

AS2045-00 / AS2046-00

Photoelectric Smoke / Smoke & Heat Detector



AS2045

AS2046

Standard Features

- High signal-to-noise ratio and sensitivity stability 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
- UL 268 7th Edition listed
- Optimized reduction to false alarms and enhanced reaction time to real fires

Product Overview

The AS2045 and AS2046 are conventional multi-criteria Photoelectric Smoke Detectors. They can be used in all open areas where Photoelectric Smoke Detectors are required. The newly developed multi-spectrum smoke categorization technology detects smoldering and flaming fires fueled by traditional materials and polyurethane while reducing nuisance alarms.

The detector utilizes a green/red LED for indication of status. In a normal standby condition, the LED flashes green every 3 seconds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window, the LED will flash Red every 3 seconds. When the detector senses smoke and goes into alarm status, the LED will latch on Red.

The detector utilizes an IR-LED and Blue LED to distinguish smoke characteristics.

The AS2046 adds a heat sensing element to also detect 20°F/minute rate of temperature rise or 135°F temperature, whichever occurs first.





Technical Specifications

AS2045
AS2046

Sensing Element	Smoke (IR LED, Blue LED, Photodiode)	
	Heat (Thermistor)	
Supply Voltage	<i>Operating Voltage Range</i>	8-35 VDC
	<i>Absolute Max Voltage</i>	42 VDC
	<i>Maximum Voltage Ripple</i>	8200mVAC
	<i>Maximum Input Capacitance</i>	0.01uF
Current Consumption	<i>Standby Current</i>	59µA
	<i>Remote Indicator Current</i>	8.0mA (Internally Limited)
	<i>Minimum Allowable Alarm Current</i>	5mA
	<i>Maximum Allowable Alarm Current</i>	150mA
Startup	<i>Time</i>	25s (Max)
	<i>Current</i>	160A (Max)
Reset	<i>Time</i>	100ms (Min)
	<i>Voltage</i>	2.5V (Min)
Smoke Density Range	1.50 - 3.50%/ft @ 300 FPM Open Area 1.50 - 3.50%/ft @ 1000 FPM In Duct 1.50 - 3.50%/ft @ 2000 FPM In Duct 1.50 - 3.50%/ft @ 3000 FPM In Duct 1.50 - 3.50%/ft @ 4000 FPM In Duct	
Compatible Bases	AS2050-00 and AS2051-00	
Heat Sensitivity Range	NA	135°F or 20°F/ min rise (whichever occurs first)
Operating Temperature Range	32°F to 120°F	
UL Listed Ambient Temperature	32°F to 120°F	
Storage Temperature Range	-22°F to +140°F	
Operating Humidity Limit	<95%RH at 104°F, <80%RH at 120°F	
Dimension	3.94" diameter x 1.77" tall	3.94" diameter x 2.18" tall
Color	Ivory	
Weight	3.4 oz	