



# GAS-1055

# Hydrogen Sulfide Analyzer

The GAS-1055 Hydrogen Sulfide ( $H_2$ S) Analyzer from Met One Instruments Powered by Acoem delivers precise and reliable performance at an excellent value. It uses proven UV fluorescent radiation technology and an internal thermal catalytic converter to measure  $H_2$ S in ambient air (LDL < 0.3 ppb, range 0-2 ppm).

H<sub>2</sub>S is measured by passing the sample through an SO<sub>2</sub> scrubber which removes any SO<sub>2</sub>, the H<sub>2</sub>S is then converted to SO<sub>2</sub> using the internal H<sub>2</sub>S converter and measured using the pulsed fluorescence technique.

## **Approvals**

Based on GAS-1050 analyzer that has the following approvals:

· US EPA approval (EQSA-0809-188)

#### **Benefits**

The Met One range of gas analyzers have been designed using experience and knowledge gained from operating large air quality monitoring networks for more than 40 years. The result, instruments that integrate seamlessly into continuous monitoring networks.

- Reliable performance backed up by a two-year warranty.
- Instant display of operational status using illuminated traffic lights on the front panel.
- Minimizes time spent on site performing maintenance through superior remote instrument control, diagnostic viewing, and calibration.
- Comprehensive data logging and remote viewing of over 200 operational parameters.
- Easier setup through an intuitive menu system with "Quick Menu", advanced GUI, and a large keypad with tactile keys.
- Removable flash memory stores 10 years of data, including up to 12 individual parameters and event logs. Operational parameters can also be transferred to memory for easy retrieval.
- Latest firmware updates can easily be installed using the USB flash memory drive.

- Programming, viewing, downloading, and emailing of data is made even simpler using optional Bluetooth connectivity combined with Android App.
- Enhanced operator safety through the use of 12 VDC internal voltages.
- Reduced cost of spare parts, accessories, and consumable items through extensive use of standard components across the Met One analyzer range.
- Rack slide design makes accessing internal components and removing the analyzer from a rack cabinet easy.
- AQMS power usage power usage can be reduced due to the instrument's low power demand and its ability to operate over a wide temperature range.
- Built in digital display shows current readings and has the ability to track and chart these values on a graphical trend display.



# **Specifications**

Ranges:  $H_2S: 0 - 2 \text{ ppm } (SO_2 < 500 \text{ PPB})$ 

Concentration units: User selectable mg/m³, µg/ m³, ppm, ppb, ppt

Noise: < 0.15 ppb 0.0 to > 20000 Mm<sup>-1</sup>

Lower detectable limit: < 0.3 ppb or 0.2 % of concentration whichever is greater

Linearity: < 1 % of full scale

Precision: 0.5 ppb

Zero drift: 24 hours: < 0.5 ppb 7 days: < 0.5 ppb

Span drift: 7 days: < 0.5 % of reading

Response time: 60 seconds to 95 %

STP reference: 0 °C, 20 °C, 25 °C at 101.3 kPa

Sample flow rate: 725 cc/min
Temperature range: 0 - 40 °C

Power: 99 - 132 VAC, 198 - 264 VAC, 47 - 63 Hz

**Dimensions:** 429 x 175 x 638 mm

Rack Spacing: 3.5 RU
Weight 19 kg

#### Communication

- · USB port (digital communication).
- TCP/IP Ethernet network connection.
- · Bluetooth (optional\*, digital communication via Android App).
- RS232 Port 1: Digital communication.
- · RS232 Port 2: Multidrop port.
- Protocols: Modbus RTU/TCP, Bavarian, EC9800, Advanced.

\*Optional Bluetooth connectivity combined with Android App makes it even easier to program, maintain, download, and email data without touching the instrument.

## Inputs / outputs

#### 25 pin I/O port

- Menu selectable current or voltage output
  0 20 mA, 4 20 mA, or 0 5 VDC (opt 0 10 VDC).
- · Menu selectable offset of 0 %, 5 % or 10 %.
- Auto-ranging from 0 50 ppb to 0 20 ppm (between 2 user specified full scale values).
- $\cdot$  3 scalable analog inputs, 0 5 v, 160  $\mu$ V resolution.
- · 8 logic level digital status inputs / 8 open collector digital outputs.

# **Data logging**

Removable USB flash memory drive that stores data in the following formats:

- Instantaneous data from: 1, 3, 5, 10, 30, or 60 minute intervals and 2, 5, 10, 30 seconds.
- Average data from: 1, 3, 5, 10, 15, 30 minutes,1, 4, 8, 12, or 24 hours.
- Data storage of 10 years of 12 parameters,1 minute data on 8 Gb memory.

# **Options & accessories**

- External AC powered pump (capable of operating 3 analyzers, excluding  $NO_x$ ).
- · Dual filter (particulate).
- · Rack slide kit.
- · Bluetooth.
- · High pressure zero/span valves.
- · SO<sub>o</sub> Scrubber.
- Printed User Manual (digital copy of User Manual supplied on USB drive with analyzer).
- Internal long life, low power, maintenance-free pump (max 6 watts).

