



Advanced Micro Instruments, Inc.

www.amio2.com Phone: 714.848.5533

MODEL 3000RS

The **AMI Model 3000RS** Portable Trace Hydrogen Sulfide (H_2S) analyzer provides an impressive low cost, accurate, rugged solution for measuring H_2S on a portable basis. Previously, this type of accuracy and reliability has not been available in such a compact portable package.

We have outfitted our portable analyzer with a comprehensive state-of-the-art electronics and complete sample handling package using our patent pending cell block technology. The front panel user interface is very simple and intuitive for ease of operation. An RS-232 connector is easily accessible on the rear of the unit when you desire to quickly download data from the built-in data logger. This allows you to leave this unit at a remote site for several days logging data to capture those potentially rare intermittent H_2S spikes that are otherwise impossible to see. The data is automatically graphed and time stamped for you after downloading.

Standard features include:

- State-of-the-art microprocessor based electronics.
- High-resolution single range LCD
- Data logger: logs data for 15 days @ 1min intervals, 30 days @ 2min intervals, etc.
- 0-1VDC analog output.
- 3 user-selectable analog output ranges: 0-10ppm, 0-50ppm, 0- 100ppm
Optional ranges: 0-500ppm, 1000ppm, 2000ppm
- Complete security feature: front panel settings will not respond to tampering if the security feature has been initiated via laptop computer.
- Rechargeable NiCad batteries: operates for 350 hours continuously.
- Low Battery indicator
- Built in trouble-shooting diagnostics
- Cal Factor - determines remaining H_2S sensor life



AMI's unique patent pending cellblock begins with a single compact metallic block that undergoes a complex machining process, followed with corrosion-resistant nickel plating. The block contains a series of drilled intersecting gas passages and mounted directly on it are a custom designed flow control valve, flow meter and quick disconnect gas inlet fitting. All become an integral part of the cellblock for a compact leak tight system that provides rapid upscale/downscale response times.

Lastly, our front panel sensor access makes H_2S sensor installation quick and easy on those rare occasions it becomes necessary, without tools or the need to remove any sensitive components. This process takes less than one minute!

In addition to measuring all of the H_2S in the gas stream, the Model 3000RS also responds to other sulfur bearing compounds such as Sulfur Dioxide and a variety of Mercaptans. This gives you a positive indication in the event that other sulfur bearing compounds are present.

Our advanced engineering techniques have resulted in a very accurate, reliable and exceptionally low cost package where portable trace H_2S analysis is required.

MODEL 300RS

FEATURES

- 3 user selectable output ranges to choose from
- High resolution 3 ½ digit LCD
- RFI protected
- 0-1VDC analog output
- Data logger
- RS-232 bi-directional communication for advanced features
- Power requirements: 115/230VAC to 12VDC battery charger
- Low minimum detection limit
- Excellent repeatability
- Fast upscale/downscale response times
- Patent Pending Cellblock Technology: Allows for all components such as: needle valve, flow meter, and compression fittings to be an integral part of the cellblock, eliminating long lengths of tubing and numerous connection fittings. Other benefits of this design include: compact size, faster response times and front panel sensor access without the need for tools.
- Area Classification: Designed for intrinsic safety for Class 1, Div. 1, Groups B,C,D
- Compact portable
- 2 year warranty for analyzer parts and labor
- 1 year sensor warranty, life expectancy 1-3 years

SPECIFICATIONS

- **3 user selectable output ranges to choose from:**
0-10ppm, 0-50ppm, 0-100ppm
Optional Ranges: 0-500ppm, 0-1000ppm, 0-2000ppm
The user selection of an output range simultaneously controls the analog output and the data logger so that both functions operate on the same range
- **Digital display:** High resolution 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 to 12VDC battery charger. Rechargeable NiCad batteries, 350 hours continuous
- 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 @ 1.5SCFH
0-2000ppm < 120 seconds @ 1.5SCFH
- **Response to Methyl Mercaptan:**
40% of actual concentration
- **Response to Sulfur Dioxide:**
18% of actual concentration
- **Area Classification:** Designed for intrinsic safety for Class 1, Div. 1, Groups B,C,D
- **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.

