

CONVENTIONAL DEVICES

SD Series Photoelectric Smoke Detectors



Features

- Two and four wire models
- Photoelectric smoke sensing technology
- Uses smoke sensor in conjunction with a fixed temperature heat sensor to extend reliability
- Durable sensor head, no need for replacement
- N/C (normal close) or N/O (normal open) selectable relay output
- Easy installation and maintenance
- Attractive sleek housing
- UL listed

Description

The SD Series photoelectric smoke detectors are engineered to meet strict UL fire safety codes and effectively respond to a wide spectrum of fires. The SD Series smoke detectors are suitable for use in commercial, industrial, institutional and residential occupancies. The sleek low-profile design of the detectors emphasizes ease of installation and field maintenance.

The SD Series consists of four models:

SD-2WP / SD-2WT

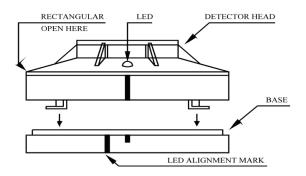
The SD-2WP is a two-wire photoelectric smoke detector for use with electrically compatible fire alarm control units. The SD-2WT is a two-wire smoke detector that uses photoelectric technology in conjunction with a fixed temperature heat sensor to further extend its sensing capabilities.

SD-4WP / SD-4WT

The SD-4WP is a four-wire photoelectric smoke detector. The SD-4WT is a four-wire photoelectric smoke detector with a fixed temperature heat sensor.

All SD Series smoke detectors come equipped with a sleek low-profile design and durable sensor head. Utilizing advanced detection and discrimination algorithms, the SD Series smoke detectors provide quality and reliability.

Installation Diagram





Electrical Specifications

Model	2/4 wire	Heat Sensor	Voltage DC	Standby Current (Max.)	Alarm Current (Max.)	Surge Current (Max.)	Star-Up Time (Max.)	Permissible Current (Max.)	Frequency	Alarm contact
SD-4WT	4	135°F	12/24V	370µA	35mA		60 Seconds	80mA	3-5 Seconds	Form A
SD-4WP	4		12/24V	370µA	35mA		60 Seconds	80mA	3-5 Seconds	Form A
SD-2WT	2	135°F	12~28V	150µA	70mA	160µA	60 Seconds	80mA	3-5 Seconds	—
SD-2WP	2		12~28V	<mark>150µA</mark>	70mA	160µA	60 Seconds	80mA	3-5 Seconds	-

Smoke Sensitivity	2.66+/- 1.11% FT Obscuration (UL standard)					
Detection Range	50 foot rating for heat sensor					
Start-Up Current	70 μA Maximum					
Alarm Impedance	For 2-wire models: $100\Omega+3V$ max; $560\Omega+3V$ max (red LED open circuit)					
Reset Voltage	Less than 1 volt					
Reset Time	Less than 1 sec					
Alarm Indicator	Continuously emitting red light					
Temperature range	-10°C to 50°C					
Humidity	0 to 95% RH, non condensing					
Alarm Contact	For 4-wire: N/O or N/C Operation					
	Form A: 1.0A@30VDC/0.5A@125VAC					
Dimensions	10mm (dia) x 46mm (ht) with base					
Weight	130g/set with base					

Ordering Information

Model	Description			
SD-2WP	2-wire photoelectric smoke detector c/w 4-inch base			
SD-2WT	4-wire photoelectric smoke detector c/w 4-inch base			
SD-4WP	2-wire photoelectric smoke detector with heat sensor c/w 4-inch base			
SD-4WT	4-wire photoelectric smoke detector with heat sensor c/w 4-inch base			

