

FAP-325-V2F Analog Photoelectric Smoke Detector Flat

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- ▶ Handles air velocity from 0 ft/min to 4000 ft/min (0 m/s to 20.32 m/s)
- ▶ Adjustable threshold smoke level (determined by FACP)
- ▶ Provides automatic compensation values in case of detector contamination
- ▶ Mounts on FAA-325-B4 or FAA-325-B6 Analog Detector Base and the FAA-325-B6S Analog Sounder Base
- ▶ Easy detector removal for cleaning and servicing

The FAP-325-V2F Analog Photoelectric Smoke Detector is an addressable device used in the analog polling circuit. It detects fast-flaming fires and dense smoke typically given off by plastic, foam, paper, wood, and other materials that tend to smolder.

The detection chamber design prevents external light from entering the chamber and uses a light-emitting diode (LED) and a photodiode which measures particulate levels in the detection chamber. These measurements are transmitted in digital form to the fire alarm control panel (FACP). The FACP can adjust the sensor threshold to compensate for contamination.

Functions

Address Range

The detector is compatible with 254 addresses. When used with the FAA-325-B6S Analog Sounder Base, the address range is 1 to 127 because the base is automatically addressed from 128 to 254.

Fire Panel Connections

The detector is controlled by a microprocessor and communicates with the fire panel (both power and data) over a two-wire polling circuit. Removing an FAP-325-V2F detector from the base for service initiates a trouble signal but does not interrupt the polling circuit.

Contamination Testing

The FPA-1000 Analog Addressable Fire Panels are UL listed to monitor the contamination level of these detectors. The fire panel monitors the contamination level of the detectors as part of its normal polling activity. Based on the compensation values provided by each detector, the electrical test determines if the detector is within its UL-listed calibration range. The fire panel automatically compensates for contamination of the detector and indicates when the detector requires cleaning.

Status Display

Each detector has two LEDs that flash every time the device is polled and is switched on steady when the detector goes into alarm condition.

Certifications and approvals

Region	Certification	
USA	UL	UROC: Smoke-automatic Fire Detectors (ANSI/UL 268)
	CSFM	see our website

Installation/configuration notes

Compatible Products

The following products are compatible with the FAP-325-V2F detector:

Category	Product ID	Product Description
Fire Panels	FPA-1000 Series	Analog Addressable Fire Panels
	D8024	Analog Fire Alarm Control Panel
	D10024A	Analog Fire Alarm Control Panel
Detector Bases	FAA-325-B4	4-inch Analog Sensor Base
	FAA-325-B6	6-inch Analog Detector Base
	FAA-325-B6S	6-inch Analog Sounder Base
Programming Products	D5070	Analog Device Programmer

Modular Construction

The FAP-325-V2F detectors are part of a two-piece modular design for detector assemblies. An FAP-325-V2F detector attaches to an FAA-325-B4 4-inch Analog Detector Base, an FAA-325-B6 6-inch Analog Detector Base, or an FAA-325-B6S 6-inch Analog Sounder Base. The base's security locking tab prevents any unauthorized detector removal from the base.

Mounting

Smoke detectors are typically mounted on the ceiling. However, if smoke detectors are mounted on a wall, they must be at least 4 in. (10.2 cm), but no more than 12 in. (30.5 cm), below the ceiling.

For UL Listing requirements, the spacing between detectors should be no more than 30 ft.

Programming

The D5070 Analog Device Programmer is required for address setting. The address of each FAP-325 Series detector is set by programming an EEPROM microchip located in the detector.

Parts included

Quant.	Component
1	FAP-325-V2F Analog Photoelectric Smoke Detector
1	Dust cover
1	Literature pack

Technical specifications

Electrical

Operating Voltage Range:	22.9 VDC to 39.5 VDC
Current Consumption:	Typical: 0.39 mA Maximum: 0.80 mA

Mechanics

Dimensions (diameter x D):	3.94 in. x 1.5 in. (10 cm x 3.8 cm)
Weight	3.4 oz (96.4 g)
Material	ABS Blend
Color	Ivory

Environmental Conditions

Operating Temperature	+14°F to +122°F (-10°C to +50°C)
UL-listed Installation Temperature	+32°F to +100°F (0°C to +37.8°C)
Relative Humidity	95%, non-condensing at +104°F (+40°C)

Sensitivity Range

With air velocity (open area) of . . .

. . . 300 ft/min (1.5 m/s):	0.5%/ft to 3.80%/ft (1.6%/m to 12.5%/m)
. . . 2000 ft/min (10.2 m/s):	0.5%/ft to 2.74%/ft (1.6%/m to 9.0%/m)
. . . 4000 ft/min (20.32 m/s):	0.5%/ft to 2.68%/ft (1.6%/m to 8.8%/m)

Ordering information

FAP-325-V2F Analog Photoelectric Smoke Detector Flat

Used to detect fast-flaming fires and dense smoke typically given off by plastic, foam, paper, wood, and other materials that tend to smolder

Order number **FAP-325-V2F**

Accessories

FAA-325-B4 4-inch Analog Sensor Base

Is combined with analog addressable detectors that use the advanced digital communication protocol to provide early fire warning for life safety and property protection

Order number **FAA-325-B4**

FAA-325-B6 6-inch Analog Sensor Base

6-inch (152.4 mm) base for FAH-325, FAI-325, and FAP-325 sensors. **US sales only!**

Order number **FAA-325-B6**

FAA-325-B6S Analog Sounder Base

Contains an addressable sounder which provides an audible alarm in the immediate vicinity and only works in combination with one of the FAH-325, FAI-325, or FAP-325 series analog sensors

Order number **FAA-325-B6S**

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