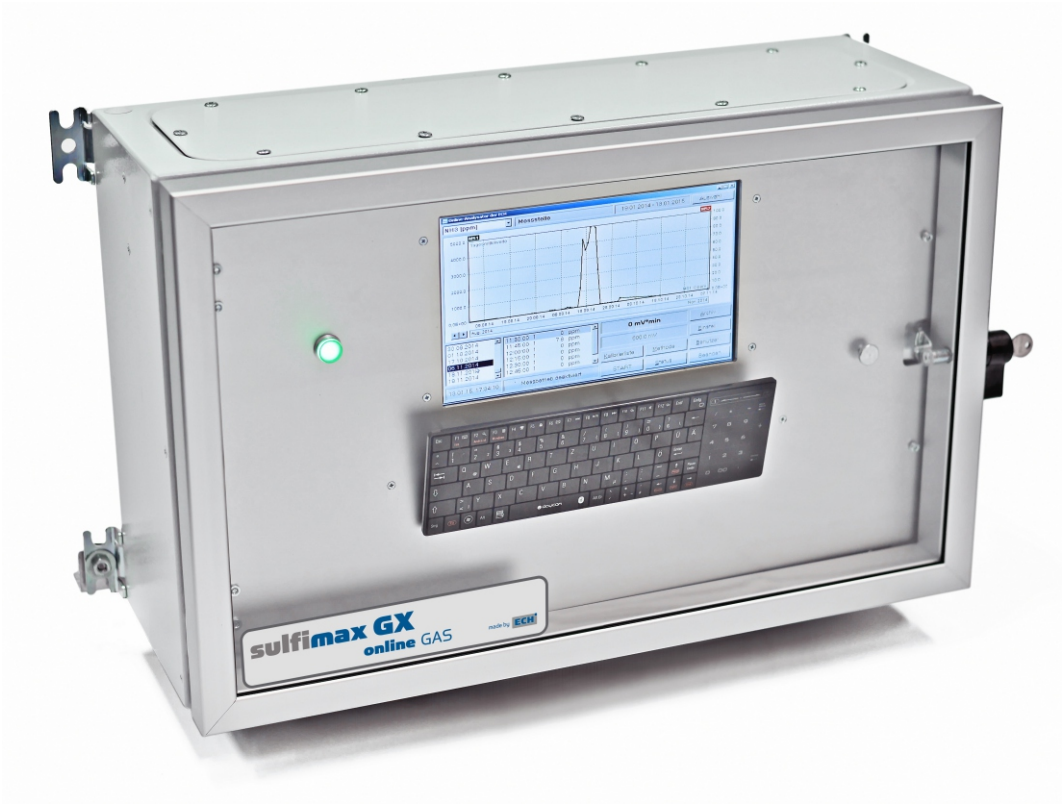
Online determination of H_2S in gases



sulfimax GX online GAS

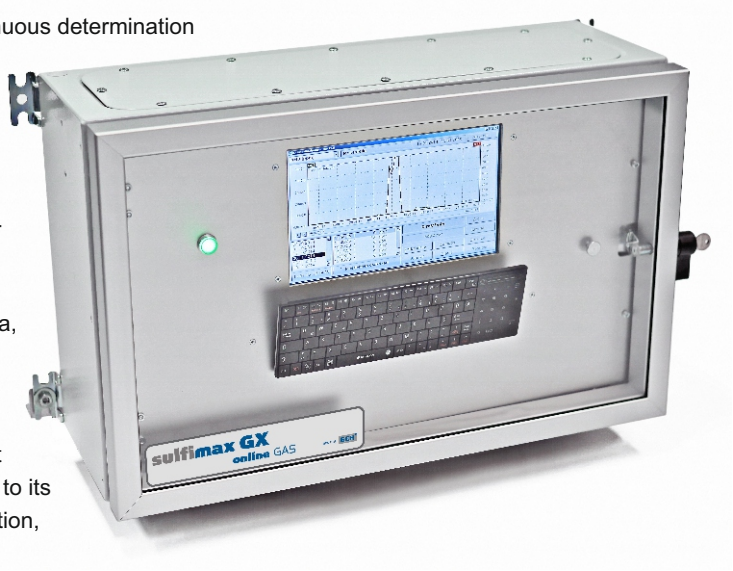
made by ECH

sulfimax GX online GAS

Online H_2S determination in gases

Product description

The **Sulfimax GX Online Gas** was developed for the continuous determination of hydrogen sulphide (H_2S) in gas mixtures.
The system is designed in such a way that both very high concentrations (100 - 20000 ppm) and low contents in the range of the odour threshold (0.1 - 100 ppm) can be measured by means of a built-in dilution stage.
The **Sulfimax GX Online Gas** contains a selective amperometric sensor with gas-selective membranes, diaphragm pumps for gas transport and sample aspiration, and an integrated PC for continuous recording of measurement data, trends and alarm conditions. The measurement results can be transmitted to the control room via digital (alarm) and analogue outputs.
The **Sulfimax GX Online Gas** enables gas analysis without drift phenomena in oxygen-free gases, such as biogas, due to its automatic purging circuits. Due to the gentle mode of operation, the service life of the sensor is considerably extended.
Due to its mode of operation, the Sulfimax GX online Gas can be used as the basis for H_2S-adapted control of enrichment and purification stages. The device is available in the same way for the monitoring of ammonia (NH_3), sulphur dioxide (SO_2) or ozone (O_3).



