

# SS-T Series

## Intelligent Addressable Plug-In Thermal (Heat) Detectors



SS-T in SS-B6 base

### Description

Gamewell's SmartScan™ intelligent plug-in smoke detectors with integral communication provide features that surpass conventional detectors. 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 decade

address switches, providing exact detector locations for selective maintenance and troubleshooting. **SS-T Series thermal detectors** use an innovative thermistor sensing circuit to produce 135°F/57°C fixed-temperature (**SS-T**) and rate-of-rise thermal detection (**SS-TR**) in a low-profile package. **SS-TH** provides fixed high-temperature detection at 190°F/88°C in a low-profile package as well. These thermal detectors provide cost effective, intelligent property protection in a variety of applications. SS-T Series addressable detectors are compatible with Gamewell's 602, 610, 632, 654 and 658 addressable fire alarm control panels with a SmartScan™ SLC.

### Installation

The SS-T Series of plug-in intelligent, addressable thermal detectors use a separate base to simplify installation, service, and maintenance. Installation instructions are shipped with each detector.

Mount base (all base types) on an electrical backbox which is at least 1.5" (3.81 cm) deep. Suitable 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 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) or 4.0" (10.16 cm) octagonal box, or a 4.0" (10.16 cm) 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 the SS-LI data sheet for device limitations between isolator modules and isolator bases.

### Applications

Use thermal detectors for protection of property. For further information, go to [systemsensor.com](http://systemsensor.com) for manual I56-407-00, *Applications Manual for System Smoke Detectors*, which provides detailed information on detector spacing, placement, zoning, wiring, and special applications.

### Features

- Sleek, low-profile, stylish design.
- State-of-the-art thermistor technology for fast response.
- SS-TR rate-of-rise model: 15°F (8.3°C) per minute.
- SS-T fixed heat, Factory preset at 135°F (57°C).
- SS-TH high temperature model of 190°F (88°C).
- Addressable by devices via decade address switches.
- Rotary, decimal addressing (1 – 99)
- Two-wire SLC connection.
- Visible LEDs "blink" every time the unit is addressed.
- 360°-field viewing angle of the visual alarm indicators (two bicolor LEDs). LEDs blink green in Normal condition and turn on steady red in Alarm.
- Integral communications and built-in device-type identification.
- Remote test feature from the panel.
- Built-in functional test switch activated by external magnet.
- Low standby current.
- Built-in tamper-resistant feature.
- Designed for direct-surface or electrical-box mounting.
- Sealed against back pressure.
- Plugs into separate base for ease of installation and maintenance. Separate base allows interchange of photoelectric, ionization and thermal sensors.
- SEMS screws for wiring of the separate base.
- Constructed of off-white Bayblend®, designed to commercial standards, and offers an attractive appearance.
- 94-5V plastic flammability rating.
- Remote LED output connection to optional RA400Z remote LED annunciator.
- Optional sounder, relay, and isolator bases.
- Optional recessed (RMK400) or surface (SMK400) base mounting kits.

### Listings

Listings and approvals below apply to the SS-T Series of intelligent, addressable thermal (heat) 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 S2527.
- CSFM approved: file 3240-1288:166.
- MEA approved: file 383-02-E Vol. V.

## Product Line Information

**SS-T:** Intelligent, addressable thermal detector. Must be mounted to one of the bases listed below.

**SS-TR:** Same as SS-T with rate-of-rise feature.

**SS-TH:** Intelligent, addressable high-temperature thermal (190°F/88°C) detector.

### 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 SS-T Series thermal 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-T detectors. Consult with 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

## Specifications

### 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

4.8 oz. (137 g).

### Operating temperature range

**SS-T, SS-TR:** -20°C to 38°C (-4°F to 100°F)

**SS-TH:** -20°C to 66°C (-4°F to 150°F).

### Detector spacing

**UL approved** for 50 ft. (15.24 m) center to center. **FM approved** for 25 x 25 ft. (7.62 x 7.62 m) spacing.

### Relative humidity

10% – 93% noncondensing.

### Thermal ratings

Fixed-temperature setpoint 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.)

200 µA @ 24 VDC (without communication); 300 µA @ 24 VDC (one communication every 5 seconds with LED enabled).

#### 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.

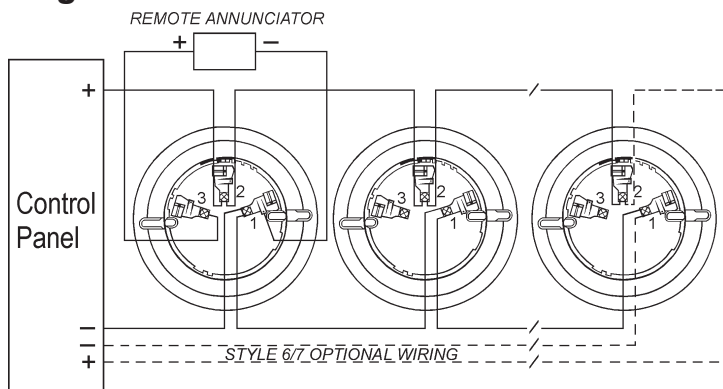
#### B224RB Relay Base: Screw terminals:

up to 14 AWG (2.0 mm<sup>2</sup>). **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" (15.748 cm). **Maximum:** 25 devices between isolator bases. See Note 2 under Installation on page 1.

## Wiring Diagrams



**Gamewell**<sup>™</sup>  
A 150-Year Tradition

A Honeywell Company

### Gamewell-FCI

12 Clintonville Road  
Northford, CT 06472-1610

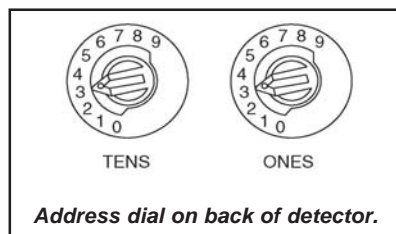
Phone: 203-484-7161

Fax: 203-484-7118

www.gamewell-fci.com

A Honeywell Company

© 2006 Gamewell-FCI



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.