

# SOE-24V

## Optical Smoke Detector

### Features

- ▶ High signal-to-noise ratio and sensitivity stability are effective in a wide range of environmental conditions
- ▶ Wide viewing angle alarm indicators
- ▶ Automatic drift compensation and maintenance indication
- ▶ Built-in magnetic test feature
- ▶ Break-away, hidden locking feature for use with NS bases
- ▶ Optimized reduction to false alarms and enhanced reaction time to real fires



### Description

The SOE-24V is a UL 268 7th Edition listed Optical Smoke Detector, which can be used in all open areas where smoke detection is required.

The new multi-spectrum smoke categorisation technology detects smoldering

and flaming fires, including those from polyurethane fuels, and at the same time can reduce false alarms from cooking fumes.



### Technical information

Sensing Element	Smoke	IR LED, Blue LED, Photodiode
Supply Voltage	Operating Voltage Range	8-35VDC
	Absolute Max Voltage	42VDC
	Maximum Voltage Ripple	8200m VAC
	Maximum Input Capacitance	0.01uF
Current Consumption	Standby Current	59µA
	Minimum Allowable Alarm Current	5mA
	Maximum Allowable Alarm Current	150mA
Startup	Time	25s (Max)
	Current	160uA (Max)
Reset	Time	100ms (Min)
	Voltage	2.5V (Min)
Compatible Bases	NS4-100, NS6-100, NS4-220, NS6-220, NS4 -221, NS6-221, NS4-224, NS6-224	
	HSC-220R, HSC-221R, HSC-224R, HSC-4R, HSC-4R12	
	*W suffix (not listed above) indicates white color	
Operating Temperature Range	32°F ~ 120°F	
UL Listed Ambient Temperature	32°F ~ 120°F	
Storage Temperature Range	-22°F ~ +140°F	
Operating Humidity Limit	<95%RH at 104°F, <85%RH at 140°F	
Dimension	3.94" diameter x 1.69" tall	
Color	Ivory	
Weight	3.53 oz.	
Air Velocity Range	0-4000 fpm	
Sensitivity Range	1.82-3.16%/ft	



### Detector Spacing

Smoke sensor spacing shall be in compliance with NFPA 72. For smooth ceilings and in the absence of specific performance-based design criteria, the distance between smoke sensors shall not exceed a nominal spacing of 30 ft. (9.1m) or all points on the ceiling shall have a sensor within a distance equal to or less than 0.7 times the nominal 30 ft. (9.1m) spacing. Sensors shall be located within a distance of one-half the nominal spacing, measured at right angles from all walls or partitions extending upward to within the top 15 percent of the ceiling height. For additional instructions see NFPA 72

PRODUCT LISTINGS	
<p><b>SIGNALING</b></p>  <p><b>LISTED</b></p>	 <p><b>APPROVED</b></p>
<b>S1383</b>	<b>455802</b>

