

VISIT 04

continuous analysis of
biogas and landfill gas

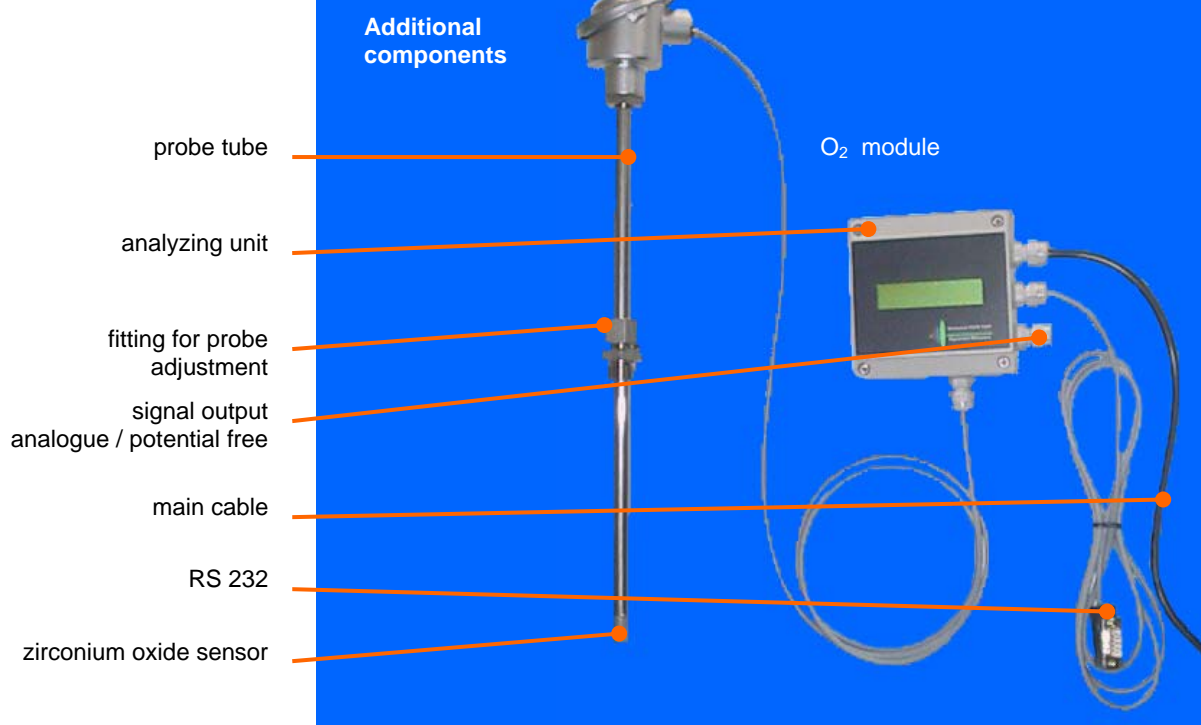
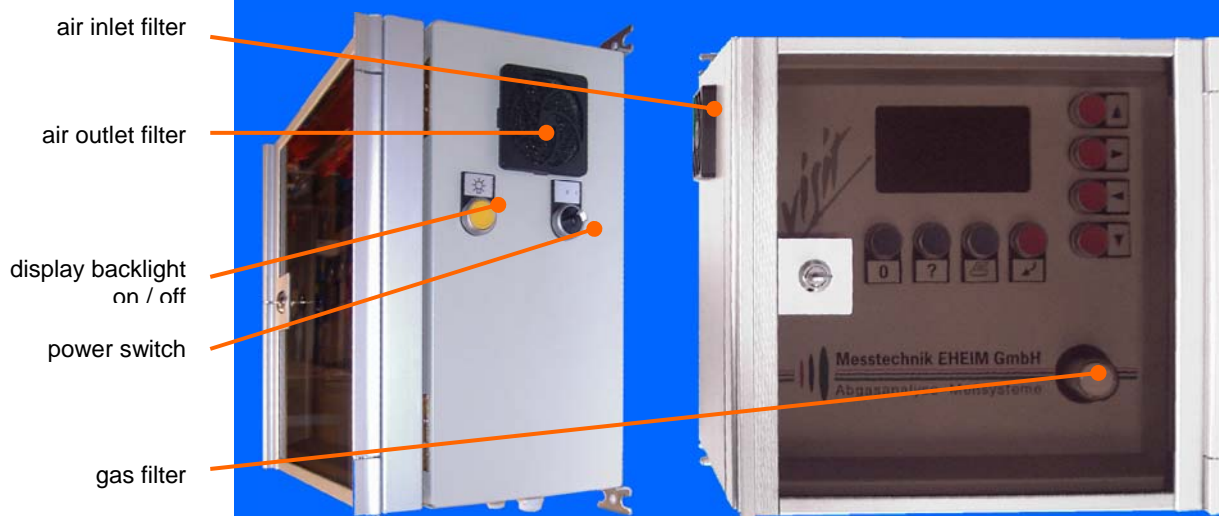
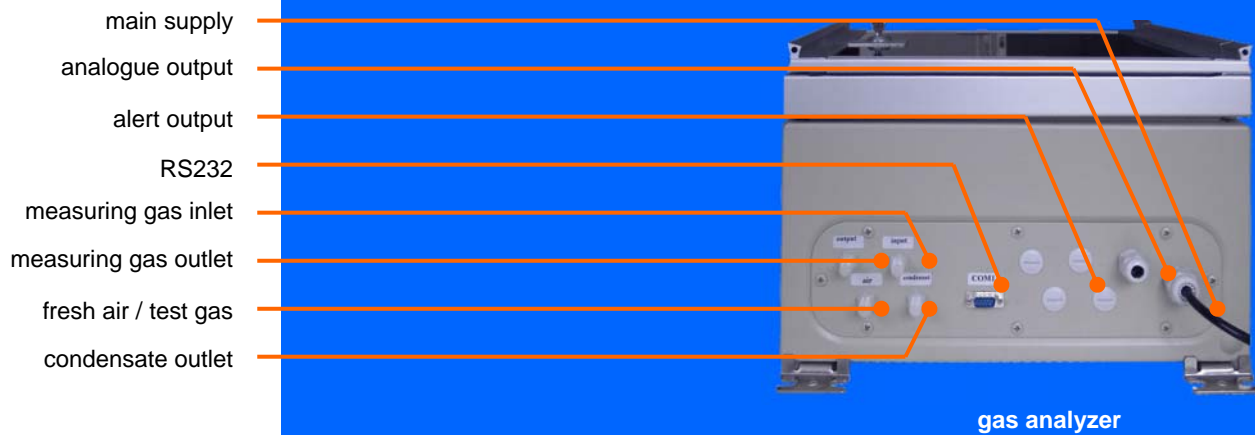
... to provide the best services!



