding detector spacing, placement and special applications.

Compatible Bases

All bases will mount on a single gang, 3-1/2" octagon, 3-1/2" square, double gang, 4" octagon, 4" square, 50mm c/c, 60mm c/c and 70mm c/c boxes.

Device	Description	Stock No.
PAD300-4DB	4" Detector Base	3992781
PAD300-6DB	6" Detector Base	3992782
PAD300-IB	6" base with an isolator module included	3992783
PAD300-RB	6" base with one Form-C relay contact. 2A @ 30VDC, 0.5A @ 125VAC	3992784
PAD300-SB	6" base with sounder module included. Sound pattern is provided from external source	3992785
PAD300-LFSB	6" base with 520Hz sounder module included. Sound pattern is provided from external source	3992786

Ordering Information

Model	Description	Stock No.
PAD300-PD	Photoelectric Smoke Detector	3992775

Features

- Selectable Rate of Rise and/or Fixed Heat Detector
- Low Profile
- Reliable Detection Technology
- LED Alarm Indicator
- Ambient Temperature Listing of 32°F to 150°F
- Simple DIP Switch Address Setting, No Programming Tool Required
- Magnetic Test Switch
- Product includes 5-year warranty
- UUKL Listed for Smoke Control



Description

The PAD300-HD is a listed analog addressable rate of rise and/or fixed temperature heat detector compatible with any fire alarm control panel that has the Potter Addressable Device (PAD) protocol. The heat sensing portion utilizes a proven thermistor for accurate and reliable heat detection. The detector and base (not included) are made of a durable plastic in an off-white to blend in with the ceiling.

The PAD300-HD is UL listed with a selectable fixed temperature point from 135° to 185° Fahrenheit and can be used for rate of rise applications. See detector spacing limitations below. This flexibility allows the installer to cover a wide variety of applications with a single unit.

The PAD300-HD and the control panel communicate over a proven and robust digital communication path and the system analyzes the information at the particular device. The total polling speed is less than five (5) seconds, well under the UL requirements.

The detector is compatible with any of the PAD300 series detector bases and simply twists on. The PAD300-HD is addressed using DIP switches in the rear of the detector and can be easily programmed in the field without special tools.

Setting the Address

Each addressable device on the SLC loop must have a unique address from 1 to 127 to function properly. The address is set using DIP switches.

Before connecting a device to the SLC loop, take the following precautions to prevent potential damage to SLC or device. Verify the following:

1. Power to the device is removed.
2. Field wiring is correctly installed.
3. Field wiring has no open or short circuits.

Technical Specifications

Operating Voltage	24 VDC
Detector Current Draw	300 μ A
Alarm Indicator	1 LED
Alarm Set-point Range	135°F to 185°F (57°C to 85°C)
Rate of Rise Detection (Selectable Option)	15°F/min. (8.3°C/min.)
Installation Temperature Range	32°F to 150°F (0°C to 66°C)
Operating Relative Humidity Range	0% to 93% (Non-condensing)
Start-up Time	Max. 1 sec.
Maximum Number of Addresses Per Loop	127
Maximum Number of Lighted Indicators in Alarm Per Loop	30
Color	Eggshell White
Weight (Without Base)	68 g (2.4 oz)
Dimensions (Without Base)	Height: 1.5 in (38 mm) Diameter 3.93 in (100 mm)

Operation

The PAD300-HD is an analog addressable detector that uses one address on the Signaling Line Circuit (SLC) of a compatible fire alarm control panel. The unit communicates with the control panel as it is polled. The LED flashes every time the unit is polled and it will flash at a fast rate if the unit is in an active status. The polling LED can be turned off if desired for less conspicuous operation.

The PAD300-HD with the PAD300-4DB or PAD300-6DB has a low profile to blend into the surrounding environment. The system has a maximum of 30 LEDs that can be turned on simultaneously. If the system already has 30 LEDs on, the PAD300-HD will operate even though the LED will not illuminate.

Spacing

The ANSI/UL listed spacing limitations of PAD300-HD smooth ceiling are dependent on alarm set point.

Alarm Set-Point	Rate of Rise Spacing	Fixed Temperature Spacing
135°F to 185°F (57°C to 85°C)	Max. 70 ft.	Max. 70 ft.

Compatible Bases

All bases will mount on a single gang, 3-1/2" octagon, 3-1/2" square, double gang, 4" octagon, 4" square, 50mm c/c, 60mm c/c and 70mm c/c boxes.

Device	Description	Stock No.
PAD300-4DB	4" Detector Base	3992781
PAD300-6DB	6" Detector Base	3992782
PAD300-IB	6" Base with an Isolator Module Included	3992783
PAD300-RB	6" Base with One Form-C Relay Contact 2A @ 30VDC, 0.5A @ 125VAC	3992784
PAD300-SB	6" Base with sounder module included. Sound pattern is provided from external source	3992785
PAD300-LFSB	6" Base with 520Hz sounder module included. Sound pattern is provided from external source	3992786

Ordering Information

Model	Description	Stock No.
PAD300-HD	Heat Detector	3992776

Features

- Single or Dual Action versions
- Durable die-cast construction
- Reset key matches the fire alarm control panels
- Compatible with IPA Series panels
- SLC Class A, Class X & Class B
- Product includes a 5 year warranty
- UUKL Listed for Smoke Control



Description

The PAD100-PSSA (Single Action) is activated by simply pulling the white “T” bar handle down. The PAD100-PSDA (Dual Action) is activated by lifting the front cover and then pulling the white “T” bar handle down. Once activated, the “T” bar cannot be reset without opening the front cover. Opening the front cover will also activate the pull station. To reset the PAD100-PS Series, use the Potter WS-93 key to unlock and open the front cover. Once the cover is open, push the “T” bar back into the normal position and re-secure the front cover.

