



SEC 3120 DIN Digital Gas Transmitter

Features

- DIN rail mount
- Back lighted LCD Display
- Low Cost
- Plug and play toxic, oxygen and combustible gas sensors
- Self-check system
- 4-20 mA outputs (2) Sensor 1 & Sensor 2
- RS-485 Interface (Isolated)
- Optional alarm and fault relays
- Pushbutton programming
- Non-intrusive calibration
- Removable, non-volatile, time stamped data logging
- Digital communication link to SEC 3000 and SEC Millenium Gas Detectors

Applications

- Petrochemical Refineries
- Compost Facilities
- Semi-Conductor Industry
- Mining
- Pulp and Paper Mills
- Oil Rig Platforms
- Buildings
- Automotive Industry
- Engine Test Rooms
- LNG & LPG Facilities
- Sewage Industry
- Water Treatment Plants
- Parking Garages
- Chemical Industry
- Nuclear Industry
- Fertilizer Industry
- Tunnels
- Medical Facilities

Operation

The SEC 3120 DIN provides interface capabilities for the SEC 3000 Gas Detector and SEC Millenium Infrared Gas Detectors.

The SEC 3120 DIN features:

- Back lighted LCD for Gas Level/Unit Parameter display
- Four (4) configurable Alarm/Fault Relays
- An isolated RS485 Modbus interface provides reliable communication in noisy environments and eliminates "Ground Loop" problems.
- Three pushbutton switches for local configuration and calibration
- Time stamped Data logging using a removable non-volatile memory module. Module can be removed from the unit to allow remote data downloading and data archiving.
- Two independent 4-20 mA sensor analog outputs.

SPECIFICATIONS

Detection Method

Toxic Gases – Electrochemical
Combustible - Infrared

Gas Sensor Compatibility

SEC 3000 & SEC Millenium

Output (digital)

RS-485 LAN (Isolated)

Outputs (Two analog)

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

Output (optional relays)

(3) Alarm and (1) Fault

Display

Back Lighted LCD
LEDs for relay indication

Operating Voltage

18-32 VDC

Operating Current (No Sensor)

125mA Max @ 24VDC

Power Consumption (SEC3120 & Sensor)

Toxic Gases and oxygen (SEC 3000) – 4W Max
Combustible & CO2 (SEC Millenium) – 9W Max

Temperature Rating

-40° to + 70°C

Humidity

0-99% RH (Non-condensing)

RFI

Built in filters reject RFI/EMI

Housing Construction

ABS Plastic (Enclosure color gray)

Certification

CSA/NRTL Pending

Housing Dimensions

3.54 (W) x 4.17 (L) x 2.28 (H) inches
{90 (W) x 106 (L) x 58 (H) mm}

Weight

Approximately 2 lbs. {0.9 Kg.}

Partial Gas List

Oxygen	(O2)	Carbon Monoxide	(CO)
Hydrogen	(H2)	Germane	(GeH4)
Ammonia	(NH3)	Silane	(SiH4)
Nitric Oxide	(NO)	Phosphine	(PH3)
Bromine	(Br2)	Sulfur Dioxide	(SO2)
Fluorine	(F2)	Nitrogen Dioxide	(NO2)
Arsine	(AsH3)	Chlorine Dioxide	(ClO2)
Ozone	(O3)	Hydrogen Sulfide	(H2S)
Chlorine	(Cl2)	Hydrogen Fluoride	(HF)
Phosgene	(COCl2)	Hydrogen Chloride	(HCl)
Diborane	(B2H6)	Hydrogen Cyanide	(HCN)
Formaldehyde	(HCHO)	Hydrogen Selenide	(H2Se)
Ethylene Oxide	(ETO)	Hydrogen Peroxide	(H2O2)
Combustible	(HC)	Carbon Dioxide	(CO2)

Current Output

Status

0.0 mA	Unit Fault
0.8 mA	Unit warm up
1.2 mA	Zero drift fault
1.6 mA	Calibration fault
2.0 mA	Unit spanning
2.2 mA	Unit zeroing
4-20 mA	Normal measuring mode
4.0 mA	Zero gas level
5.6 mA	10% Full Scale
8.0 mA	25% Full Scale
12 mA	50% Full Scale
16 mA	75% Full Scale
20 mA	Full scale
>20 mA	Over-range



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