Messtechnik EHEIM GmbH

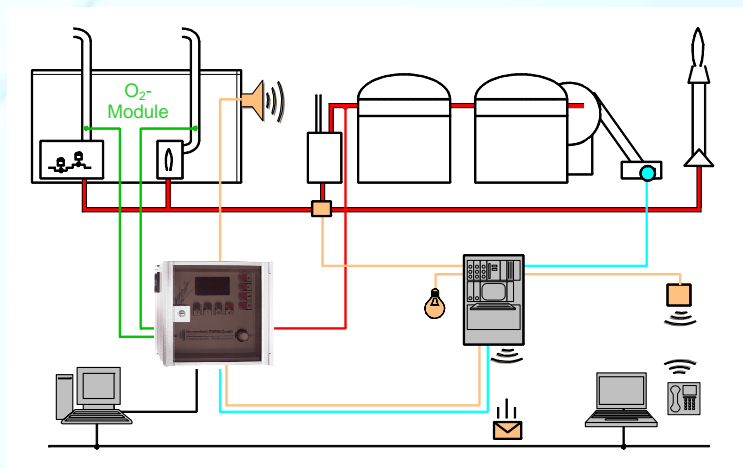
Abgasanalyse-Meßsysteme

VISIT 04



VISIT 04 – the optimum systems solution

VISIT 04 for the management of biogas and landfill gas utilization



The fundamental information for optimum operating management both for gas production and for gas recovery (cogeneration units and burners) are given by the measurement of the raw gas composition (CH_4 , CO_2 , O_2 , CO). Information about H_2S concentration enables the preventive measures to avoid damages in gas fittings, cogeneration units and boilers. CO concentrations indicate faults with respect to the landfill gas generation.

