

## TECHNICAL INFORMATION

In the interest of continuing product improvement,  
we reserve the right to change models,  
specifications, and/or features without prejudice.

PROJECT: \_\_\_\_\_  
LOCATION: \_\_\_\_\_  
ARCHITECT: \_\_\_\_\_  
ENGINEER: \_\_\_\_\_  
CONTRACTOR: \_\_\_\_\_  
DATE: \_\_\_\_\_ SALES ENGINEER: \_\_\_\_\_

## DETECTION - STAND ALONE SERIES FDS-SA

The FDS (Fume Detection System) is a product that has many years of research and innovative technological development. The FDS is an advanced microprocessor-based system featuring a high quality stand alone controller, a unique high-tech enclosure, and all the necessary characteristics to provide continuous, effective, and fully integrated monitoring of toxic and combustible gases.



ACCESSORIES

### CHARACTERISTICS:

Two Alarm Levels	Calibration Status Warning
8-Step Led Display	Innovative & Attractive Case Design
High/Low DPDT Alarm Relays	Simple Installation & Operation
Audio/Visual Alarms	Easy Field Verification
Programmable Time Delays	Remote Sensor Configuration Option
Quick Self-Test & Warm-up	High Cost Effectiveness

### TECHNICAL DATA:

Dimensions:	8.09" (H) x 5.97" (W) x 2.65" (D)
Power Requirements:	24 Vac nominal (17-27 VAC), 50-60 Hz, 0.4A: 24 Vdc nominal (20-38 Vdc)
Optional Main AC input:	120 Vac nominal, +/- -10% (with on board transformer)
Relay output:	2 DPDT relays, 5A @ 30 Vdc
Communications:	4-20mA
Operating Environment:	Commercial, Indoor, Extreme Temperature Environments
Operating Temperatures:	NO <sub>2</sub> & CH <sub>4</sub> : -40 F to 122 F; CO: -4 F to 122 F
Sensor Type:	Electrochemical cell (CO, NO <sub>2</sub> ); catalytic (CH <sub>4</sub> )
Display:	8 character, 2 line backlit LCD
Visual Indicators:	Green LED: power Amber LED 1: Alarm/Fault Amber LED 2: Alarm/Fault
Audible Alarm:	-85dBA @ 3 m (10-ft.)
Accuracy:	+/- 3% of full scale @ 25C

Application:	FDS-SA-CO: Detection of Carbon Monoxide Fumes from Gas Powered Vehicles FDS-SA-NO <sub>2</sub> : Detection of Nitrogen Dioxide Fumes from Diesel Powered Vehicles FDS-SA-CH <sub>4</sub> : Detection of Methane Fumes from Natural Gas Powered Vehicles
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Detected Gas	Relative Density (air = 1)	Installation Height	Coverage Radius
CO (Carbon Monoxide)	0.968	3-5 ft. from floor	50 feet unimpeded
NO <sub>2</sub> (Nitrogen dioxide)	1.58 (cold)	1-3 ft. below ceiling	50 feet unimpeded
CH <sub>4</sub> (Methane)	0.558	1 ft. below ceiling	20 feet unimpeded

\* Verify compliance with Local & National codes is recommended. Please confirm if explosion proof sensors are required. Standard sensors are NOT explosion proof.