Sulfimax GX Online Gas - Automatic analyzer for wall mounting

Applications

- Online recording of the current H_2S gas concentration as a basis for H_2S-adapted controls (e. g. pump sump, gravity lines, collection tanks)
- Biogas processes, fermentations
- Environment analysis
- Wastewater analysis
- Landfill leachate monitoring

Areas:

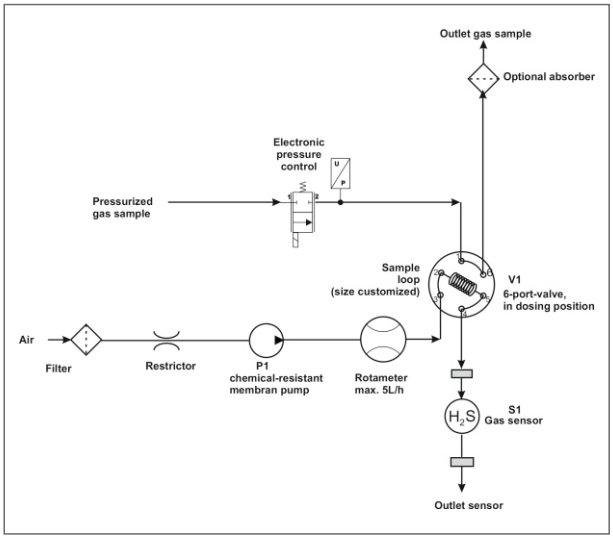
- Municipal wastewater associations
- Industrial sectors
- Biogas plants
- Petroleum processing

Advantages

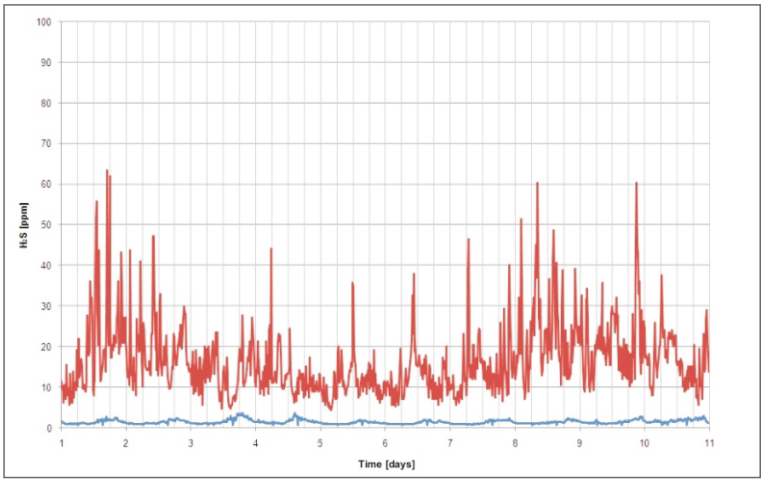
- Fully automated sample dosing
- Hardly any cross-sensitivities due to selective electrochemical sensor
- Output 4 - 20 mA for integration of the H_2S signal into the local control system
- Long sensor life due to intermittent gas path gas path switching
- Active sample aspiration, thus free installation (wall mounting) with up to 100 m distance from the sampling point

Features and Results

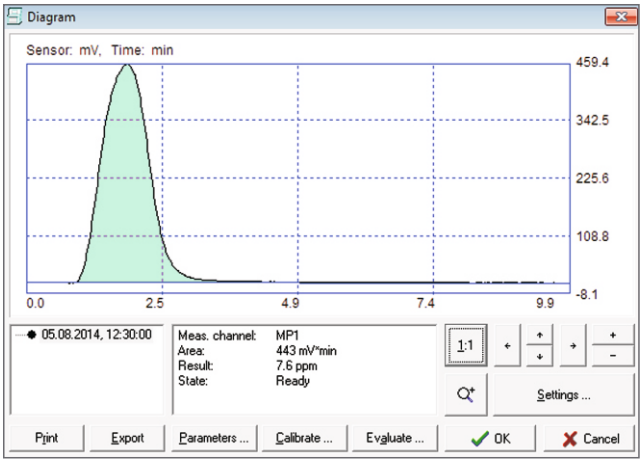
- Continuous H_2S gas analysis (measuring time < 5 min)
- Robust analysis method (drift stability)
- Simple calibration
- Simple, clear software
- Integrated purging steps to ensure a constantly updated sample for analysis
- Also available for measuring ammonia (NH_3), sulphur dioxide (SO_2) or ozone (O_3)



Flow diagram of the analysis system



Determination of H_2S at two sewage collecting tanks before and after a biofilter



Determination of H_2S in gas stream

Biogas plant

Technical specifications

Measuring points:	Max. 2
Sampling:	By suction via a transfer line (up to 100 m)
Sample volume:	0.1 - 100 mL (depending on application)
Sample pressure:	Ambient or pressurized
Typical measuring time:	< 5 min (depending on sample)
Measuring range:	0.1 ppm - 20000 ppm (2 %)
Gas supply:	Internal pump or pressure controller
Alarm:	Dry contact
Signal output:	4 - 20 mA
Power supply:	220 - 230 V, 50 Hz, 2 A
Power input:	100 W
Protection type:	IP 66
Dimensions:	660 x 250 x 400 mm (W x D x H)
Weight:	9 kg

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ECH Elektrochemie Halle GmbH
Otto-Eißfeldt-Str. 8
D-06120 Halle (Saale)
Germany
Tel.: +49 (0) 345 279570-0
Fax: +49 (0) 345 279570-99

ECH Scientific Limited
Building 69, Wrest Park, Silsoe
Bedfordshire, MK45 4HS
United Kingdom
Tel.: **+44 (0) 1525 404747**
Fax: +44 (0) 1525 404848

Email: **info@echscientific.com** • www.ech.de • www.aquamaxkf.com

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