

# SulfiLogger

# Proactive & data-driven H<sub>2</sub>S management

### Innovative sensor system for continuous H<sub>2</sub>S monitoring in rough environments

H₂S is a challenge in many industries where the toxic gas causes odor, corrosion, and worker safety problems. Although these problems can be mitigated, a lack of reliable data prevents cost-effective optimizations.

The new SulfiLogger™ H<sub>2</sub>S sensor provides the insights that are needed for efficient odor and corrosion control by measuring H<sub>2</sub>S continuously and without interruptions in rough environments.

These insights enable a proactive and data-driven approach to H<sub>2</sub>S management for superior odor and corrosion control, cost savings, improved worker safety, and better environmental compliance.



Analyte	H <sub>2</sub> S
Data frequency	Continuous
Data output options	<ul><li>Cloud data</li><li>4-20 mA (SCADA)</li><li>RS-232</li></ul>
Power input options	<ul><li> 4-20 mA loop power</li><li> DC power</li><li> Batteries</li></ul>
Warranty	1 year

#### SulfiLogger™ X1 sensor:







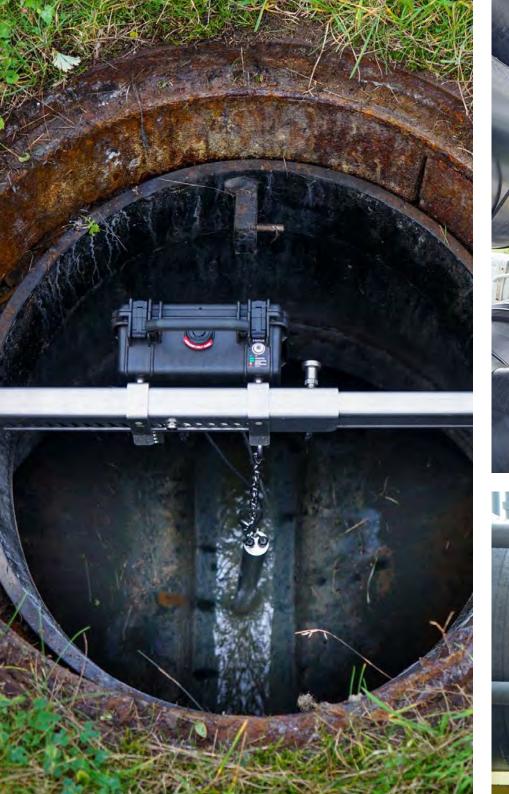






- ETL listed (cETLus marked) to Canadian and US General Safety and Hazardous (Class I, Div. 1) Locations.
- ATEX, UKEX, and IECEx approved for use in Zone 0 Hazardous Areas (Ex II 1G Ex ia IIC T4 Ga).

Read more







# Get superior insights

## Measure H<sub>2</sub>S anywhere...

With the SulfiLogger™ H<sub>2</sub>S sensor, you can measure H<sub>2</sub>S anywhere you want.

Designed specifically for use in rough environments, the sensor operates under oxygen-free conditions, in up to 100% humidity, and it measures not only gas-phase H<sub>2</sub>S in air and gases but also dissolved H<sub>2</sub>S in wastewater.

You can deploy the SulfiLogger™ H<sub>2</sub>S sensor virtually anywhere you want - and therefore, you can get exactly the data you are looking for.



### **Wastewater**

Measure H<sub>2</sub>S directly in raw and untreated wastewater



### Air

Measure H<sub>2</sub>S in the air in the headspace above wastewater



### Gases

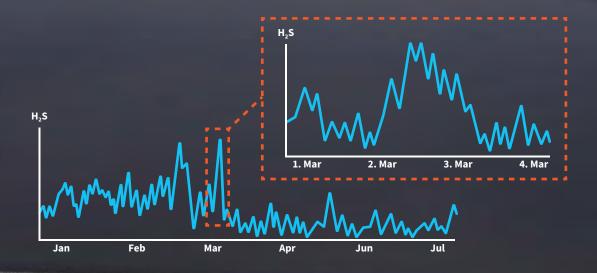
Measure H<sub>2</sub>S in wet and unprocessed biogas and natural gas

## ...and without interruptions

The SulfiLogger™ H<sub>2</sub>S sensor measures hydrogen sulfide without interruptions; continuously and long-term.

With the SulfiLogger™ H<sub>2</sub>S sensor, you get a dynamic overview of the development in H<sub>2</sub>S that reveal not only patterns on a daily, weekly, and seasonal scale, but also unpredictable spikes in H<sub>2</sub>S levels.

It is the unique combination of the abilities to measure **anywhere** and **without interruptions** that are the key to the SulfiLogger™ H<sub>2</sub>S sensor's superior insights.



# Follow the development in H<sub>2</sub>S

## Access cloud data on any device

In the SulfiLogger™ WebData cloud service, you can follow the development in H₂S levels on any device and at any time.

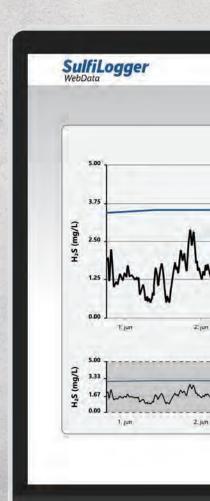
Among other things, you can...

