

A fixed single point alarm unit that meets the requirements for economic and reliable monitoring of gas levels in a wide range of environments from commercial premises through to heavy industrial applications that may require hazardous area sensing.

The WatchGas101 may be utilised as a standalone unit or as an addressable sensor forming part of the WatchGas Combi CANbus addressable network system and therefore offering the features of our most advanced system.



Key Features

- Data Logging
- Three Alarm Stages + Relays
- 4~20Ma Analogue Output
- Sensor Input Select 4~20Ma/Mv Bridge
- Weather Proof
- Back Lit Alpha Numeric Full Status Display
- Front Panel Access To Set Up And Maintenance Of Parameters
- Internal Or Remote Sensor Options
- Aspirated Sensor Option

Application Examples

- Public buildings
- Boiler plant rooms
- Swimming pools,
- Water treatment works
- H&V control systems
- Manufacturing and process plants

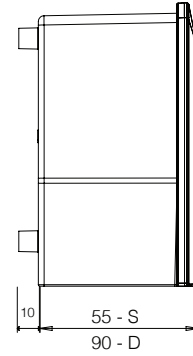
SPECIFICATIONS

| | |
|--|---|
| Size | L 145mm H 145mm D 65mm 24vDC version (S) D 100mm AC version (D) |
| Weight | 0.8 kg |
| Measuring Range | Combustible Gas - LEL, %vol, ppm Toxic Gas - ppm Oxygen - % vol - Depletion or Enrichment Any 4~20mA source input signal |
| Temperature | -15 to +50°C (Operating Temperature) / -5 to 55°C (Storage Temperature) |
| Alarm Signal | Acoustic: 85dB @ 10cm 1, 2, 3 and Fault Alarms - mutable Visual: Two line alpha numeric back lit display Power - Green LED Alarms 1, 2, 3 - Red LEDs Fault - Amber LED Alarms inhibit - Amber LED |
| Alarm Settings | Digital setting (fully adjustable between zero and full scale) Delay to alarm |
| Power Supply | 24v nominal 15 to 30vDC Option - 230/115v AC 50/60 Hz The two voltages may be utilised simultaneously - standby supply |
| Outputs | 1, 2, 3 and fault alarm relays -SPCO normally de-energised - energised option, latched or unlatched All contacts rated 3A - 230v AC 4-20mA CANbus Logging <ul style="list-style-type: none"> • Intervals - variable time • Roll over/stop • Storage - 2,880 readings Requires <ul style="list-style-type: none"> • RS232 lead • PC or laptop (dedicated) • Hyperterminal - downloaded from website |
| Sensor Inputs (jumper selectable) | Bridge type 3 wire detector mv (Catalytic) 4-20mA (electrochemical / infrared / catalytic / PID / semiconductor) |
| Sensor Cable | 3 core 1.5mm ² screened 1.5km |
| Power Consumption | 4 watts - full alarm |
| IP Rating | IP64 |
| Miscellaneous | Alarm relay inhibit during calibration Sounder Inhibit System function test Field Terminals - screw type 2.5mm Cable entry - top, bottom, sides, rear |

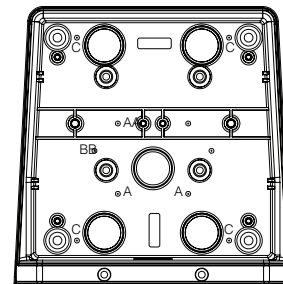
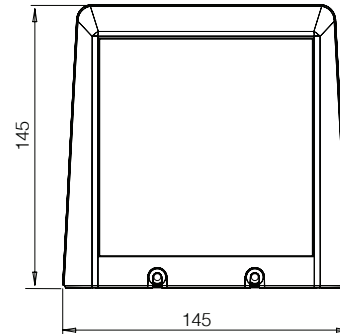
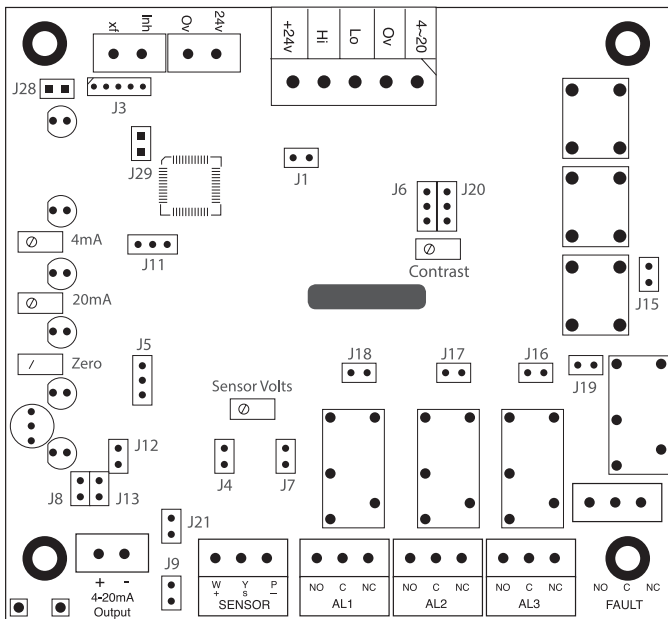
AVAILABLE GAS SENSORS

| Gases | Measuring Range | |
|--|---|---|
| Flammable Gases | Catalytic 2v / 300mA LEL Level Hydrocarbons | |
| | Catalytic 2v / 100mA LEL Levels H ₂ , Kerosene | |
| | Thermal Conductivity 2v / 300mA 0~100 %vol. | |
| | Catalytic 2.3V / 165mA, Hydrocarbons, NH ₃ | |
| O₂ Oxygen | Catalytic LEL 2v / 170mA (mV output) | |
| | Catalytic LEL 2v / 170mA (4~20mA output) | |
| | Semiconductor - ppm | |
| | 0~25% Vol Electrochemical | |
| | CO Carbon Monoxide | 0~200ppm Electrochemical |
| | | H₂S Hydrogen Sulfide |
| | SO₂ Sulfur Dioxide | |
| | | NO₂ Nitrogen Dioxide |
| | H₂ (ppm levels only) Hydrogen | |
| | | Cl₂ Chlorine |
| HCN Hydrogen Cyanide | 0~10ppm Electrochemical | |
| | HCl Hydrogen Chloride | 0~10ppm Electrochemical |
| NO Nitric Oxide | | 0~10ppm Electrochemical |
| | NH₃ Ammonia | 0~100ppm Electrochemical |
| 0~1000ppm Electrochemical | | |
| 0~5000ppm Electrochemical | | |
| 0~200ppm Semiconductor | | |
| O₃ Ozone | 0~1ppm Electrochemical | |
| HF Hydrogen Fluorine | 0~10ppm Electrochemical | |
| F₂ Fluorine | 0~1ppm Electrochemical | |
| N₂H₄ Hydrazine | 0~1ppm Electrochemical | |
| ClO₂ Chloride Dioxide | 0~1ppm Electrochemical | |
| H₂O₂ Hydrogen Peroxide | 0~100ppm Electrochemical | |
| ETO Ethylene oxide | 0~25ppm Electrochemical | |
| PID 10.6 eV Range | 0~1000ppm | |
| Refrigerant Gases | 0~1000ppm Infrared | |
| Formaldehyde | 0 - 10 ppm | |

INTERNAL ASPIRATED SENSOR UNIT



CONTROL UNIT PCB



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