



**AMI**  
ADVANCED MICRO INSTRUMENTS

## MODEL 3000RS PORTABLE TRACE H<sub>2</sub>S

### DEPENDABLE H<sub>2</sub>S MEASUREMENTS MADE EASY FOR THE FIELD

The **MODEL 3000RS** Portable H<sub>2</sub>S Analyzer is the perfect choice for safely and accurately measuring ppm levels of H<sub>2</sub>S in the natural gas industry. Exclusive innovations and distinctive features are designed into a compact and rugged package. Our patented Cell Block and high-performance sensor produce a safe, fast and reliable H<sub>2</sub>S measurement in harsh applications. All AMI portables are outfitted with a datalogging feature that serves as a useful tool when spot-checking multiple sites per day.

#### ELIMINATOR CELL BLOCK™ ADVANTAGE

**Compact and Leak Free Design** - This unique sample system approach virtually eliminates all potential leak paths while optimizing flow efficiencies. The sample system and sensor pocket are machined directly into a solid metallic block and interconnected with precision-drilled, intersecting gas passages – eliminating the need to use long lengths of tubing and leak-prone compression fittings. The uniquely engineered metering valve and flow meter are integrated directly into this compact block.

#### COMMON APPLICATIONS

- ▶ NATURAL GAS
- ▶ BIOGAS
- ▶ WASTEWATER

#### ACCURATE & COST-EFFECTIVE MEASUREMENTS

Stain tubes can detect the presence of H<sub>2</sub>S, but differences in technique and the subjective reading method can lead to unacceptable errors as high as ± 20%. The ongoing cost of single-use tubes add up over months of regular sampling. The one-time investment in a **MODEL 3000RS** provides an accurate and unambiguous tool for quickly measuring ppm levels of H<sub>2</sub>S and verifying compliance with stringent tariff limits.

#### TRULY PORTABLE AND DESIGNED FOR THE FIELD

At just 5 lbs. (7.3 kg), the **MODEL 3000RS** is the smallest, lightest, and most accurate portable Trace H<sub>2</sub>S Analyzer in the industry.

#### SPOT-CHECKING OR UNATTENDED MONITORING

The **MODEL 3000RS** is a great choice for quick and easy spot-checking of inlet/outlet gas at H<sub>2</sub>S treatment facilities. When extended monitoring is required, operators can utilize the onboard data logger to record a time-stamped record of H<sub>2</sub>S levels and temperature at a user programmable interval. The long-life rechargeable battery makes unattended operation possible when trying to track down small, intermittent leaks.



# MODEL 3000RS

## PHYSICAL & ELECTRICAL SPECIFICATIONS

WEIGHT	GAS CONNECTIONS	WETTED PARTS
5.0 lbs (2.3 kg)	<b>Input:</b> Female Quick Disconnect fitting. Supplied with mating male quick disconnect fitting coupled to 1/4" compression fitting <b>Exhaust:</b> Male barb fitting for 1/4" flexible tubing	316 S.S. fittings, electro-less nickel plated cell block, gold-plated contacts, acrylic flow meter & O-rings (Viton, kalrez, and Buna-N)

### POWER

Rechargeable Nickel Cadmium Batteries (350 hours of continuous operation)



Note: 2-year Warranty for Parts & Labor for any defects in materials or workmanship. 1-year Warranty for H<sub>2</sub>S sensors

## OPERATIONAL SPECIFICATIONS

OUTPUT RANGES (USER SELECTABLE)		AMBIENT OPERATIONAL TEMPERATURE	FLOW RATE (RECOMMENDED)	INLET GAS PRESSURE
STANDARD RANGES	OPTIONAL HIGH RANGE SENSOR			
0 – 10 ppm	0 – 100 ppm	25°F to 115°F (-3.9°C to 46°C)	0.1 to 2.0 SCFH (0.05 – 1.0 Lpm)	0.5 – 150 psig (0.03 – 10.3 bar)
0 – 50 ppm	0 – 500 ppm			
0 – 100 ppm	0 – 1000 ppm			
0 – 200 ppm	0 – 2000 ppm			

## SENSOR & ANALYZER PERFORMANCE SPECIFICATIONS

LOW RANGE SENSOR	HIGH RANGE SENSOR	90% FULL SCALE RESPONSE TIMES @ 1.5 SCFH (0.75 Lpm) FOR SPECIFIC RANGES		REPEATABILITY	ACCURACY	APPROVALS
<b>Max Range</b> 0 – 200 ppm	<b>Max Range</b> 0 – 2000 ppm	<120 sec for 0 – 100 ppm	<120 sec for 0 – 2000 ppm	±1% of range or ±0.2 ppm of H <sub>2</sub> S, whichever is greater	±1.5% of full range range at constant conditions	CSA-approved for Class 1, Div. 1, Groups B,C,D hazardous areas

### RESPONSE TO OTHER GASES IN THE SAMPLE GAS (GIVEN THAT 100 PPM OF THE LISTED GAS IS PRESENT)

Methyl Mercaptan (40 ppm)    Carbon monoxide (4 ppm)    Hydrogen (1 ppm)    Sulfur dioxide (18 ppm)    *Note: For complete list, contact AMI*

## ANALYZER KEY FEATURES

<b>ELIMINATOR CELL BLOCK™</b>	Contains a Complete Sample System with all components fully integrated, including the flow meter, metering valve and 4-way Selection (ON/OFF) Valve
<b>ANALOG OUTPUT</b>	0.0 – 1.0 VDC
<b>COMMAND CENTER</b>	Software that works across AMI's Analyzers and gives users access to advanced functions: <ul style="list-style-type: none"> <li>▶ Calibration Details</li> <li>▶ Security Settings</li> <li>▶ Time-stamped data logger with adjustable interval recording for: <ul style="list-style-type: none"> <li>- H<sub>2</sub>S measurement</li> <li>- Temperature</li> <li>- Battery voltage</li> </ul> </li> </ul>
<b>ACCESSORIES</b>	<ul style="list-style-type: none"> <li>▶ Carrying Case</li> <li>▶ Auxiliary Power Adapter</li> <li>▶ Flexible High Pressure Sample Tubing</li> </ul>