- Get a color-coded overview of all measurement sites
- ✓ View and compare interactive graphs
- Export data for further analysis
- Integrate data into other systems

The SulfiLogger™ H<sub>2</sub>S sensor's data are transmitted to SulfiLogger™ WebData via the battery-powered PowerCom Box accessory.

## Integrate SCADA/PLC data

For real-time data in SCADA or PLC systems, the SulfiLogger™ H<sub>2</sub>S sensor outputs an analogue 4-20 mA and digital RS-232 signal that easily integrates into SCADA or PLC systems.





## **Make smarter decisions**

The SulfiLogger™ H<sub>2</sub>S sensor's superior insights enable you to make smarter decisions and adopt a proactive and data-driven approach to odor and corrosion control.



### Benefits include...

Improved odor & corrosion control	Locate and solve H <sub>2</sub> S problems at the source and improve the efficiency of H <sub>2</sub> S mitigation initiatives.
OpEx savings	Cost-optimize chemical dosing stations to prevent excessive consumption of chemicals for H <sub>2</sub> S control.
<b>⊘</b> CapEx savings	Improve the effectiveness of H₂S control processes to minimize corrosion and extend the lifespan of assets.
Improved worker safety	Permanently monitor critical hotspots to add an extra layer of worker safety.
Improved environmen- tal compliance	Reduce the consumption of unspent scavenger chemicals to improve environmental compliance.

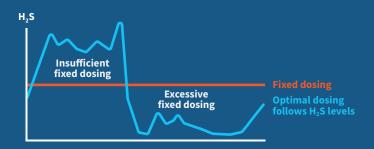


### **Investigate & monitor**

Conduct short-term measurement campaigns to locate the source of problems, or monitor critical hotspots permanently to get a full and dynamic overview.

## **Control & optimize**

Control chemical dosing stations or other desulphurization processes to reduce costs, minimize odor & corrosion problems, and improve environmental compliance.





### **Data-driven decisions**

Measure H<sub>2</sub>S before, during and after major infrastructure projects to account for H<sub>2</sub>S as a vital parameter and make data-driven decisions to extend the lifespan of valuable assets.

**INDUSTRY FOCUS** 

## Wastewater

# Use liquid-phase H<sub>2</sub>S measurements to reveal new insights in sewer systems and at wastewater treatment plants

With the SulfiLogger™ H<sub>2</sub>S sensor, you can continuously measure dissolved H<sub>2</sub>S directly in raw wastewater. Liquid-phase measurements reveal new and better insights into the full downstream sulfide potential, whereas measurements in the degassed air rely on many factors including local turbulence and ventilation conditions.

The sensor is designed for use in the entire sewer network and at treatment plants, and the liquid-phase measurements are ideal for many applications including permanent monitoring and chemical dosing control in municipal & industrial wastewater, processed water, pulp & paper, and other industries.

#### Benefits include...

- Cost savings on chemicals
- Extended lifespan of assets
- Improved worker safety



### Measure H<sub>2</sub>S anywhere...

in sewers and at wastewater treatment plants

- Wet wells, basins, and discharge wells
- Manholes and treatment plant inlets





#### **INDUSTRY FOCUS**

## Oil & Gas

# Optimized scavenger dosing and corrosion control with real-time H<sub>2</sub>S measurements in wet natural gas

H<sub>2</sub>S is a major challenge in oil & gas processing where scavenger chemical dosing and unplanned downtime are costly affairs.

The SulfiLogger™ H<sub>2</sub>S sensor enables costoptimized desulphurization and greatly improved corrosion control by reliably measuring H<sub>2</sub>S in unprocessed natural gas. The sensor is built for long-term deployment in extreme environments, and it continuously measures H<sub>2</sub>S after the first-stage oil and gas separator or immediately before or after scavenger injection or other desulphurization processes.

#### Benefits include...

- Cost savings on scavenger chemicals
- ✓ Improved worker safety (HSE)
- No need for manual sampling

### Measure H₂S anywhere...

in on-shore & off-shore oil & gas processing facilities

- Immediately after the first-stage oil & gas separator
- Immediately before or after desulphurization equipment



**INDUSTRY FOCUS** 

# Biogas

# Cost-optimized desulphurization processes using real-time measurements of H<sub>2</sub>S in biogas

H<sub>2</sub>S is a problematic and corrosive byproduct of biogas processing that cause plant assets to deteriorate prematurely.

The SulfiLogger™ H<sub>2</sub>S sensor is an ideal tool in biogas processing because it measures H<sub>2</sub>S without interruptions in wet and unprocessed biogas exactly where you want.

As the sensor measures virtually anywhere in the production process, it provides the data needed to perform vital cost optimizations for single or multi-stage desulphurization processes.

#### Benefits include...

- Cost savings on chemicals
- **⊘** Improved worker safety
- Optimized performance of active carbon filters



## Measure H₂S anywhere... in biogas plants

- Immediately after the anaerobic digester
- Immediately before or after desulphurization equipment



# **Driven by innovation**

The SulfiLogger™ H<sub>2</sub>S sensor is developed and manufactured by SulfiLogger A/S in Denmark. We have more than 20 years of experience with the development of cutting-edge sensor solutions and are driven by innovation, curiosity, sustainability, and impeccable quality control standards.

We have a vision for a brighter future without odor and corrosion issues, and we developed the SulfiLogger™ H₂S sensor to equip utility providers with the reliable data that we believe are the key to achieving sustainable, efficient, and cost-effective H₂S control.

Read more

sulfilogger.com

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