P POTTER
The Symbol of Protection

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
- Optimized reduction to false alarms and enhanced reaction time to real fire

Pending

Description

The CPSD-24V and CPSHD-24H are UL 268 7th Edition listed photoelectric smoke detectors allowing them to be used in all open areas where smoke detection is required. The CPSD-24V is a photoelectric only smoke detector. The CPSHD-24H is a combination smoke with a UL521 7th Edition listed heat detector. The new multi-spectrum smoke categorization technology detects smoldering and flaming fire, including polyurethane fuels, while reducing nuisance cooking alarms.

Operation

The CPSD-24V Photoelectric Smoke 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 the LED will latch on red.

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

The CPSHD-24H adds a heat sensing element to also detect 20°F/minute rate of temperature rise or 135°F temperature, whichever occurs first.

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. See NFPA 72 for additional instructions.

Technical Specifications

CPSD-24V Conventional Photoelectric Smoke Detector		
Color	Ivory	
Compatible Bases	NS4-100, NS6-100, NS4-220, NS6-220, NS4-221, NS6-221, NS4-224, NS6-224, SB-46 and SB-93	
	HSC-220R, HSC-221R, HSC-224R, HSC-4R, HSC-4R12	
	*W suffix (not listed above) indicates white color	
Current Consumption	Minimum Allowable Alarm Current	5mA
	Maximum Allowable Alarm Current	150mA
	Remote Indicator Current	8.0mA (Internally Limited)
	Standby Current	59μA
Dimensions	3.94" diameter x 1.77" tall	
Operating Humidity Limit	<95%RH at 104°F, <80%RH at 120°F	
Operating Temperature Range	32°F ~ 120°F	
Reset	Time	100ms (Min)
	Voltage	2.5V (Min)
Sensing Element	Smoke	IR LED, Blue LED, Photoiode
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	
Startup	Time	25s (Max)
	Current	160A (Max)
Storage Temperature Range	-22°F ~ +140°F	
Supply Voltage	Absolute Max Voltage	42VDC
	Maximum Input Capacitance	0.01uF
	Maximum Voltage Ripple	8200mVAC
	Operating Voltage Range	8-35VDC
UL Listed Ambient Temperature	32°F ~ 120°F	
Weight	3.4 oz	

CPSHD-24H Conventional Photoelectric Smoke and Heat Detector		
Color	Ivory	
Compatible Bases	NS4-100, NS6-100, NS4-220, NS6-220, NS4-221, NS6-221, NS4-224, NS6-224, SB-46 and SB-93	
	HSC-220R, HSC-221R, HSC-224R, HSC-4R, HSC-4R12	
	*W suffix (not listed above) indicates white color	
Current Consumption	Minimum Allowable Alarm Current	5mA
	Maximum Allowable Alarm Current	150mA
	Remote Indicator Current	8.0mA (Internally Limited)
	Standby Current	59μA
Dimensions	3.94" diameter x 2.18" tall	
Heat Sensitivity Range	135°F or 20°F/ min rise (whichever occurs first)	
Operating Humidity Limit	<95%RH at 104°F, <80%RH at 120°F	
Operating Temperature Range	32°F ~ 120°F	
Reset	Time	100ms (Min)
	Voltage	2.5V (Min)
Sensing Element	Heat	Thermistor
	Smoke	IR LED, Blue LED, Photoiode
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	
Startup	Time	25s (Max)
	Current	160A (Max)
Storage Temperature Range	-22°F ~ +140°F	
Supply Voltage	Absolute Max Voltage	42VDC
	Maximum Input Capacitance	0.01uF
	Maximum Voltage Ripple	8200mVAC
	Operating Voltage Range	8-35VDC
UL Listed Ambient Temperature	32°F ~ 120°F	
Weight	3.4 oz	

Ordering Information

Model	Description	Stock No.
CPSD-24V	Conventional Photoelectric Smoke Detector	1430039
CPSHD-24H	Conventional Photoelectric Smoke and Heat Detector	1430040