Application

The PAD100-PSSA/PSDA is compatible with Potter’s IPA and AFC/ARC series addressable fire alarm control panels. It is a non-coded addressable pull station available in either a single or dual action model and installs on a single gang box or surface mounts using the P32-BB or P32-DBB (deep) back box.

Technical Specifications

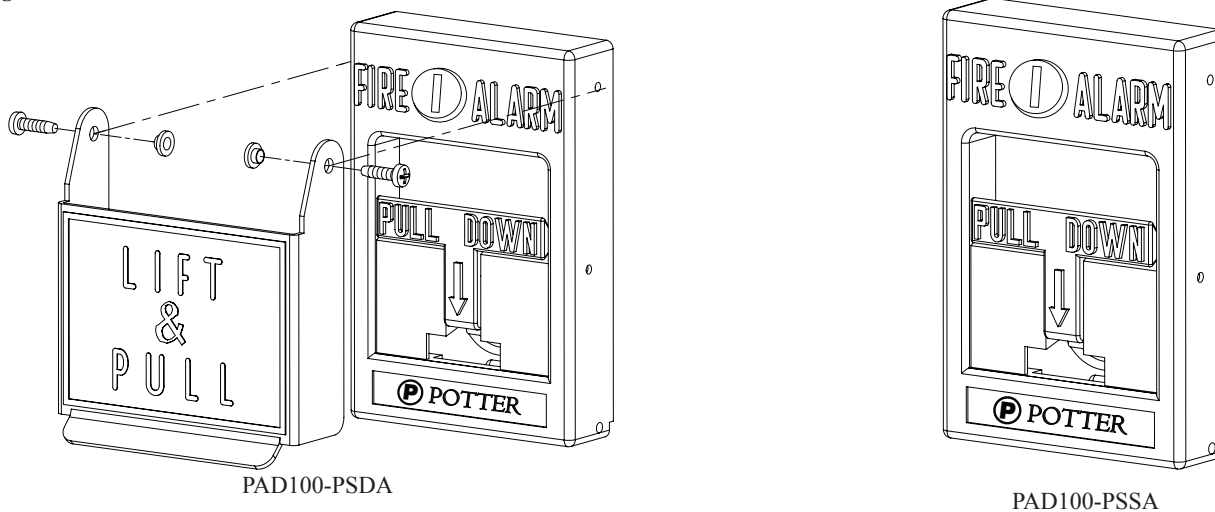
Operating Voltage	24.0 VDC
Max SLC Standby Current	200uA
Max SLC Alarm Current	200uA
Environmental Limitations	32°F - 120°F (0° - 49°C) Indoor Only
Dimensions	4.75” H x 3.25” W x 1.75” D
Relative Humidity Range	0 - 93% (non-condensing)
Mounting Options	Single gang box or Potter P32-BB/DBB
Shipping Weight	APS-SA - 1.22 lbs. APS-DA - 1.46 lbs.

Setting the Address

The PAD100-PS Series uses one SLC address assigned to the device. The address is set using the DIP switch located on the back of the PAD100-PS device.

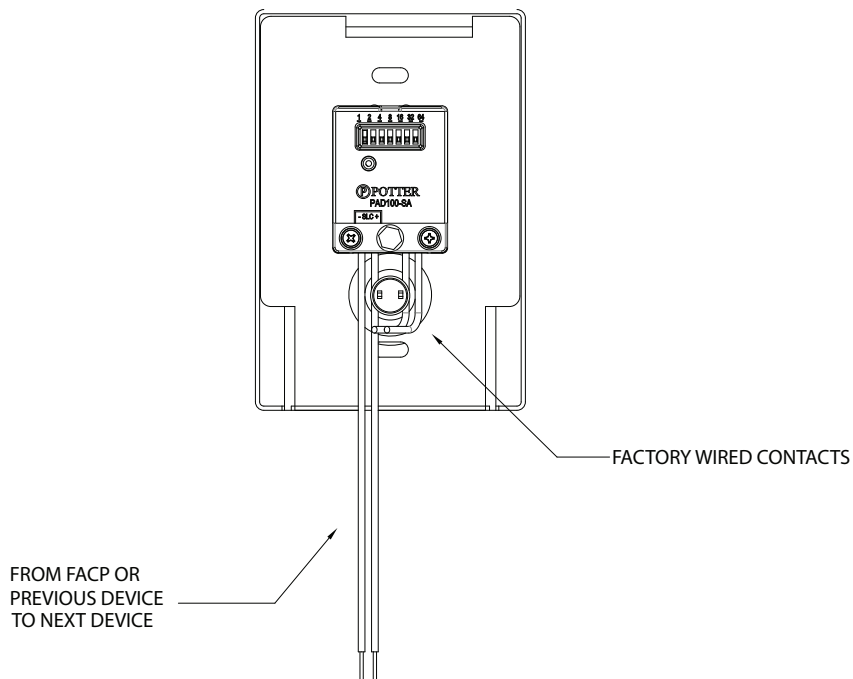
Pull Station Front View

Fig 1



Pull Station Back View and Wiring

Fig 2



Ordering Information

Model	Description	Stock No.
PAD100-PSSA	Addressable Pull Station, Single Action	3992721
PAD100-PSDA	Addressable Pull Station, Dual Action	3992720

Features

- LED Technology for Energy Efficiency:
 - Industry's lowest current draw, ensuring energy efficiency.
 - Requires fewer power supplies and smaller wire gauge, reducing wire runs.
- 6 field-selectable settings for both wall and ceiling models.
 - Wall: 15 cd - 185 cd / Ceiling: 15 cd - 177 cd
- 3 horn patterns (Continuous, T3, T3/T4) for fire and CO signaling in one device.
- Strobe synchronization with Potter fire alarm control panels and power supplies. Ability to mix xenon and LED strobes in the same field of view.