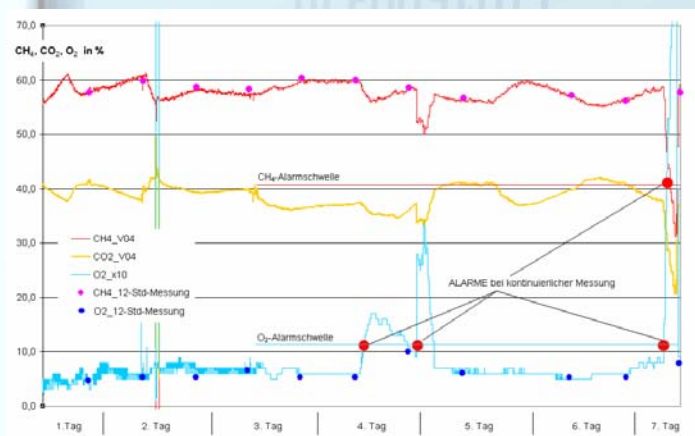
VISIT 04 with O_2 -module enables the alarm indication during abnormal working conditions as a result of a mutated biogas or landfill gas composition. That is the basis for optimization of gas utilization.

The measuring data will be compared with entered limit values by the VISIT controller. Alarms will be signalized at the potential free outputs. Analogue signals will be transferred to the system control of the biogas plant.

This enables intervention into the operational behaviour of the gas consumers (cogeneration units, boilers, etc.):

- The risks of abnormal working conditions will be discovered in time, therefore damages and losses will be avoided.
- Optimal working conditions will be adjusted by automatic control.

VISIT 04 for verification and service of biogas and landfill gas facilities



The knowledge about both the raw gas composition (CH_4 , H_2S , O_2 , CO_2 , CO) and the residue oxygen in the fuel gas enables the diagnostics in case of a operation faults. VISIT 04 is able to record all data (measurements, alerts) continuously by automatic programme mode. The storage interval can be entered. Hourly recording saves the data of one year. The stored data can be read out, evaluated and exported into other software applications by the Win-Data software.



CH_4

CO_2
optional

H_2S
optional

O_2
biogas

CO
optional

VISIT 04

wall mounted control cabinet
up to 5 gas sensors integrated
housing fan
interior heater (optional)
suction pump for measuring gas
gas cooler
exchangeable particle filter
bulkhead fitting for gas inlet, gas outlet, fresh
air inlet and condensate outlet
data interface RS 232
4 analogue outputs 0-20/4-20 mA or 0-10V
4 potential-free outputs (Option)



O_2
flue gas

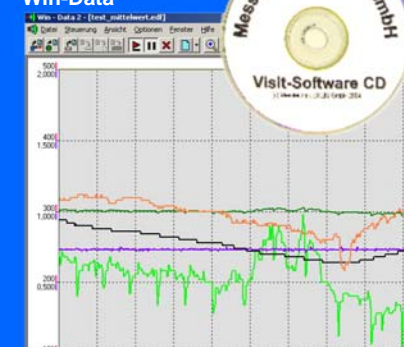
O_2 -module

zirconium oxide sensor
probe tube \varnothing 12 mm, 300 mm long
fitting for probe adjustment $\frac{1}{2}$ ",
2 m cable
data evaluation unit with display
analogue output 0-20 / 4-20 mA, 0-10V
potential-free output

accessories

Teflon hose (gas inlet and gas outlet)
plastic hose (condensate outlet)
fittings straight and angled
fittings for probe adjustment
flame barrier

Win-Data





Characteristics

- self check when starting the device, error display
- suction pump for measuring gas
- short response time for sensors
- high measurement accuracy by temperature compensation
- high-precision measurement of infrared sensors by ambient pressure compensation (opt.)
- 8x30 character display with activating/deactivating of background lighting
- on-line help on display (English and German)
- configurable alerts (fix and floating)
- configurable analogue outputs
- configurable measuring cycle (flushing time, measuring time, standby-time)
- configurable interval of data storage
- configurable continuous data transfer to PC

Range of measurements

value	option	range
CH ₄		0 up to 100 vol%
H ₂ S	X	0 up to 5.000 ppm
O ₂		0 up to 25 vol%
CO ₂	X	0 up to 100 vol%
CO	X	0 up to 10.000 ppm
CO (alternatively)	X	0 up to 10 vol%

Technical data

gas flow rate	1,5 L/min
T ₉₀ - response time	20 sec.
data storage	9500 pieces
data interface	RS 232
case	control cabinet with operator control panel
dimensions	420 x 400 x 265 mm (width x height x depth)
weight	18 kg
power supply	110/250 V, 50-60 Hz, 60 W, 3x1,5mm ² ground wire

Operating condition

adm. ambient temperature	0 up to +45 °C
adm. storage temperature	-20 up to +50 °C
adm. positive pressure at gas inlet	50 mbar (50 hPa)
adm. negative pressure at gas inlet	50 mbar (50 hPa)
adm. positive pressure at gas outlet	1 mbar (1 hPa)
adm. negative pressure at gas outlet	1 mbar (1 hPa)

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