



MULTI-CHANNEL GAS ANALYSER

Biogas 905



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Instrumentation and Control

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Application

The **Biogas Analyser 905** monitors either continuously or intermittently, the gas components contained in the Biogas (process control) and optionally, monitors the surrounding air to provide an early warning of dangerous, explosive and non-combustible gases and vapours.

Accessories

Signal horn, warning light, warning banner, plotter.

Other accessories will be offered, according to the measurement tasks required.

Fields of Application

- Monitoring of biogas, landfill gas or digester gas
- Warning of explosive gas mixtures
- Warning of gases that endanger health
- Warning of non-combustible gases

Features

- Up to 5 sensors for Biogas measurements
- Up to 3 sensors for room monitoring
- Time-controlled measurements in intermittent mode
- 4-line display, each line with 16 characters
- Menu-assisted operation via 6 keys
- 16 freely configurable alarms (max. 3 per measurement point or sensor)
- Adjustable alarm threshold, from 5 – 100 % of the measurement range
- A minimum of 5 floating alarm contacts for optional assignment
- Floating service and fault contact
- 5 analog outputs, 4–20 mA
- 5 digital inputs for control functions (initiating a measurement, selection of a measurement point)
- Double measurement change-over switch in the standard housing (optional); extras by request
- Serial output RS 232 or RS 485
- Manual flow-through adjustment
- Gas components-filter system and conditioning
- Condensate collector for external installation
- High degree of operational reliability
- Low power consumption
- Water sensor for the detection of condensate break-through

Technical Data

Details apply, per control unit

Sensors:	Electrochemical sensors Infrared sensors Paramagnetic sensors
Sensor input:	2-wire sensors (TOX 592) or 3-wire sensors (GTR 196) for warning of explosive gas mixtures
Sensor supply:	24 V DC / 200 mA max.
Test ranges:	CO ₂ : 0 - 50 ... 100 Vol. % CH ₄ : 0-100 Vol. % O ₂ : 0 - 21 Vol. % (electrochemical) O ₂ : 0-5 Vol. % ... 0-25 Vol. % (paramagnetic) H ₂ : 0-2 Vol. % H ₂ S: 0-50 ppm ... 0-5.000 ppm other ranges by request
Accuracy:	< ±3 %, f.s.d.
Ambient temperature:	+41 °F to +113 °F
Temperature effects:	< 5 % for a ± 68 °F change
Installation:	Wall-mounting
Output signals:	Current output 4 – 20 mA RS 232 or RS 485 interface; a minimum of 5 floating alarm contacts for optional assignment; 1 fault relay 1 service relay
Relay rating:	230 V, 500 VA
Voltage supply: optional:	115 V, 60 Hz 230 V, 50 Hz
Power consumption:	100 VA
Dimensions (W x H x D):	23.62 x 19.68 x 15.75 inch (9 HU)
Weight:	approx. 77.16 lbs

Measurable gases

Gas	Formula
Methane	CH ₄
Hydrogen sulphide	H ₂ S
Carbon dioxide	CO ₂
Oxygen	O ₂
Hydrogen	H ₂