Description

The Potter PE Series feature advanced LED technology with a range of low and high candela settings for indoor wall and ceiling-mount applications. Crafted with a low-profile design, these devices seamlessly complement building interiors. Rich in features, the devices offer 6 candela settings and 3 horn patterns within a single unit. Installation is simplified with pre-wire/pre-test capabilities via a hinged mounting plate. Wall models follow a single-gang design, allowing tool-free setting changes. The PE Series is designed for 24V operations. The PE-HN can also be used in 12V applications.

High Efficiency, LED Technology

The PE series of LED strobes utilize LED technology and optical design to improve efficiency and reduce overall power consumption. Strobe models offer six candela settings (15, 30, 75, 110, 135, 185 cd for wall models and 15, 30, 75, 110, 150, 177 cd for ceiling models).

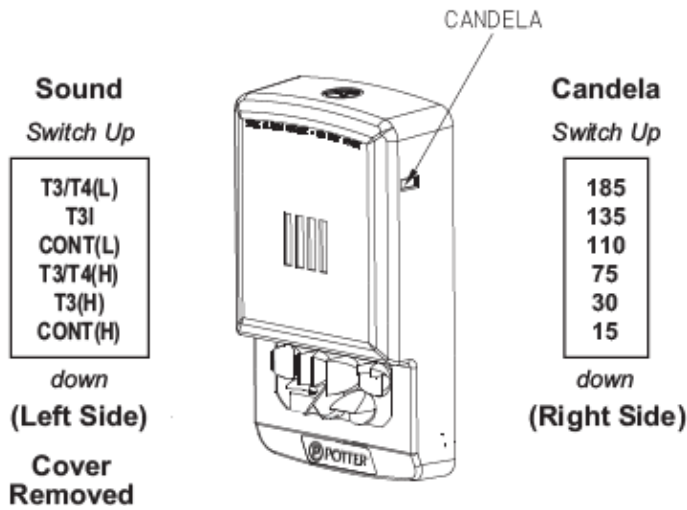
Product Listing:

- UL Listed
- FM Approved
- CSFM

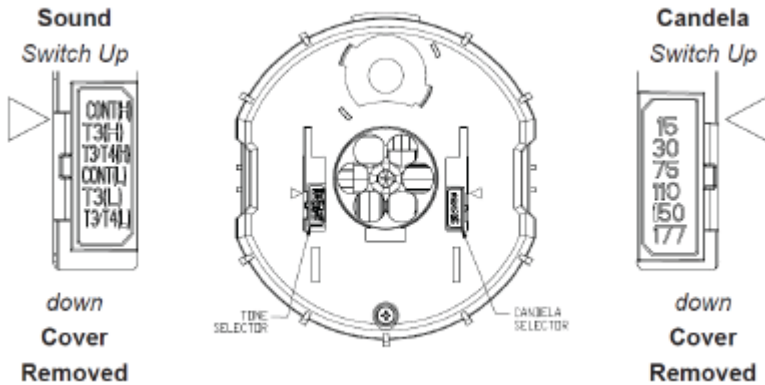
Technical Specifications

Mounting Options (Indoor Only)	Mounting plate included with all models. Wall-Mount Applications: • PE-HS and PE-ST are suitable for wall-mount applications only. • Wall mounting options include single-gang, PE-SBB backboxes, or to 4" square with an adapter kit. • PE-HN can be used for both wall and ceiling-mount applications. Ceiling-Mount Applications: • PE-HSC and PE-STC are designed for ceiling-mount applications only. • Ceiling mounting options include PE-SPKBB-C backboxes or to 4" square, 1 1/2" or 2 1/8" and Octagonal, 1 1/2" or 2 1/8" deep.
Wire Gauge	# 12 through # 18 AWG
Operating Temp	32°F to 122°F (0°C to 50°C) maximum humidity 93%
Dimensions	Wall: 4.79"H x 2.76"W x 1.18"D Trimplate: 5.25"H x 4.58"W x 0.32"D Ceiling: 6.27" Diameter x 1.69"D
Operating Voltage	12 VDC/VFWR: 8 - 17.5 VDC/VFWR 24 VDC/VFWR: 16 - 33 VDC/VFWR (12 VDC PE-HN/PE-HNC only)
Strobe Output Rating	UL 1971, UL 1638, ULC S526. Selectable candela outputs for wall models (15, 30, 75, 110, 135, 185) and ceiling models (15, 30, 75, 110, 150, 177).
Synchronization Models	Strobes can be synchronized with Potter fire alarm control panels and power supplies using Wheelock® sync protocol.

