



TETHYS Instruments



GAS ANALYSER FTUV

H2S

DESCRIPTION

The Model FTUV-H2S gas analyser is an hydrogen sulfide gas monitoring system specifically designed for wastewater treatment plant, H2Sremoval process and calibration gas manufacturer.

The analyser is mounted in a 19" rack.
The front panel incorporates a flow meter

to check the circulation of the analysed gas or zero gas as well as a large LCD display touch screen.

This tactile screen displays the analyser results and provides menus and messages allowing the user to easily control the operation of the analyser.

MEASUREMENT PRINCIPLE

The measurement principle is based on the UV absorption spectrum of the hydrogen sulfide (H2S) in the UV range.

The UV ligth is generated by a plused xenon lamp guaranted for 10⁹ flashes, giving a lifetime of 10 years with continuous operation.

The H2S is measured directly in a quartz gas flow cell without any converter, suppressing any maintenance or parts replacement.

There is no risk of interference with CO2, CH4 or H2O as theses gases do not have UV absorption.

Times to times, an auto-zero on an external zero air is performed to guaranty accurate measurements.

The sensitivity is determined by the optical path length of the quartz flow cell, which remains perfectly constant and thereby eliminates periodic recalibration of the analyser.

A calibration verification (or recalibration under exceptional circumstances) may have to be conducted but only over a period of several months due to the inherent stability of the measurement system.

SPECIFICATIONS

Sampling gas: Pressure: min 0 bar (0 PSI), max 0.2 bar (3 PSI)

Flow: 1 to 5 litre/min(0.25 to 1.5 GPM)

Temperature: min 0 °C (32 °F) max 60 °C (140 °F), heated version at 150 °C (300 °F)

Fittings: Swagelok, stainless steel 316 for tube OD 1/4"

Zero gas: Pressure: min 0 bar (0 PSI), max 0.2 bar (3 PSI)

Flow: 1 to 5 litre/min(0.25 to 1.5 GPM)

Temperature: min 0 °C (32 °F), max 60 °C (140 °F) Fittings: Swagelok, stainless steel 316 for tube OD ½"

Range: 0 to 500 ppm of H2S, maxi 1500 ppm (other ranges on request)

Accuracy: +/- 0.5 ppm or +/- 2 % of reading, whichever is greater

Measurement rate: 5 seconds to 1 hour Data storage: 4000 measurements

Communication: RS485 with MODBUS, RS-232 with Windows Hyperterminal

Outputs: 4-20 mA, isolated, 500 Ohm max, screw terminal

4 alarms or default relay contacts, screw terminal, 2A max 110V to 240V (50-60 Hz) selectable by internal switch, 30 VA

Ambient temperature: 0 °C (32 °F) to 60 °C (140 °F)

Dimensions: Rack 19" 3U (482.6 mm x 133 mm x 430 mm)

Weight: < 15 kg

Power supply:

All specifications are subject to change without notice. Some characteristics refer to optional parts



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