



## SEC 3100 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 output*
- *RS-485 Interface (Isolated)*
- *Optional alarm and fault relays*
- *Push button programming*
- *Non-intrusive calibration*
- *Removable, non-volatile, time stamped data logging*
- *Digital communication link to SEC 3000 and SEC Millennium 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 SEC3100 provides interface capabilities for the SEC3000 Gas Detector and SEC Millennium Infrared Gas Detectors.

The SEC3100 features:

- Back lit 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 push button switches for local configuration and calibration
- Time stamped Data logging using a removable non-volatile memory stick module. Module can be removed from the unit to allow remote data downloading and data archiving.

## SPECIFICATIONS

### Detection Method

Toxic Gases – Electrochemical  
Combustible - Infrared

### Gas Sensor Compatibility

SEC 3000 & SEC Millenium

### Output (digital)

RS-485 LAN (Isolated)

### Output (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 Lit LCD  
LEDs for alarm/status indication

### Operating Voltage

18-32 VDC

### Operating Current (No Sensor)

125mA Max @ 24VDC

### Power Consumption (SEC3100 & Sensor)

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

### Temperature Rating

-40° to +70°C

### Humidity

0-99% RH (Non-condensing)

### Housing Construction

ABS Plastic

### 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

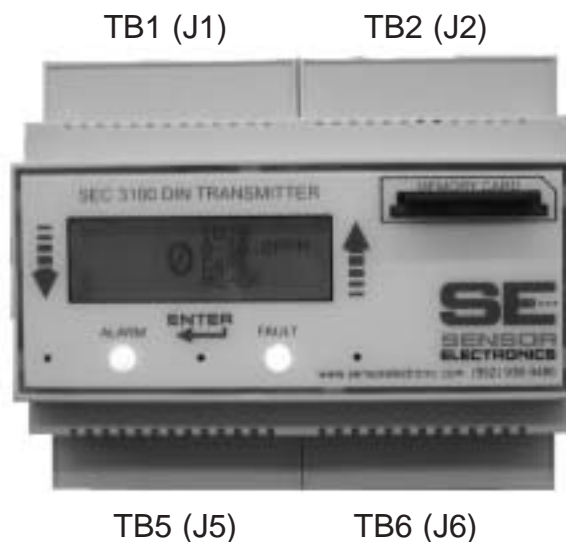
### Weight

Approximately 1 lb. {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)
Methyl Mercaptan	(CH4S)	Ethyl Mercaptan	(C2H6S)

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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