SS-APT

Acclimate™ Multi-Sensor Smoke Detector
Low-Profile, Intelligent, Addressable

SS-APT in SS-B6 base

Description

Gamewell's **SS-APT Acclimate™** detector is an intelligent, addressable, multi-sensing, low-profile detector designed for use with any 600 series Smart*Scan*™ SLC panel.

The Acclimate™ detector uses a combination of photoelectric and thermal sensing technologies that are designed to increase immunity to false alarms. Unlike traditional intelligent detectors, the Acclimate™ detector has a microprocessor in the detector head that processes alarm data. As a result, the Acclimate™ detector adjusts its sensitivity automatically, without operator intervention or control panel programming.

Areas where the Acclimate™ detector is especially useful include office complexes, schools, college campuses, manufacturing and industrial facilities, and anywhere else the use of a particular area may change. The Acclimate™ detector automatically adjusts its sensitivity to acclimate itself to the environment.

Installation

The SS-APT plug-in detector uses a separate base to simplify installation, service, and maintenance. A special tool allows maintenance personnel to plug-in and remove detectors without using a ladder. Mount base on an electrical backbox at least 1.5" (3.81 cm) deep. Suitable mounting back boxes include:

- 4.0" (10.16 cm) square box.
- 3.5" (8.89 cm) or 4.0" (10.16 cm) octagonal box.
- Single-gang box *(**except** for relay or isolator base)*.
- ***With B501BH or B501BHT base,*** use a 4.0" (10.16 cm) square box.
- ***With B224RB or B224BI base,*** use a 3.5" (8.89 cm) octagonal box, or a 4.0" (10.16 cm) octagonal or square box.

NOTES: 1) *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 Style 4 (Class "B") wiring.* ***2)*** *When using* ***relay or sounder bases****, consult SS-LI data sheet for device limitations between isolator modules and isolator bases.*

APPLICATION NOTE: The SS-APT detector has the unique ability to adjust sensitivity according to the environment, based on heat and smoke levels. Avoid installing these detectors in locations that are susceptible to rapid and high temperature changes. An example of an incorrect application would be near or in line with the output of a self-contained heater.

DETECTOR SPACING: Gamewell recommends spacing detectors in compliance with NFPA 72. In low airflow applications with smooth ceilings, space detectors 30 feet (9.144 m). For specific information regarding detector spacing, placement, and special applications, refer to NFPA 72. *System Smoke Detector Application Guide,* document A05-1003, is available at **systemsensor.com**.

Features

- Automatically adjusts sensitivity levels without the need for operator intervention or programming. Sensitivity increases with heat.
- Microprocessor-based, combination photo and thermal technology.
- Addressable-analog communication.
- Sleek, low-profile design.
- Two-wire SLC connection.
- Sleek, low-profile design.
- Rotary, decimal addressing (1 – 99).
- Addresses can be viewed and changed without the need for electronic programmers.
- Dual bi-color LED design provides 360° viewing angle.
- Built-in tamper-resistant feature.
- Sealed against back pressure.
- Constructed of off-white Bayblend®, designed to commercial standards, and offers an attractive appearance.
- 94-5V plastic flammability rating.
- SEMS screws for wiring of the separate base.
- Several base options, including relay, isolator, and sounder.
- Remote test feature from the panel.
- Built-in functional test switch activated by external magnet.
- Capable of heat-only alarm mode, enabled by a special command from the panel. Smoke alarms are ignored.
- Low-temperature signal at 45°F +/– 10°F (7.22°C +/– 5.54°C).

Listings

Listings and approvals below apply to the SS-APT Acclimate™ Multi-Sensor Low-Profile Intelligent Addressable Smoke detectors. In some cases, certain detectors may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed: file S1195.
- CSFM approved: file 7272-1288:165.
- MEA approved: file 275-02-E Vol. IV.

Acclimate™ is a trademark of System Sensor.
Bayblend® is a registered trademark of Bayer Corporation.

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Product Line Information

SS-APT: Low-profile intelligent multi-smoke detector. Must be mounted to one of the bases listed below.

Bases:

SS-B6: Standard U.S. low-profile base, UL Listing.

B501BP: Standard European flangeless base, pkg. of 10.

B501BH: Sounder base, includes B501 base above.

B501BHT: Same as B501BH, but includes temporal sounder.

B224RB: Intelligent relay base.

B224BI: Intelligent isolator base. Isolates SLC from loop shorts.

Accessories:

RA400Z: Remote LED annunciator. 3 – 32 VDC. Fits U.S. single-gang electrical box. *Supported by SS-B6 and B501 bases only.*

SMK400: Surface mounting kit provides for entry of surface wiring conduit. *For use with B501 base **only**.*

RMK400: Recessed mounting kit. *For use with B501 base **only**.*

SMB600: Surface mounting kit for use with SS-B6.