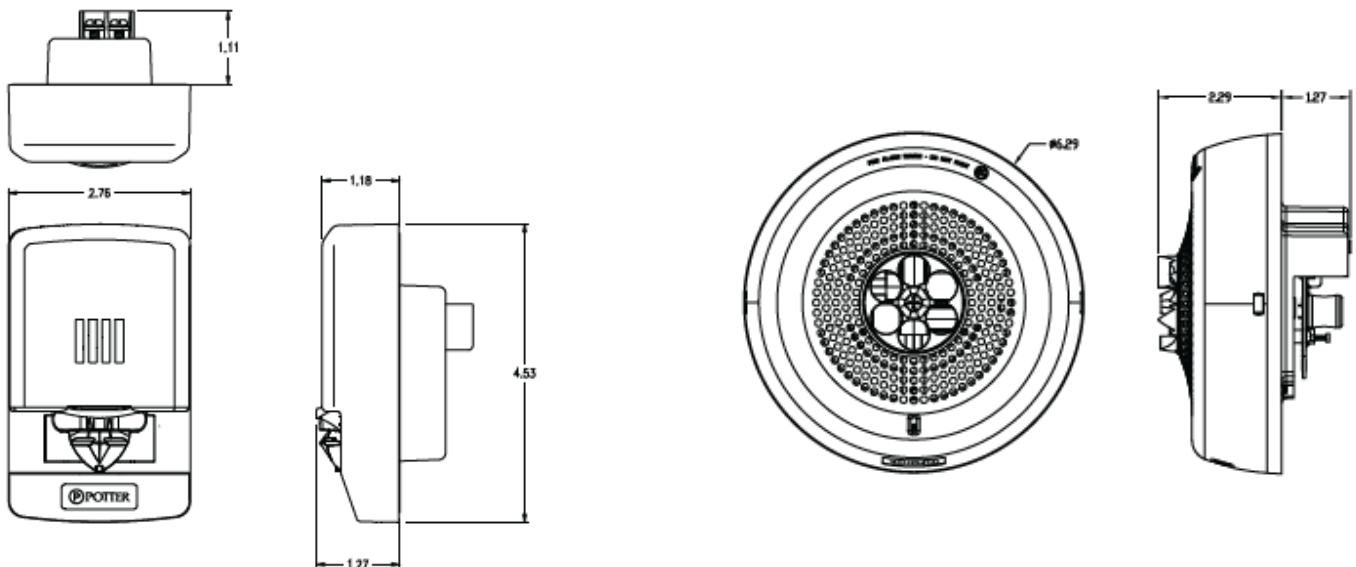
PE-HS and PE-ST Switch Locations



PE-HSC and PE-STC Switch Locations



Dimensions



Regulated Voltage Range VDC

Model Number	Regulated Voltage Range VDC	High dB	Low dB
PE-HN	8.0 - 17.5	0.025	0.020
PE-HN	16.0 - 33.0	0.028	0.021

PE-STR & PE-HS Strobe Current Ratings

24 VDC (16 - 33 Volts)								
Model Number	15 cd	30 cd	75 cd	110 cd	135 cd	150 cd	177 cd	185 cd
PE-ST	0.017	0.022	0.053	0.079	0.106			0.161
PE-STC	0.017	0.023	0.053	0.079		0.110	0.161	
At Anechoic High Continuous								
PE-HS	0.035	0.042	0.069	0.096	0.124			0.177
PE-HSC	0.035	0.042	0.069	0.096		0.124	0.177	
At Anechoic Low Continuous								
PE-HS	0.025	0.034	0.061	0.096	0.117			0.168
PE-HSC	0.025	0.034	0.061	0.094		0.117	0.168	

PE-HN & PE-HS Horn Ratings

PE-HN & PE-HS dBA Sound Output			
Description	Reverberant dBA Per UL 464		
	Volume	PE-HN @ 12V	PE-HN, PE-HS @ 24V
Continuous Horn	High	80	80
	Low	78	78

Notes:

When the application requires T4; field devices must be set to T3/T4 Horn setting and in the Potter Programming Software the corresponding circuit be set to Wheelock T4

Specification & Ordering Information

Model Number	Part Number	Mounting	Strobe Candela	Lens	Red	White	Lettering
Horn Strobes							
PE-HSR	4871006	Wall	15, 30, 75, 110, 135, 185	Clear	X		Fire
PE-HSW	4871007	Wall	15, 30, 75, 110, 135, 185	Clear		X	Fire
PE-HSRC	4871008	Ceiling	15, 30, 75, 110, 150, 177	Clear	X		Fire
PE-HSWC	4871009	Ceiling	15, 30, 75, 110, 150, 177	Clear		X	Fire
PE-HSRC-N	4871112	Ceiling	15, 30, 75, 110, 150, 177	Clear	X		No Lettering
PE-HSWC-N	4871113	Ceiling	15, 30, 75, 110, 150, 177	Clear		X	No Lettering
PE-HSW-NA	4871028	Wall	15, 30, 75, 110, 135, 185	Amber		X	No Lettering
PE-HSR-NA	4871114	Wall	15, 30, 75, 110, 135, 185	Amber	X		No Lettering
PE-HSRC-NA	4871118	Ceiling	15, 30, 75, 110, 150, 177	Amber	X		No Lettering
PE-HSWC-NA	4871032	Ceiling	15, 30, 75, 110, 150, 177	Amber		X	No Lettering
Strobes							
PE-STR	4871002	Wall	15, 30, 75, 110, 135, 185	Clear	X		Fire
PE-STW	4871003	Wall	15, 30, 75, 110, 135, 185	Clear		X	Fire
PE-STRC	4871004	Ceiling	15, 30, 75, 110, 150, 177	Clear	X		Fire
PE-STWC	4871005	Ceiling	15, 30, 75, 110, 150, 177	Clear		X	Fire
PE-STRC-N	4871141	Ceiling	15, 30, 75, 110, 150, 177	Clear	X		No Lettering
PE-STRC-N	4871142	Ceiling	15, 30, 75, 110, 150, 177	Clear		X	No Lettering
PE-STR-NA	4871103	Wall	15, 30, 75, 110, 135, 185	Amber	X		No Lettering
PE-STW-NA	4871104	Wall	15, 30, 75, 110, 135, 185	Amber		X	No Lettering
PE-STWC-NA	4871106	Ceiling	15, 30, 75, 110, 150, 177	Amber		X	No Lettering
Horns							
PE-HNR	4871000	Wall			X		No Lettering
PE-HNW	4871001	Wall				X	No Lettering

