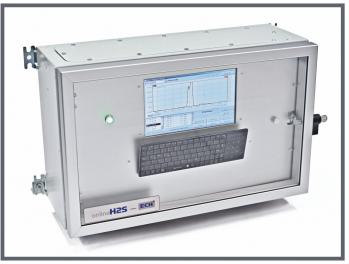
# online H2S Online determination of H<sub>2</sub>S gas

#### **Product description**

The OnlineH2S is used for the continuous quantitative determination of hydrogen sulphide ( $H_2S$ ) in gas mixtures.

The system is designed with an integrated dilution step for measurement of very high concentrations (100 -20000 ppm). Also very low contents in the range of odour treshold (0.1-100 ppm) can be measured.

The OnlineH2S contains a selective amperometric sensor with gas selective membranes, membrane pumps for gas transportation and sample transfer and an integrated PC for continuous recording of measurement data, trends and alarm states. The measurement values can be transmitted via digital (alarm-) and analog outputs into the control room.



Analyzer for online determination of H<sub>2</sub>S in gases

Due to an integrated cleaning system the gas analysis in  $O_2$  free gases (e. g. biogas) is realized without any drift effects. Because of the stress free mode of operation, the sensor lifetime is considerable increased.

The operation principle makes the OnlineH2S ideal as a basis for  $H_2S$  adjusted regulation of enrichment and cleaning steps.

The instrument is available in the same design for monitoring of ammonia gas (NH<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>) or ozone (O<sub>3</sub>).

## Applications

- Online determination of the current H<sub>2</sub>S concentration as basis for adjusted regulations (e.g. pump sump, gravity pipeline, collecting tank)
- Processes of anaerobic digestion, fermentation processes
- Environment analysis
- Wastewater analysis
- Monitoring of landfill leachate

Fields of applications:

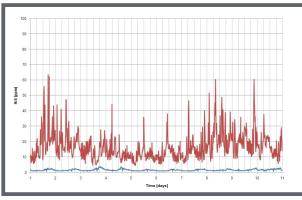
- Municipal association for sewage treatment
- Industrial sectors
- Biogas plants
- Petroleum processing



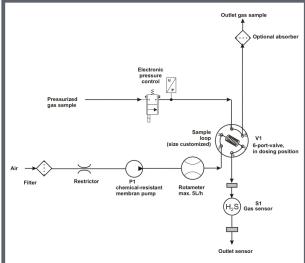
Biogas plant

#### **Advantages**

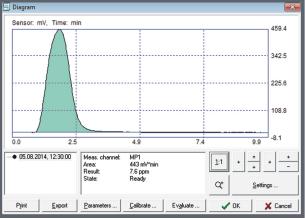
- Continuous H<sub>2</sub>S determination in gases (measurement duration < 5 min)</li>
- Robust method of analysis
- Automatic sample dosing
- Easy calibration steps
- Selective electrochemical sensor with no cross-sensitivity
- Software easy-to-use
- Output value of H<sub>2</sub>S as a 4 20 mA signal for integration into the local control system
- Long lifetime of the sensors due to the intermittent gas switching
- Integrated rinsing steps for measuring of continually fresh samples
- Active sample intake of the gas up to a distance of 100 m variable setup of device (wall mounted)
- Also available for determination of ammonia gas (NH<sub>3</sub>), sulphur dioxide (SO<sub>2</sub>) or ozone (O<sub>3</sub>)



Determination of  $\mathrm{H_{z}S}$  at two sewage collecting tanks before and after a biofilter







### We are here for you



ECH Elektrochemie Halle GmbH Otto-Eissfeldt-Str. 8 D-06120 Halle (Saale) Germany Tel.: +49 345 279570-0 Fax: +49 345 279570-99 E-mail: info@ech.de Website: www.ech.de

# Specifications

Measuring points:

Sample transfer over an up to 100 m long distance

Max. 2

Dosing 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 - 20000 ppm (2 %)
Gas supply:	Internal pump or pressure controller
Alarm:	Dry contact
Interface:	4 - 20 mA output
Power supply:	220 - 230 V, 50 Hz, 2 A
Power input:	100 W
Protection type:	IP66
Dimensions:	660 x 250 x 400 mm (W x D x H)
Weight of the device:	9 kg

Determination of H<sub>2</sub>S in gas stream