

## **MODEL 3000RS**



The AMI model 3000RS portable analyzer is the industry standard analyzer for spot checking and trouble-shooting trace hydrogen sulfide in gas systems.

- Trace hydrogen sulfide measurement from 0.1ppm to 200ppm (2000ppm optional)
- Rugged, small, portable unit
- Complete flow control provided
- Single quick-disconnect sample connection
- · Patented cell block provides purge capability
- Logs hydrogen sulfide readings, temperature and battery voltage for subsequent recovery
- Up to 350 hour battery life
- Instantly replaceable sensor, no tools required
- Approved by CSA International to UL and CSA standards as meeting requirements for Class 1, Div. 1, Groups B,C,D with a flammable gas sample.

Hydrogen sulfide is a "sticky" gas – it sticks to the surface of all the tubing and sample components. The 3000RS minimizes the length of the sample plumbing by making use of the AMI patented cell block principle, modified for use with the H2S sensor.

The analyzer can be set up to monitor a sample while logging the readings so that they can be examined later, using the "datalog" capability built in. When enabled it will log the hydrogen sulfide readings every minute, as well as the temperature and battery voltage. It also tracks the calibration history and the sensor usage.

It responds primarily to hydrogen sulfide. It has minimal response to other electrochemically active gases such as carbon monoxide and hydrogen, but it should not be used if those gases are a significant percentage of the background gas.

The AMI model 3000RS is built tough with a welded steel case, and a special version of our patented cell block to provide the sample handling required. All the sample handling components are directly mounted on or in the block, with connections made via drilled passages. Built into it is a needle valve so that flow can be adjusted. As usual with AMI analyzers the sensor itself is immediately accessible behind the front panel and can be replaced simply and without needing any tools.

This analyzer is intrinsically safe and has been formally approved by CSA International to UL and CSA standards as meeting requirements for Class 1, Div. 1, Groups B,C,D with a flammable gas sample. It is battery powered with up to 350 hours of life, and it contains a data logger so that it can be left monitoring a gas system for several days in order to catch intermittent hydrogen sulfide spikes. The range over which it logs can be adjusted for best sensitivity. When completed, simply plug it into a PC through the USB port and use the AMI software to display the data.

## **FEATURES**

- Portable H2S analyzer
- 4 user selectable output ranges
- 3 ½ digit LCD
- · RFI protected
- 0-1VDC analog output
- Power requirements: 115/230VAC for 12VDC battery charger
- Low minimum detection limit
- · Excellent repeatability
- Fast upscale/downscale response times
- Patented Cellblock Technology allows for all components such as: needle valve, flow meter, and compression fittings to be an integral part of the cellblock, and provides a more compact size, faster response times and front panel sensor access without the need for tools.
- Approved by CSA International to UL and CSA standards as meeting requirements for Class 1, Div. 1, Groups B,C,D with a flammable gas sample.
- 2 year warranty for analyzer parts and labor
- 1 year sensor warranty, life expectancy 1-2 years
- USB communication for advanced features\*
- Data logger with up to 10 days of 1 minute interval capacity\*
- Datalog captures short term peaks of up to ten times the range selected\*
- Logs calibration history\*
- Logs power status\*
- Logs sensor oxygen exposure\*
- Sensor life indication\*
- \*Require, Optional AMI User Interface Software

## **SPECIFICATIONS**

- 4 user selectable output ranges: 0-10ppm, 0-50ppm, 0-100ppm, 0-200ppm
- Optional Ranges: 0-500ppm, 0-1000ppm, 0-2000ppm.
- Digital display: 3 ½ digit LCD. Reads full scale from 0.00ppm to 100.0ppm independently of output range selection
- Analog output signal: 0-1VDC represents the output range selected: 0-10ppm, 0-50ppm, 0-100ppm, etc.
- Data logger: Logs data for 15 days @ 1 minute intervals, 30 days @ 2 minute intervals, etc. Represents the output range selected: 0-10ppm, 0-50ppm, 0-100ppm, etc.
- Power requirements: 115/230VAC for 12VDC battery charger.
- Rechargeable NiCad batteries: 350 hours continuous operation
- Minimum detection: 50ppb of H2S
- Repeatability: +/- 1% of range or +/- 0.2ppm of H2S,whichever is greater
- Operating temperature range: 25 to 115° F
- Diurnal temperature specification: < +/- 3 % of scale over temperature range
- 90% full scale response times for specified range: 0-100ppm
  120 seconds @ 1.5SCF 0-2000ppm < 120 seconds @</li>
  1.5SCFH
- Response to Methyl Mercaptan: 40% of actual concentration
- Response to Sulfur Dioxide: 18% of actual concentration
- Approved by CSA International to UL and CSA standards as meeting requirements for Class 1, Div. 1, Groups B,C,D with a flammable gas sample.
- Inlet gas pressure: 0.5 to 150psig
- Gas connections: ¼"/quick disconnect 316 S.S. compression fitting
- Wetted parts: 316 S.S. fittings, electroless nickel plated cellblock, gold plated contacts, acrylic flow meter and Viton O-rings
- Portable dimensions: 4.5"W x 9.5"H x 4.5"D
- · Weight: 5 lbs.

## **OPTIONS**

- Protective carrying case for the analyzer plus sample tubing etc
- Flexible, microbore sample tubing
- · Cigarette lighter charging adapter
- · USB cable with AMI User Interface Software