Accessories					
Model Number	Part Number	Description	Mounting	Red	White
PE-SBB-R	4871022	PE Series Backbox	Wall	X	
PE-SBB-W	4871023	PE Series Backbox	Wall		X
PE-SPKBB-CR	4871026	PE Series Backbox	Ceiling	X	
PE-SPKBB-CW	4871027	PE Series Backbox	Ceiling		X

Architect & Engineering Specifications

The notification appliances shall be Potter PE-HS audible visual strobe appliances, PE-ST visual strobe appliances and PE-HN audible appliances for wall and ceiling-mount applications with a low-profile design or approved equals. The PE-HS and PE-ST strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service and UL 1638 (Visible Signaling Devices). The PE-HS and PE-HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All models shall meet the requirements of FCC Part 15 and ICES-003. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 16 to 33 VDC/VFWR.

The PE-HS audible strobe and PE-ST strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Light Emitting Diode (LED) as the light source with a rugged Lexan® lens. The appliances shall be of low current design. The LED strobe flash duration shall be 20 ms. Where Multi-Candela appliances are specified, the strobe intensity shall have 6 field selectable settings at 15, 30, 75, 110, 135 and 185 candela for wall mount applications and 15, 30, 75, 110, 150 and 177 for ceiling applications. The selector switch for selecting the candela shall be tamper resistant. Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a choice of three (3) horn patterns (high & low output): Continuous, T3, and T3/T4 for fire (T3) and CO (T4) signaling.

The PE-HS audible strobe, PE-ST strobe, and PE-HN audible shall include a hinged mounting plate. Mounting options shall include PE-SBB backboxes, single-gang backbox and to 4" square with adapter kit for wall-mount models and PE-SPKBB backboxes, 4" square, 1 1/2" or 2 1/8" deep and 4" Octagonal, 1 1/2" or 2 1/8" deep for ceiling models. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). All notification appliances shall be backwards compatible.

The PE-HS, PE-HN, and PE-ST wall models shall have a low profile measuring 4.79"H x 2.76"W x 1.18"D. The PE-HSC and PE-STC ceiling models shall have a low profile measuring 6.27" Diameter with 1.69"D.

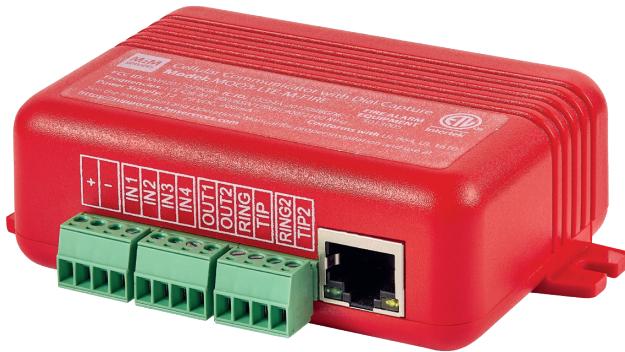
When synchronization is required, the appliance shall be compatible with Potter fire alarm control panels and power supplies with built-in Wheelock® sync protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flash-rate and still maintain (1) flash per second over its Regulated Voltage Range.

M2M
SERVICES

SIMPLICITY.
APPLIED.

UNIVERSAL SOLE/DUAL PATH COMMERCIAL FIRE COMMUNICATOR

MQ03-LTE-M-FIRE-AV



FUTURE-PROOF TECHNOLOGY

LTE-M on both AT&T and Verizon networks



QUICK AND EASY INSTALLATION

supporting Contact ID, SIA and Pulse 4+2



RELIABLE DATA REPORTING

to any Monitoring Station from coast to coast



IMPROVED PROFITABILITY

Low flat monthly fees for cellular service

5G READY

AT&T
AND
verizon
IN ONE RADIO

CONFORMS TO
UL864



Intertek



www.m2mservices.com

MAIN FEATURES

REPORTING FORMATS – Dial Capture Interface supporting Contact ID, SIA and Pulse 4+2

EXCEPTIONAL REDUNDANCY – Dual-path LAN/cellular and dual SIM AT&T and Verizon

SUPERVISED CONNECTIVITY – 5 minute polling

FULL EVENT REPORTING – Reliable reporting to any Central Station

UNIVERSAL PANEL COMPATIBILITY – Works on 12 to 29 VDC, supporting wide range of fire panels

PROGRAMMABLE INPUTS – Used for relay output connection of the FACP



DEVICE SPECIFICATIONS

- Multi-band CAT-M1 LTE
700/850/1700/1900/2100 MHz
- 2 Telco interfaces (Dial Capture): CID, SIA, Pulse 4+2
- 4 supervised inputs & 2 outputs (programmable)
- Supply voltage: +12 to +29 VDC
- Consumption: Standby 50mA, Peak 200mA
- Dimensions: 2.48" x 3.54" x 1.26"
- Weight: 2.56oz without antenna

CONTACT US



info@m2mservices.com



800-403-7029

RCONTROL ADMIN MOBILE APP





NP/NPX SERIES

SEALED RECHARGEABLE LEAD-ACID BATTERIES

NP/NPX INDUSTRIAL BATTERIES

Yuasa brand NP and NPX batteries give excellent performance in either float or cyclic applications. These batteries are designed for light duty cyclic applications, fire and security systems, Emergency lighting, solar and wind support systems, UPS systems and toys!

