

Hydrogen sulphide in liquids and gases



Conform to Standard DIN 38405-27: 2017-10

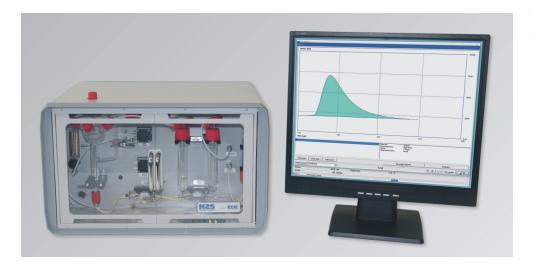


Lab

Laboratory Version



Description



The H2S ANALYZER Lab fulfils the requirements of the standard DIN 38405-27:2017-10: Determination of sulphide by gas extraction method (D 27).

The H2S ANALYZER Lab measures hydrogen sulphide in liquids and gases in only one device.

The determination of total volatile sulphides in aqueous solutions and other liquid samples works through high efficient gas extraction linked with a selective detection method. Thereby, interferences from the sample matrix will be minimized. The analysis is performed fast and with high efficiency. Sample preparation is not required, therefore the reproducibility and the accuracy enhance additionally. The dosing of the sample can either happen manually using syringe or optionally using an automated autosampler.

For extension of application the device can be upgraded with an additional Head Space Module. It is suitable for solid and pasty samples.

Applications

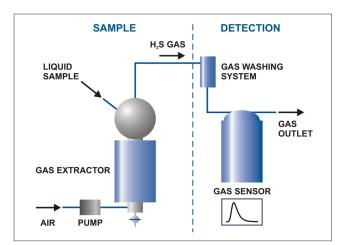
- Water, drinking water, surface water
- Municipal wastewater
- Industrial wastewater
- Monitoring of landfill-leachate
- Gas analysis (e. g. LNG, LPG)
- H₂S in hydrocarbon mixtures
- Investigation of technical and pharmaceutical products (e. g. storage stability)
- Quality management



H2S ANALYZER Lab with autosampler for liquids

Principle

- Dosing of the sample via syringe into the gas extracting vessel
- Fast release of the H₂S out of the sample after automatic addition of the acid
- Automatic transfer of the H₂S onto the electrochemical sensor
- Automatic integration of the measurement graph
- Results in parts per million (ppm), milligrams (mg/L) or, if requested, in customer specific units by using a formula generator



Functional scheme

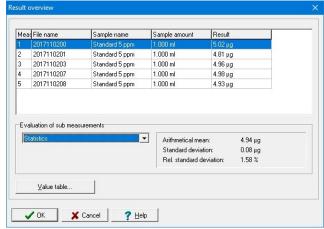


Table of results of a multi measurement

Extension module

Headspace Module for solid samples

The determination of volatile hydrogen sulphide (H₂S) in solid and pasty samples is easily feasible by using a additional manual Headspace Module coupled with the selective H2S ANALYZER Lab.

Solid samples are measured by isothermal heating in a closed headspace vial. The temperature is adjustable depending on the type of sample. Even very low H_2S concentrations are detectable. No sample preparation is necessary.

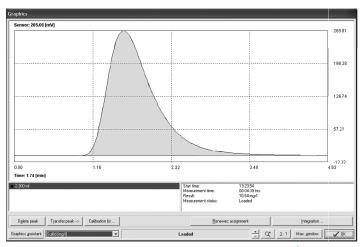
As a result of the rapid determination of H_2S , new opportunities are opened. Simple handling of the compact device allows the usage not only for laboratory staff but also for everyone.



H2S ANALYZER Lab with Headspace Module

Advantages

- Complete separation of H₂S from the sample
- Analysis of the original sample
- No sample preparation
- Simple calibration
- Software: simple, clear, intuitive
- Dosing manually or optional fully automatic
- Definition of own methods for device control
- Minimized cross sensitivity through the indirect method
- Gas extracting technique for a fast release and separation of H₂S from the sample
- Robust and fast analysis



Typical measurement - automatic peak analysis / interpretation

Specifications

Measuring range: 0.01 ... 10,000 ppm

(dependent on sample volume)
Resolution: 0.1 µg abs., output signal linear

Typical duration: 1 ... 15 min (dependent on the sample)

Sample volume: $0.01 \dots 20 \text{ mL}$ Gas flow: Up to 50 L/h

Power supply: 230 V/50 Hz, 115 V/60 Hz

Power input: 30 W

Dimensions: 480 x 390 x 290 mm (W x D x H)

Weight: 11 kg

Data connection: RS 232 / USB (with converter)
Device control: PC software (PC not included in the scope of delivery)



Compact version H2S ANALYZER Cubi for on-site use

We are here for you



Headquarters in Germany

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

Sales and Service Center in UK

ECH Scientific Limited Building 69, Wrest Park, Silsoe Bedfordshire, MK45 4HS United Kingdom

Tel.: +44 1525 404747 Fax: +44 1525 404848

E-mail: info@ech.de Website: www.ech.de



