

## Overview

The SuperDuct two-wire duct smoke detector is ideally suited to applications where early indication of combustion is required within the confined space of ventilation ductwork. Its primary purpose is to provide early warning of an impending fire and to prevent smoke from circulating throughout the building.

The SD-2W features a unique design that speeds installation and simplifies maintenance. Removable dust filters, conformally coated circuit boards, and optional water-resistant gaskets keep contaminants away from components, ensuring years of trouble-free service. When cleaning is required, the assemblies come apart easily and snap back together in seconds.

SuperDuct detectors use differential sensing to prevent gradual environmental changes from triggering false alarms. A rapid change in environmental conditions, such as smoke from a fire, causes the detector to automatically signal an alarm condition but dust and debris accumulated over time does not change alarm sensitivity.

## Remote Test, Reset, and Alarm Stations

Remote Test/Reset stations provide alarm testing and indication from the convenience of a remote location. Tests can be performed quickly and safely – without having to climb to the roof. Magnetically operated and key-operated one-gang models are available.

## Specifications

Wire Size	14-22 AWG
Air Velocity	100-4000 ft/min
Sensitivity	.79 – 2.46 % smoke obs per foot
LEDs	Power (green), Alarm (red), Trouble (amber) & Dirty (amber)
Alarm relay	1 form C, 2.0 A @ 30Vdc
Operating Environment	ULC listed to -29°C to 49°C (-20°F to 120°F), 93% humidity

## Standard Features

- PCB mounted photoelectric detector with onboard intelligence
- Environmental compensation with differential sensing for reliable, stable, and drift-free sensitivity
- -29°C to 49°C operating range with 100 to 4,000 ft/min. air velocity rating assures reliability under harsh environmental conditions
- Wide 0.79% to 2.46% obscuration/ft. smoke sensitivity
- Less than 2" deep for easy installation where space is tight
- Status LEDs remain visible through clear assembly cover
- Cover monitor switch for added security
- Sampling tube can be installed with or without the cover in place and can be rotated in 45-degree increments to ensure proper alignment with duct airflow
- Magnet-activated test switch
- One Form C auxiliary alarm relay for controlling ancillary equipment (e.g. HVAC controls)
- Easy access to field connection terminals

## Ordering Information

Catalog Number	Description
SD-2W	Conventional SuperDuct Detector
SD-T*	Sampling tube, one required per detector

\* Specify length in inches example SD-T36 = 36" tube. Available tubes sizes: 8, 18, 24, 36, 42, 60, 78 & 120.

Accessories	
SD-TRM	Remote test station, magnetic—single gang
SD-TRK	Remote test station, keyed—single gang
EC-LED	Remote LED indicator—single gang
SD-MAG	Test magnet kit
SD-GSK	Cover gasket kit

# Two-wire Photoelectric Duct Smoke Detector

SuperDuct Series SD-2W