BCK-200B: Black detector covers, box of 10.

M02-04-01: Test magnet.

M02-09-00: Test magnet with telescope stick.

XR2B: Detector removal tool. Allows installation and/or removal of the SS-APT Series detector heads from base in high ceiling installations.

T55-127-000: Detector removal tool without pole.

XP-4: Extension pole for XR2B. Comes in three 5-ft. sections.

Detector Guards:

NOTE: The following guards are not UL listed with the SS-APT. Consult with local AHJ.

STI 9601: Low-profile, flush-mount smoke detector guard, wire.

STI 9602: Low-profile, surface-mount, smoke detector guard, wire.

STI 9609: High-profile, flush-mount, smoke detector guard, wire.

STI 9605: High-profile, surface-mount, smoke detector guard, wire.

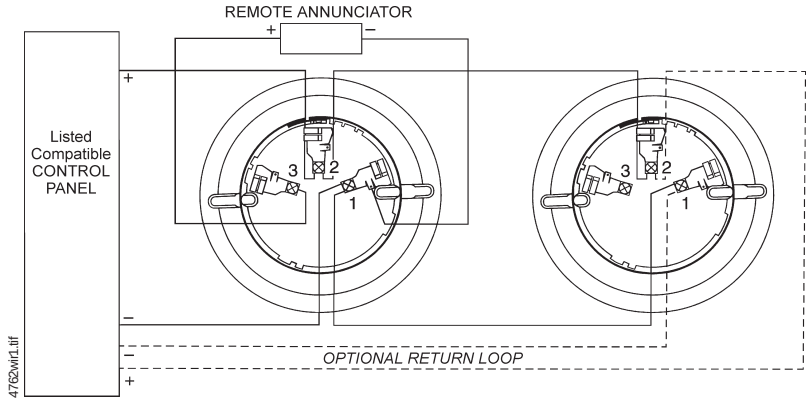
STI 9604: Flush-mount heat detector guard, wire.

STI 9610: Surface-mount heat detector guard, wire.

STI-8200-SS: Flush-mount stainless steel smoke detector guard.

STI-8230-SS: Surface-mount stainless steel smoke detector guard.

Wiring Diagrams



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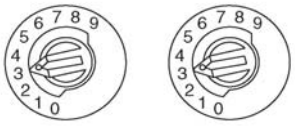

Address dial on back of detector.

Specifications

Sensitivity
Auto-adjusting levels
1 to 2, 2 to 3, and 3 to 4%/ft.
Fixed-sensitivity levels: 0.5, 1, 2, 3, and 4%/ft.
Size
2.1" (5.3 cm) high x 4.1" (10.4 cm) diameter installed in B501 base, 6.1" (15.5 cm) diameter installed in SS-B6 base.
Shipping weight
5.2 oz. (147 g).
Operating temperature
0°C to 38°C (32°F to 100°F).
UL-Listed velocity range
0 – 4000 ft./min. (1219.2 m/min.), suitable for installation in ducts.
Relative humidity
10% – 93% noncondensing.
Thermal sensing rating
Fixed-temperature setpoint 135°F (57°C).

ELECTRICAL SPECIFICATIONS:
Voltage range
15 – 32 volts DC peak.
Standby current (max. avg.)
250 µA @ 24 VDC (without communication); 360 µA @ 24 VDC (one communication every 5 seconds with LED enabled).
Loop resistance
40 ohms maximum; varies according to control panel used. Refer to panel installation manuals.
LED current (max.)
6.5 mA @ 24 VDC (“ON”).

BASES AVAILABLE:

SS-B6: 6.1" (15.5 cm) diameter.

B501: 4.1" (10.4 cm) diameter.

B501BH or B501BHT: Sounder base assembly. Includes B501 base.

B224RB Relay Base: *Screw terminals:* up to 14 AWG (2.0 mm²). ***Relay type:*** Form-C. ***Rating:*** 2.0 A @ 30 VDC resistive; 0.3 A @ 110 VDC inductive; 1.0 A @ 30 VDC inductive. ***Dimensions:*** 6.2" (15.748 cm) x 1.2" (3.048 cm).

B224BI Isolator Base: *Dimensions:* 6.2" (15.748 cm) x 1.2" (3.048 cm). ***Maximum:*** 25 devices between isolator bases.

Specifications and wiring information are provided for information only and are believed to be accurate. Gamewell-FCI assumes no responsibility for their use. Data and design are subject to change without notice. Installation and wiring instructions shipped with the product shall always be used for actual installation. For more information, contact Gamewell-FCI.