

# Hydrogen sulphide in liquids and gases



Conform to Standard DIN 38405-27: 2017-10

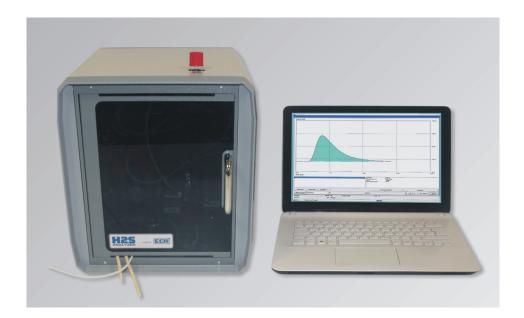


Cubi

**Compact Version** 



#### **Description**



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

The H2S ANALYZER Cubi 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 is carried out manually with a syringe.

Thanks to its compact design the H2S ANALYZER Cubi is suitable also for on-site use. For extension of application the device can be upgraded with an additional Head Space Module. It is suitable for solid and pasty samples.

## **Applications**

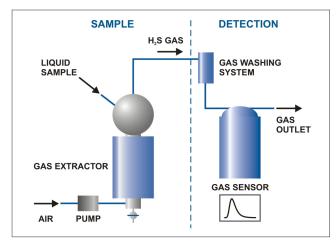
- Water, drinking water, surface water
- Municipal wastewater
- Industrial wastewater
- Monitoring of landfill-leachate
- Gas analysis (e. g. LNG, LPG)
- H<sub>2</sub>S in hydrocarbon mixtures
- Investigation of technical and pharmaceutical products (e. g. storage stability)
- Quality management



Interior view of H2S ANALYZER Cubi

## **Principle**

- Dosing of the sample via syringe in the gas extracting vessel
- Fast release of the H<sub>2</sub>S out of the sample after automatic addition of the acid
- Automatic transfer of the H<sub>2</sub>S 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

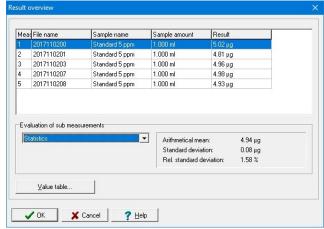


Table of results of a multi measurement

#### **Extension module**

#### Headspace Module for solid samples

The determination of volatile hydrogen sulphide (H<sub>2</sub>S) in solid and pasty samples is easily feasible by using a additional manual Headspace Module coupled with the selective H2S ANALYZER Cubi.

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.

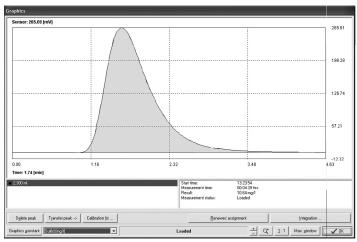
As a result of the rapid determination of  $H_2S$ , new opportunities are opened. Simple handling of the compact device allows the usage not only for laboratory staff but also for everyone.



H2S ANALYZER Cubi with Headspace Module

## **Advantages**

- Complete separation of H<sub>2</sub>S from the sample
- Analysis of the original sample
- No sample preparation
- Simple calibration
- Software: simple, clear, intuitive
- Dosing manually
- Definition of own methods for device control
- Minimized cross sensitivity through the indirect method
- Gas extracting technique for a fast release and separation of H<sub>2</sub>S 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 ... 20 mL Gas flow: Up to 50 L/h

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

Power input: 30 W

Dimensions: 260 x 310 x 300 mm (W x D x H)

Weight: 8 kg

Data connection: RS 232 / USB (with converter)
Device control: PC software (PC not included

in the scope of delivery)



Laboratory Version H2S ANALYZER Lab with autosampler

## We are here for you



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