TYPE	FR TYPE	VOLTS	NORMAL CAPACITY	LENGTH		WIDTH		OVERALL HEIGHT Incl. TERMINALS		WEIGHT		LAYOUT	TERMI- NALS
			10 hr rate (Ah)	mm.	(in.)	mm.	(in.)	mm.	(in.)	kgs.	(lbs.)		
NP SERIES			20 hr Rate (Ah)										
NP1.2-6	—	6	1.2	97	3.82	25	0.98	54.5	2.15	0.3	0.66	1	A
NP3-6	—		3	134	5.28	34	1.33	64	2.52	0.65	1.43	1	A
NP4-6	—		4	70	2.76	47	1.85	105.5	4.15	0.85	1.87	5	A
NP4.5-6	—		4.5	70	2.76	47	1.85	105.5	4.15	0.08	0.18	5	A
NP7-6	—		7	151	5.95	34	1.33	97.5	3.84	1.35	2.98	1	A
NP10-6	—		10	151	5.95	50	1.97	97.5	3.84	2.0	4.41	1	A
NP1.2-12	—	12	1.2	97	3.82	48	1.89	54.5	2.15	0.57	1.25	3	A
—	NP2.3-12FR		2.3	178	7.01	34	1.34	64	2.52	0.94	2.07	1	A
NP4-12	—		4	90	3.54	70	2.76	106	4.17	1.7	3.74	1	A/D
NP5-12	—		5	90	3.54	70	2.76	105	4.13	1.85	4.07	1	B/D
NP7-12	NP7-12FR		7	151	5.94	65	2.56	97.5	3.84	2.2	4.85	4	A/D
NP7.5-12	—		7.5	151	5.94	65	2.56	97.5	3.84	2.65	5.84	4	A/D
NP12-12	NP12-12FR		12	151	5.94	98	3.86	97.5	3.84	4.0	8.82	4	D
NP18-12B	NP18-12BFR		17.2	181	7.13	76.2	2.99	167	6.57	6.2	13.64	2	E
NP24-12	NP24-12FR		24	166	6.54	175	6.89	125	4.92	8.65	19.05	2	C
NP24-12B	NP24-12BFR		24	166	6.54	175	6.89	125	4.92	8.65	19.05	2	E
NP38-12B	NP38-12BFR		38	197	7.74	165	6.5	175	6.89	13.8	30.4	2	F
—	NP65-12FR		65	350	13.78	166	6.54	174	6.85	22.8	50.2	2	G
NPX SERIES			W/Cell to 1.67 end voltage (15 Min Rate)										
NPX-50	—	6	50W/Cell	151	5.95	50	1.97	97.5	3.84	2.0	4.41	1	A
NPX-25	NPX-25FR	12	23W/Cell	90	3.54	70	2.75	106	4.17	2.0	4.41	1	D
NPX-35	NPX-L35FR		35W/Cell	151	5.94	65	2.56	97.5	3.84	2.65	6.17	4	D
—	NPX-80BFR		80W/Cell	181	7.13	76.2	2.99	167	6.57	6.6	14.5	2	E
—	NPX-80RFR		80W/Cell	181	7.13	76.2	2.99	167	6.57	6.6	14.5	2	M5
—	NPX-100RFR		95W/Cell	166	6.54	125	4.92	175	6.89	9.3	20.8	2	M5
—	NPX-150RFR		150W/Cell	197	7.76	165	6.5	175	6.89	15.5	34.1	2	M6

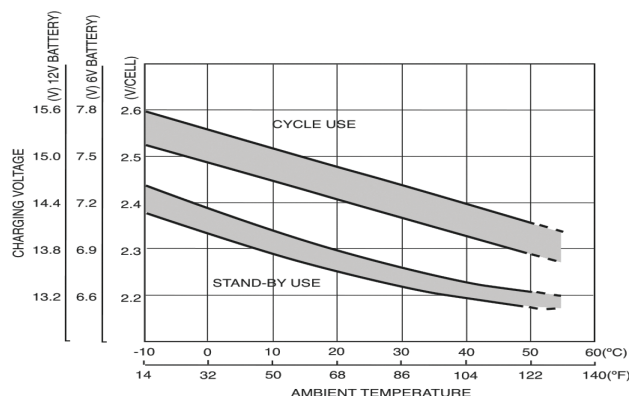


The Yuasa brand of small valve-regulated batteries have, since their introduction, set the standard for quality and excellence in the field of rechargeable sealed lead-acid battery technology. This standard has been used as a benchmark in applications such as security, uninterruptible power supplies (UPS), emergency lights and medical equipment. Anywhere the need for reliable and dependable back-up power is required, Yuasa sets the pace.

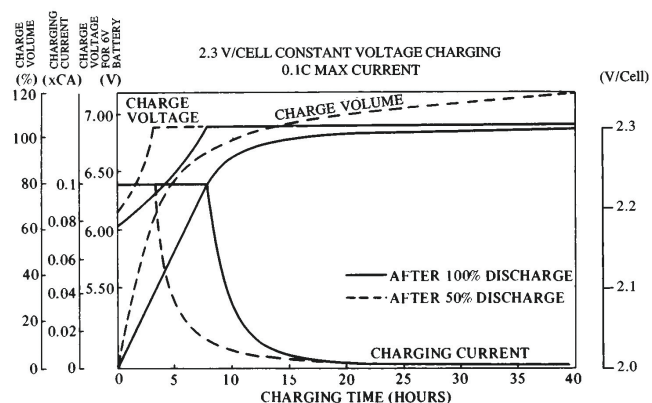
The Yuasa brand NP product line covers the entire spectrum of battery sizes, ranging from 1.2 Ah to 65Ah in 6 and 12 volt varieties. Yuasa also offers a full line of flame retardant batteries (UL94-V0, LOI 30). Designated "FR", these batteries comply with UL1778 flame retardant specifications for UPS.

