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 I56-1380 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-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
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

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-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-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)
B200SRA-A: Same as B200SRA-WH, English/French (required in Canada for ULC applications with CO Series detector applications
B200SRA-IV: Same as B200SRA-IV in Ivory color, ULC listing
B200SRA-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)
B200SRA-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
SPECIFICATIONS

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/DNRAW, -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


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