



SEC 1500 Gas Detector

Features

- *Designed for non-hazardous environments*
- *Low-cost installation*
- *Over 20 different gases detected*
- *120 VAC, 220 VAC or 10-30 VDC operation*
- *CSA/NRTL approved*
- *Industry standard 4-20 mA output*
- *RS-485 digital output*
- *Optional programmable relays*
- *User friendly, one person calibration*
- *Provides continuous self-diagnostics*
- *Toxic and oxygen deficiency detectors*
- *Retains operating parameters and calibration settings when powered down*
- *Operates with SEC Supervision Plus Hazard Event Monitoring Software*

Applications

- Petrochemical Refineries
- Compost Facilities
- Semi-Conductor Industry
- Mining
- Pulp and Paper Mills
- Refrigeration Applications
- Buildings
- Automotive Industry
- Engine Test Rooms
- Air Quality Intake System
- Sewage Industry
- Water Treatment Plants
- Parking Garages
- Chemical Industry
- Nuclear Industry
- Fertilizer Industry
- Tunnels
- Medical Facilities

Operation

The SEC 1500 is a digital gas detector designed to detect one of a number of gases, display the concentration of that particular gas, and provide an alarm when gas concentrations reach preset levels.

The SEC 1500 will operate as a stand-alone gas detector with independent relay outputs and LED display. An industry standard 4-20 mA output enables the SEC 1500 to be connected to existing analog systems.

The SEC 1500 operating parameters (relay action, alarm set values, sensor configuration, etc.) can be viewed or changed using the SEC 2500 Hand Held Programmer. This device can communicate anywhere on the network with any SEC 1500 by connecting onto the RS-485 data highway.

An RS-485 digital output enables the SEC 1500 to com-

municate to the SEC 4100 System Monitor or a personal computer (PC) running SEC Supervision Plus software. The network is formed by connecting a single twisted shielded pair cable of wires, reducing cabling and installation costs compared to traditional analog systems.

The SEC 1500 retains operating parameters and calibration settings when powered down. An onboard microprocessor provides continuous self-diagnostics and identifies problems using fault codes. Four (4) optional 8 amp SPDT relays respond to Low, Mid, and High gas alarms as well as any fault conditions.

The SEC 1500 is network compatible with the SEC 2000 gas detector, the SEC IR Detector, SEC Supervision Plus software, the Digital Analog Interface Module (DAIM), SEC 4100 System Monitor and the Expansion Relay Controllers.

Specifications

Detection Method

Combustible Gas - Solid state; LEL
 Toxic Gases - Electrochemical
 Oxygen - Galvanic

Alarms

Visual indication and relay contacts for low, mid, high and fault

Output (digital)

RS-485 LAN

Output (analog)

4-20 mA (source type), max. 1000 ohm load at 24 VDC supply voltage

Relay, Type and Rating

SPDT: 8 Amps@250 VAC
 8 Amps@30 VDC

Relay Operation

Selectable latching or non-latching
 Selectable normally energized or normally de-energized (except fault)
 Selectable alarm relay off delays
 Manual relay control

Operating Voltage

120 or 220 VAC
 10 to 30 VDC

Temperature Range

-20° to +50°C

Housing Construction Options

NEMA 4 powder coated steel enclosure or,
 NEMA 4X 12 & 13 molded fiberglass or,
 NEMA 4X 12 & 13 304 stainless steel

CSA/NRTL Certification

CSA file # LR 95495-6

Housing Dimensions

6 (W) x 9.5 (L) x 3.8 (H) inches

Weight

Approximately 7 lbs {3.2 Kg.}

Available Standard Gases

Combustible (LEL)	Carbon Monoxide (CO)
Oxygen (O ₂)	Germane (GeH ₄)
Hydrogen (H ₂)	Silane (SiH ₄)
Ammonia (NH ₃)	Phosphine (PH ₃)
Nitric Oxide (NO)	Sulfur Dioxide (SO ₂)
Bromine (Br ₂)	Nitrogen Dioxide (NO ₂)
Fluorine (F ₂)	Chlorine Dioxide (ClO ₂)
Arsine (AsH ₃)	Hydrogen Sulfide (H ₂ S)
Ozone (O ₃)	Hydrogen Fluoride (HF)
Chlorine (Cl ₂)	Hydrogen Chloride (HCl)
Phosgene (COCl ₂)	Hydrogen Cyanide (HCN)
Diborane (B ₂ H ₆)	Hydrogen Selenide (H ₂ Se)
Formaldehyde (HCHO)	Ethylene Oxide (ETO)

Other Products Available:

Infrared Hydrocarbon Gas Detectors
 Explosion Proof Gas Detectors
 4-20 mA Gas Detectors
 Data Logging/Graphics Software Packages
 Optical UV/IR Flame Detectors
 Fire Suppression Aerosol Generators
 Portable Automatic Fire Fighting Systems
 Halotron Systems
 Twin Agent Units
 Dry Chemical Mobile and Stationary Units

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