Yuasa also offers the NPX Series Batteries, designed for high rate discharge applications. These batteries are used primarily where high wattage is required for a short duration. With 50% more wattage available and a 30% reduction in size over conventional batteries, the NPX Series offers a superior value, especially in UPS applications.

RELATIONSHIP BETWEEN CHARGING VOLTAGE AND TEMPERATURE



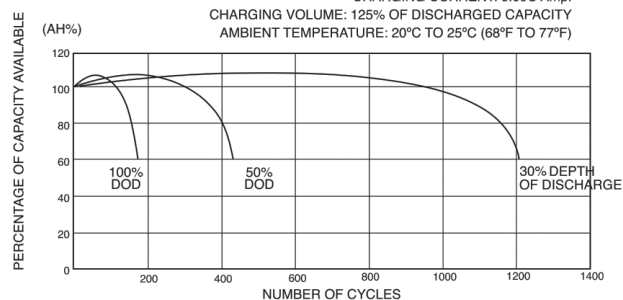
CHARGING CHARACTERISTICS



TYPICAL DISCHARGE CHARACTERISTICS NP RANGE

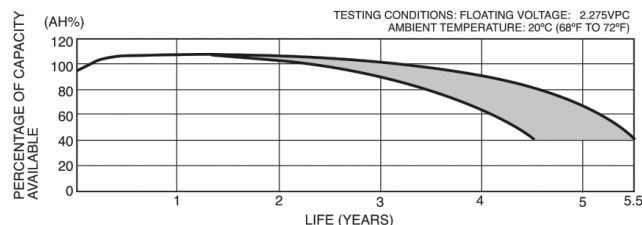
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE

TESTING CONDITIONS: DISCHARGE CURRENT: 0.17C Amp. (F.V 1.7V/CELL)
CHARGING CURRENT: 0.09C Amp.
CHARGING VOLUME: 125% OF DISCHARGED CAPACITY
AMBIENT TEMPERATURE: 20°C TO 25°C (68°F TO 77°F)

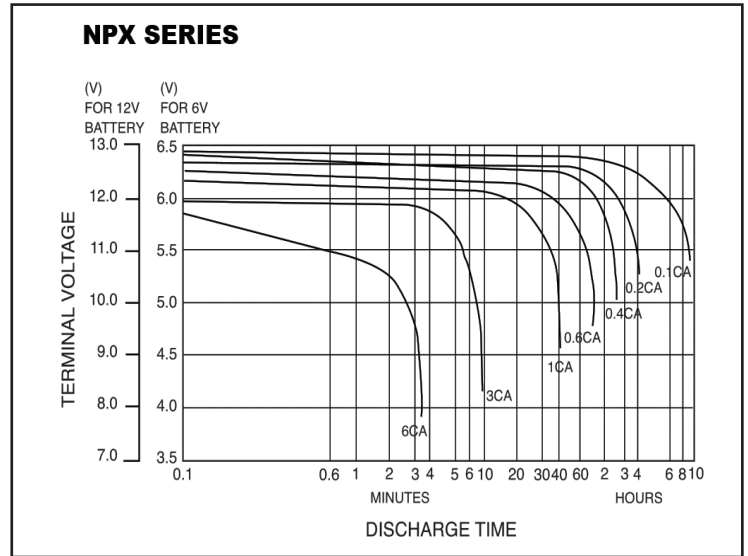
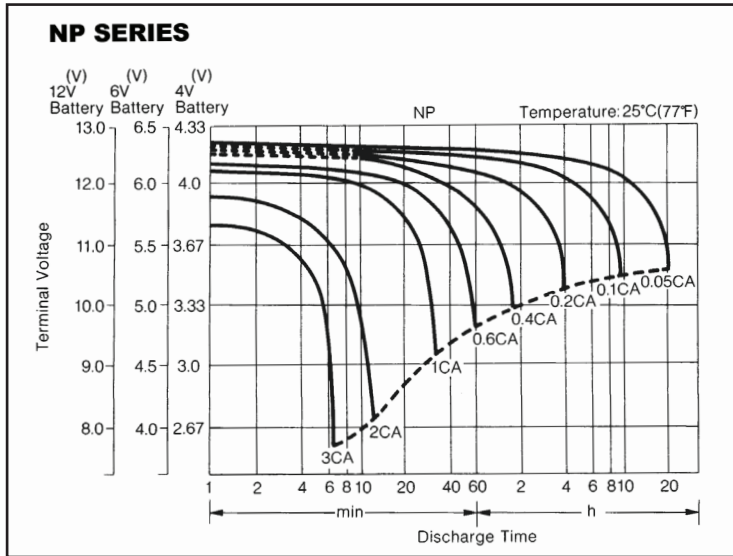


FLOAT SERVICE LIFE NP RANGE

TESTING CONDITIONS: FLOATING VOLTAGE: 2.275VPC
AMBIENT TEMPERATURE: 20°C (68°F TO 72°F)



DISCHARGE CHARACTERISTICS CURVES AT 25°C (77°F)



Important notes to prolong battery life:

Charging

- Standby use: Apply constant voltage charging at 2.275 volts per cell (or 2.25–2.30VPC). Cyclic use: Apply constant voltage charging at 2.40–2.50VPC.
- Initial charging current should be set at less than 0.25CA.
- Storage- 6 months- Top charge: Apply constant voltage at 2.40 volts per cell, initial charging current should be set at less than 0.1CA for 15 to 20 hours.

Discharge

- Stop operation when voltage has reached the minimum permissible voltage. Recharge immediately.
- Do not operate at 6CA or more current continuously.

Storage

- Always store battery in a fully charged condition.
- If battery is to be stored for a long period, apply a recovery top-charge every 6 months.

Temperature

- Keep within ambient temperatures of –15°C to +50°C for both charging and discharging. Store batteries in a dry and cool location.

