

FSP-851(A) Series

Intelligent Plug-In Photoelectric Smoke Detectors with FlashScan®



Intelligent Addressable Devices

General

Notifier FSP-851(A) Series 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 not manually monitored and reported in the panel. FlashScan® technology allows each detector's address to be set with only a single address switch, avoiding need detectors located for sensitive environments after detector communication switch an communication loop. The FSP-851(A) provides its detector's unique optical sensing chamber is engineered to sense smoke produced by a wide range of combustibles. Dual electronic lenses focus up to 100 ft (30 m) beam separation laser technology for FSP-851(A). The FSP-851(A) is a remote test capable detector for use with DMS-Automatic dual detector technology. FSP-851(A) series detectors are compatible with Notifier Drop and CLIP series fire alarm control panels (FACP).

FlashScan® U.S. Patent 4,222,985 is a communication protocol developed by Notifier that greatly increases the speed of communication between intelligent devices. Intelligent devices communicate in a grouped fashion. If one of the devices in the group has one destination, the group's CPU stops the group and communicates in single mode. The result is a response speed greater than for a series of of single devices.

Features

- Sleek, low-profile design.
- Addressable-wiring communication.
- Stable ambient-light technique with noise immunity.
- Low standby current.
- Two-wire full connection.
- Compatible with FlashScan® and CLIP protocol systems.
- Relay, alarm addressing (1-30 or CLIP systems, 1-100 or FlashScan systems).
- Optional remote, single-gang LED indicators.
- Dual LED design provides 360° viewing angle.
- Stable bracket (LEDs turn green every time the detector is addressed, and blinks steady red on alarm (FlashScan systems only).
- Remote test feature from the panel.
- Built-in test with address display (on address on LED will blink the detector LED) (CLIP and FlashScan systems only).
- Built-in functional test switch (activated by external relay).
- Built-in tamper-resistant feature.
- Secured against lock prisms.
- Constructed of shatter-resistant plastic, designed to commercial standards, and offers an attractive appearance.
- 84-in. plastic tamperability rating.
- 200-ft wires for wiring of the separate loop.
- Optional relay, indicator, and monitor bases.



FSP-851(A) in 851(A)-PA Base

Specifications

Sensitivity: 0.2% to 0.25% per beam obscuration

Size: 2 1/2" (6.35 cm) high, base diameter

- **851(A)-PA** 6 1/2" (16.5 cm) diameter
- **851(A)** 4 1/2" (11.4 cm) diameter
- **851(A)** 6 3/4" (17.1 cm) diameter
- **851(A)** 8 1/4" (21.0 cm) diameter
- **851(A)** 6 1/2" (16.5 cm) diameter
- **851(A)** 6 1/2" (16.5 cm) diameter

Shipping Weight: 5.0 oz (142 g)

Operating Temperature Range: FSP-851(A), 4°C to 100°C (39°F to 212°F); FSP-851(A)-PA, 4°C to 20°C (39°F to 68°F). Low temperature signal for FSP-851(A), at 30°F (1°C) (7.2°C = 45°F); FSP-851(A), at 4°C (39°F) (4.4°C = 40°F to 40°C (104°F to 104°F)).

UL/ULC Listed Voltage Range: 4-400V AC, (208V to 240V), suitable for installation in U.S.

Relative Humidity: 10%-95% noncondensing.

Normal Rating: Fire temperature rating 100°F (37°C).

Detector Bases and Accessories

Notifier automatically spacing detectors in accordance with NFPA 72. In low ceiling applications with smooth ceiling, space detectors at least 20 ft (6.1 m) for ceiling heights 10 feet (3.0 m) and higher. For specific information regarding detector spacing, placement, and special applications refer to NFPA 72, Smoke Detector Application Guide, document 720-103, a available at www.nfpa.org.

Electrical Characteristics

Voltage Range: 16-30V AC (RMS)

Standby Current (max. avg.): 50µA @ 24VAC (low communication every two seconds with LED enabled).

LED Current (max.): 1.0mA @ 24 VDC (70°F).