

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

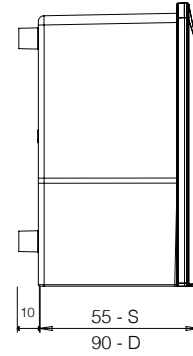
SPECIFICATIONS

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

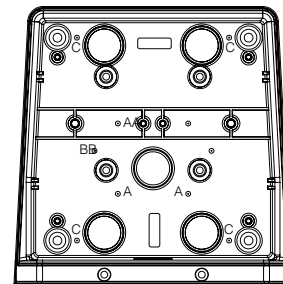
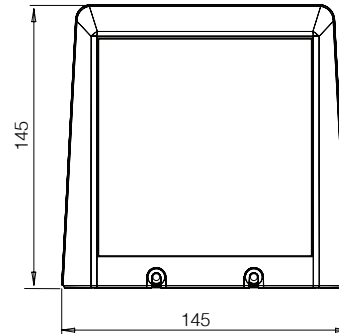
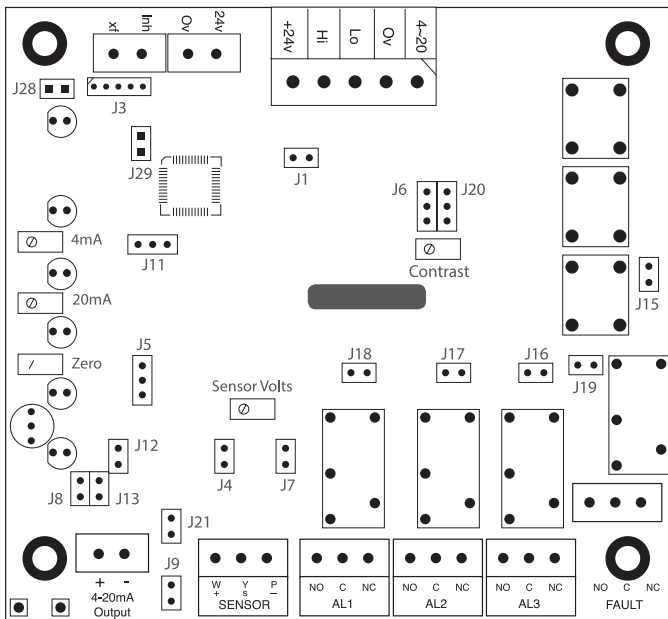
AVAILABLE GAS SENSORS

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 CO Carbon Monoxide H₂S Hydrogen Sulfide SO₂ Sulfur Dioxide NO₂ Nitrogen Dioxide H₂ (ppm levels only) Hydrogen Cl₂ Chlorine HCN Hydrogen Cyanide HCl Hydrogen Chloride NO Nitric Oxide NH₃ Ammonia O₃ Ozone HF Hydrogen Fluorine F₂ Fluorine N₂H₄ Hydrazine ClO₂ Chloride Dioxide H₂O₂ Hydrogen Peroxide ETO Ethylene oxide PID 10.6 eV Range Refrigerant Gases Formaldehyde	Catalytic LEL 2v / 170mA (mV output) Catalytic LEL 2v / 170mA (4~20mA output) Semiconductor - ppm 0~25% Vol Electrochemical 0~200ppm Electrochemical 0~50ppm Electrochemical 0~5ppm Electrochemical 0~5ppm Electrochemical 0~2000ppm Electrochemical 0~10ppm Electrochemical 0~10ppm Electrochemical 0~10ppm Electrochemical 0~100ppm Electrochemical 0~1000ppm Electrochemical 0~5000ppm Electrochemical 0~200ppm Semiconductor 0~1ppm Electrochemical 0~10ppm Electrochemical 0~1ppm Electrochemical 0~1ppm Electrochemical 0~1ppm Electrochemical 0~100ppm Electrochemical 0~25ppm Electrochemical 0~1000ppm 0~1000ppm Infrared 0 - 10 ppm

INTERNAL ASPIRATED SENSOR UNIT



CONTROL UNIT PCB



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