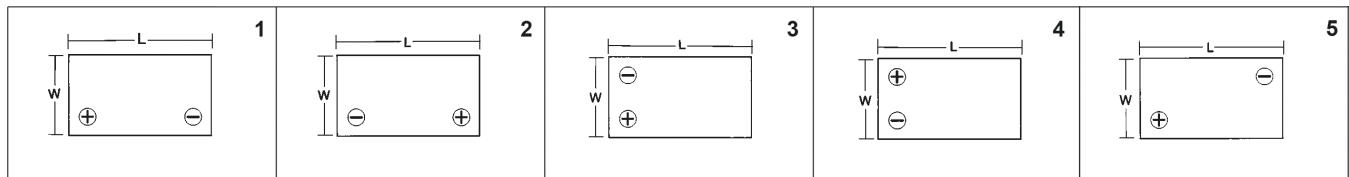
Incorporating battery into equipment

- Encase battery in a well ventilated compartment.
- Avoid installing battery near heated units such as a transformer.
- House the battery in the lowest section of the equipment enclosure or rack to prevent unnecessary battery temperature rise.

Others

- Avoid terminal short circuit. DO NOT expose to open flame.
- Avoid setting batteries in environments which can cause direct contact to gasoline, paint thinner, organic solvents, synthetic resins, oil, etc...

LAYOUT



TERMINALS

Faston tab: 187 A

INCH = MM	
.250	6.35
.185	4.70
.124	3.15
.098	2.50
.059	1.50
.031	0.80
.020	0.50
.004	0.10

Faston tab: 187 B

INCH = MM	
0.472	12.00
0.250	6.35
0.236	6.00
0.185	4.70
0.079	2.00
0.020	0.50

Faston tab: 250 C

INCH = MM	
.250	6.35
.124	3.15
.098	2.50
.059	1.50
.031	0.80
.020	0.50

Faston tab: 250 D

INCH = MM	
.310	7.90
.250	6.35
.16	4.0
.031	0.8
.020	0.5

Bolt fastened terminal E

INCH = MM	
.472	12.00
.453	11.50
.433	11.00
.216	5.50
.079	2.00

Bolt fastened terminal F

INCH = MM	
.59	15.0
.216	5.5
.295	7.5
.197	5.0

Bolt fastened terminal G

INCH = MM	
0.24	6
0.27	7
0.37	9.5
0.71	18
0.768	19.5

JST No. VHR-2N I

WIRE AWG #20 UL 1007

JST No. VHR-2N (TERMINAL)

JST SVH-21T-P1.1

Internal thread terminal

Terminal	x	y
J:	17mm	M5
K:	20mm	M6
L:	20mm	M8

ABOUT GS YUASA ENERGY SOLUTIONS, INC.

GS Yuasa Energy Solutions, Inc. is an American subsidiary of GS Yuasa Corporation, the world's second largest battery company and a 100+ year old Japanese corporation. GS Yuasa Energy Solutions (GYES) was formed in 2019 to address the growing energy storage and reserve power markets. GYES brings together and leverages GS Yuasa Group's advanced technologies with proven American market successes in lithium, telecom, UPS, alarm & security, and energy storage into a single business unit.



-GENESIS-

Plenum Rated Power Limited Fire Alarm Cable

Part Number: 4511

16 AWG 2 Solid Conductors

Ratings	FPLP, CL3P, FT6
Approvals	UL Listed
<u>Construction</u>	
Conductor	16 AWG Solid Bare Copper
Conductor Count	2
Insulation	Plenum PVC (0.009" nom.)
Insulation Colors	Black, Red
Lay Length	4.25" nom.
Shielding	N/A
Rip Cord	Yes
Jacket	Plenum PVC (0.015 " nom.)
Overall Diameter	0.177" nom.
Print Legend	GENESIS P/N 4511 2C 16AWG E175105 (UL) FPLP OR CL3P FT6 75C (RoHS) W/O# XXXXXXXX-XXXXXXXX XXXXFT A B C D E F 1 2 3 4 5 6 7 8 9
<u>Properties</u>	
Operating Voltage	300 Volts max.
DC Resistance	4.1 Ohms/1000' at 20°C
Capacitance	21.8 pF/ft. nom.
Impedance	66 Ohms nom.
Temperature	-20°C to 75°C
Flame Rating	NFPA 262 (Plenum); CSA C22.2 No. 2556 (FT6)
RoHS Compliant	Yes
Country of Origin	USA

-GENESIS-

Plenum Rated Power Limited Fire Alarm Cable

Part Number: 4506

18 AWG 2 Solid Conductors

Ratings FPLP, CL3P, FT6

Approvals UL Listed

Construction

Conductor 18 AWG Solid Bare Copper

Conductor Count 2

Insulation Plenum PVC (0.007" nom.)

Insulation Colors Black, Red

Lay Length 2.25" nom.

Shielding N/A

Rip Cord Yes

Jacket Plenum PVC (0.015 " nom.)

Overall Diameter 0.136" nom.

Print Legend GENESIS P/N 4506 2C 18AWG E175105 (UL) FPLP OR CL3P FT6 75C (RoHS) W/O#
XXXXXXXX-XXXXXXXX XXXXFT A B C D E F 1 2 3 4 5 6 7 8 9

Properties

Operating Voltage 300 Volts max.

DC Resistance 6.52 Ohms/1000' at 20°C

Capacitance 32.1 pF/ft. nom.

Impedance 58 Ohms nom.

Temperature -20°C to 75°C

Flame Rating NFPA 262 (Plenum); CSA C22.2 No. 2556 (FT6)

RoHS Compliant Yes

Country of Origin USA