

# Intelligent Bases

## Standard, Isolator, Sounder, and Multifunctional Bases

### General

To meet local code and application requirements, PROTECTWELL® offers standard 4" bases, as well as, specialty base designs including isolator, sounder and multifunction options for the addressable detectors of Protectwell brand.

The standard 4" bases offer a plug-in detector base intended for use in intelligent systems, with screw terminals identified with a (+ and -). The 4" base offers a compact design.

The specialty bases support application driven requirements. These bases employ a separate mounting plate that installs on various junction box sizes to eliminate unsightly surface-mount boxes. The mounting plate enables pre-wiring of all connections to speed and simplify installation.

Isolator bases allow the Signaling Line Circuit (SLC) loop to operate under fault conditions created from a short circuit preventing an entire communication loop from being disabled. The base isolates the section of the loop containing the short circuit from the remainder of the circuit and automatically restores when the fault is corrected.

Sounder are designed for new and existing dwelling unit applications. They offer maximum flexibility in installation, configuration, and operation to meet or exceed UL requirements.

Multi-Function base derives power from the SLC loop circuit and directly converts the detector alarm signal into sound signal. It is a new design that combines short-circuit isolation circuits. Combining the advantages of short-circuit isolation and sounder alarms, so that the common smoke and heat detectors have both short-circuit protection and audible alarm output. Therefore, the function of the smoke and heat detectors can be upgraded without affecting its normal use.

The B200SR sounder is fully compatible with existing B501BH and P301BH Series sounder base installations. The device enables users to select one of two B501-supported tones (ANSI Temporal 3 or Continuous) through a jumper.

The B200S sounder adopts the same address as the detector, but use a unique device type on the loop. The Fire Alarm Control Panel (FACP) can use that address to command an individual sounder — or a group of sounders — to activate. The command set from the FACP can be tailored to multiple event-driven tone outputs allowing selection of volume (75 or 85 dBA), tone (ANSI Temporal 3, ANSI Temporal 4, or March Time) and group. In addition, some FACP will enable custom tone patterns. The B200S series sounder bases recognize the System Sensor synchronization protocol. This enables them to be used as a component of the general evacuation signal — along with other System Sensor AV appliances — when connected to a power supply or FACP output capable of generating the System Sensor synchronization pulses.



B501



P601



P330BH



B224BI

### Specifications

#### Diameter:

- B501,P901E,P601,V801: 4" (10.16 cm) diameter.
- B900BH-3,P330BH,B500BH-3: 4.04" (10.3 cm) diameter.
- B900BH: 6" (15.2 cm) diameter.
- P224BI: 6.1" (15.5 cm) diameter.
- B200S,B900BI,B200SR: 6.875" (17.46 cm) diameter.

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## Temperature range:

- P224BI, B224RB, B200S, B200SR, B200SCOA: 32°F to 120°F (0°C to 49°C).
- B210LP, B501: -4°F to 150°F (-20°C to 66°C).
- B900BH-3: -4°F to 120°F (-20°C to 49°C).
- P330BH, P901E, B900BH: -50°F to 131°F (-10°C to 55°C).
- B501: -50°F to 122°F (-10°C to 50°C).

**Relative humidity:** 10% – 93% non-condensing.

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

## ELECTRICAL Ratings

### FOR B501 SERIES BASES:

Operating voltage: 15 to 32 VDC

### FOR P901E SERIES BASES:

Operating voltage: 15 to 32 VDC

### FOR P601 SERIES BASES:

Operating voltage: 15 to 32 VDC

### FOR V801 SERIES BASES:

Operating voltage: 15 to 32 VDC

### FOR B200 SERIES BASES:

**External supply voltage:** 16 to 33 VDC (FWR)

**Standby current:** 500 µA maximum.

### Alarm current:

- B200S
  - 35 mA maximum at high-volume setting
  - 15 mA maximum at low-volume setting
- B200S-LF High-volume setting:
  - 70 mA maximum @ 33.0 VDC
  - 90 mA maximum @ 24.0 VDC
  - 140 mA maximum @ 16.0 VDC
- B200S-LF Low-volume setting:
  - 15 mA maximum @ 33.0 VDC
  - 20 mA maximum @ 24.0 VDC
  - 25 mA maximum @ 16.0 VDC
- B200SR
  - 35 mA maximum

- B200SR-LF
  - 65 mA maximum @ 33.0 VDC
  - 90 mA maximum @ 24.0 VDC
  - 125 mA maximum @ 16.0 VDC
- B200SCOA
  - 40mA Max (DC)
  - 70mA Max (FWR)

**SLC operating voltage:** 15 to 32 VDC

**SLC standby current:** See applicable sensor specification.

### Sound output:

- B200S, high-volume\*: Greater than 85 dBA minimum.
- B200S, low-volume\*: Greater than 75 dBA minimum.
- B200SR\*: Greater than 85 dBA minimum.
- B200SCOA, high-volume\*\*: Greater than 87 dBA minimum.
- B200SCOA, low-volume\*\*: Greater than 85 dBA minimum.

### FOR B224BI, B224RB:

**Operating voltage:** 15 to 32 VDC (powered by SLC)

**Standby ratings:** <450 µA maximum @ 24 VDC

**Set time ((B224RB only):** short delay 60-100 milliseconds; long delay 6-10 seconds

**Reset time ((B224RB only):** 20 milliseconds maximum

**Relay characteristics ((B224RB only):** two-coil latching relay; one Form-C contact; ratings (UL/CSA): 0.9 A @ 125 VAC, 0.9 A @ 110 VDC, and 3.0 A @ 30 VDC.

## Product Line Information

### INTELLIGENT BASES

**B501:** White, 4" standard European flangeless mounting base for 300P series.

**P901E:** Intelligent Detectors Base for 330DP series.

**P601E:** Intelligent Detectors Base for 600P series.

**V801:** Intelligent Detectors Base for 18DP series.

**B900BH-3:** Loop-powered Sounder Base for 330DP Series Intelligent Detectors.

**P330BH:** Multi-function Detector Base for 330DP/600PM/600TM series, provide short-circuit protection and audible alarm output.

**B224BI:** White, isolator detector base for 300P series.

**B900BI:** White, isolator detector base for 330DP series.

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## Standard, Isolator, Sounder, and Multifunctional Bases

**B224RB-WH:** White, relay base.

**B224RB-IV:** Ivory, relay base.

**B224BI-WH:** White, isolator detector base.

**B224BI-IV:** Ivory isolator detector base.

**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.

**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.

**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.

**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.

**B200SR-WH:** White, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications.

**B200SR-IV:** Ivory, Intelligent sounder base capable of producing sound output with ANSI Temporal 3 or continuous tone. Intended for retrofit applications.

**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.

**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.

### ***MOUNTING KITS AND ACCESSORIES***

**PW-LDE-1:** Remote LED Indicator. For use with B501/P901E.

**RA100Z:** Remote LED annunciator. 3–32 VDC. Mounts to a U.S. single-gang electrical box. For use with B501.

**SMB500:** Surface mounting kit.

**CP900:** Address coder.