SE SENSOR ELECTRONICS

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 proveds 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.

SEC 3120 DIN   Digital Gas Transmitter

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

Operation Voltage
18-32 VDC

Operating Current (No Sensor)
125mA Max @ 24VDC

Power Consumption (SEC 3120 & 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

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

Sensor Electronics Corporation
12730 Creek View Avenue, Savage, MN 55378 U.S.A. • (800) 285-3651 • (952) 938-9486 • FAX: (952) 938-9617
Email: sales@sensorelectronics.com • website: www.sensorelectronics.com

Sensor Electronics Corporation reserves the right to alter specifications without prior notice.

© 11/18