



**OXYGEN | H<sub>2</sub>S | MOISTURE**

## **THE LEADER IN ANALYZERS FOR NATURAL GAS**

### **COMPLETE GAS ANALYZER SOLUTIONS**

Advanced Micro Instruments offers a full-line of advanced Gas Analyzers for detecting oxygen, hydrogen sulfide and moisture in Natural Gas. In addition to our fixed and portable Analyzers, we offer a range of maintenance-free accessories that protect the Analyzers from the harsh elements found in natural gas pipelines.

### **INDUSTRY PROVEN EXPERTS**

AMI has been supplying the Natural Gas Industry with Gas Analyzers since 1995. Our Analyzers are found on compressor stations, meter runs, VRU's, gas processing plants and other gas infrastructure across North America. When the measurement is critical, the industry trusts AMI's Gas Analyzers to get the job done right – every time.

### **TECHNOLOGY LEADERS**

AMI's patented designs and unique, proprietary technologies give customers industry-leading performance, reliability and accuracy. Our Gas Analyzers are packed with highly desirable features that provide operators with ultimate flexibility in monitoring their gas conditions while minimizing the Analyzer costs.

# HIGH PERFORMANCE GAS ANALYZERS

## BX Series

AMI's BX Series is our most advanced offering of High-Performance Analyzers. They combine patented technologies with reliable and easy-to-use, intuitive features and are the preferred choice among engineers and measurement technicians.

## OXYGEN (O<sub>2</sub>)



### MODEL 2010BX TRACE OXYGEN 10 Output Ranges PPM and % Level

Industry's best selling Analyzer for detecting trace levels of oxygen in Natural Gas. Fast, accurate measurements down to 0.05 ppm.



### MODEL 1000RS PORTABLE TRACE OXYGEN 10 Output Ranges PPM and % Level

Ultra-portable O<sub>2</sub> Analyzer for spot-checking pipelines. Patented 4-way Selector Valve (Sample/Purge/On/Off) allows for rapid come down time between measurements.

### MODEL 210BX PERCENT OXYGEN 4 Output Ranges Ranges between 0-25%

Designed for detecting percent levels of oxygen in gas streams down to 0.01%.



## HYDROGEN SULFIDE (H<sub>2</sub>S)



### MODEL 3010BX TRACE H<sub>2</sub>S 4 Output Ranges: 0-200 ppm Optional Ranges: 0-2000 ppm

Compact, low-cost design for continuous measuring trace levels of H<sub>2</sub>S in natural gas.



### MODEL 3000RS PORTABLE TRACE H<sub>2</sub>S 4 Output Ranges: 0-200 ppm Optional Ranges: 0-2000 ppm

Spot-checking and fast verification of H<sub>2</sub>S monitors. High accuracy ( $\pm 1\%$ ) compared to sample tubes ( $\pm 10$  to 15%).

## MOISTURE (H<sub>2</sub>O)



### BARRACUDA MODEL 4010BR Tunable Diode Laser (TDL) TRACE MOISTURE RANGE: 0.25 - 20.0 lbs (5.25 - 420ppm) H<sub>2</sub>O

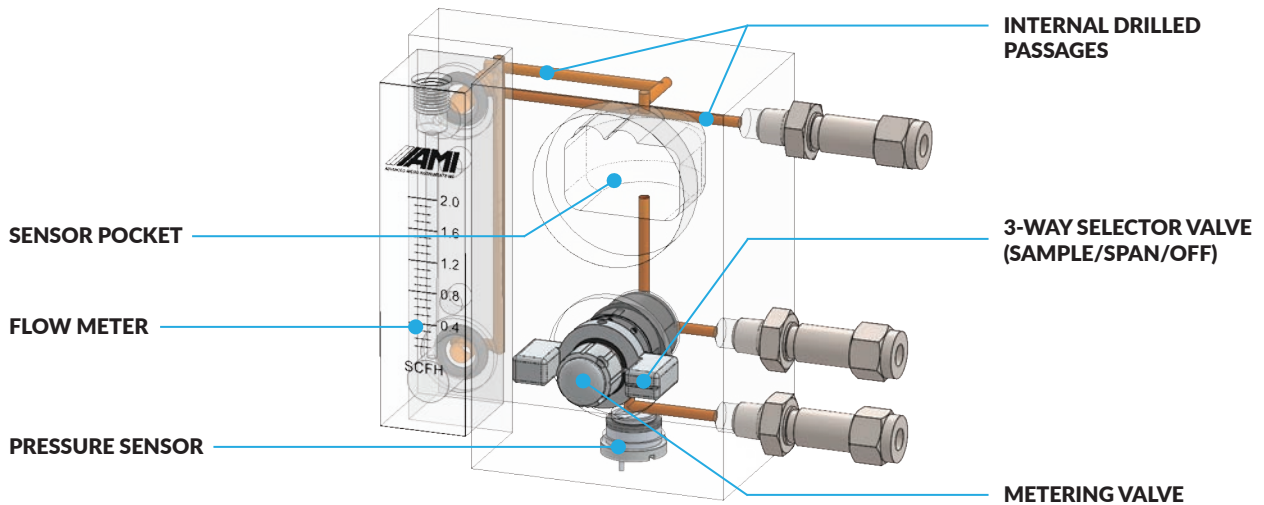
Most advanced TDL Moisture Analyzer in the Industry. Patented design makes the **MODEL 4010BR** highly reliable, very compact and extremely cost-effective. The **MODEL 4010BR** is packed with desirable features while being a fraction of the cost of other TDL Analyzers.

### KEY FEATURES

- ▶ Advanced TDL technology makes moisture measurements possible with some of the most difficult gas samples
- ▶ Industry's shortest gas path to the measurement cell means fast, accurate moisture readings
- ▶ Low power requirements allow for AC, DC and remote solar installations
- ▶ Robust design eliminates expensive factory service

# PATENTED DESIGNS & KEY TECHNOLOGIES

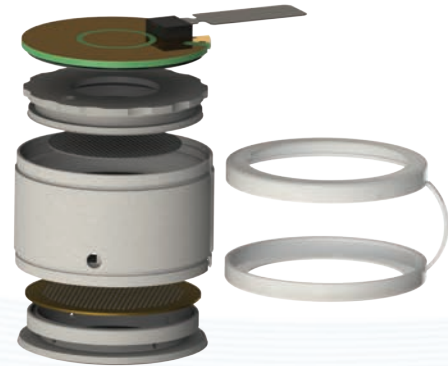
## ELIMINATOR CELL BLOCK™



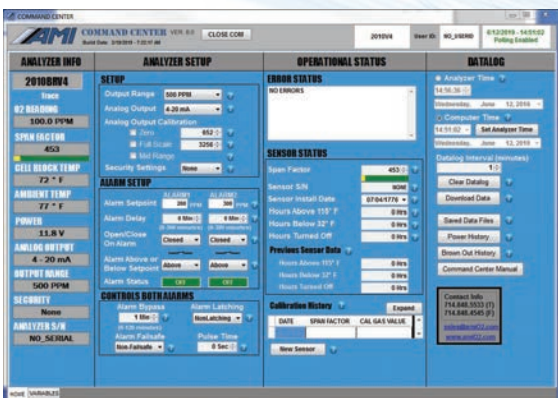
Our patented **ELIMINATOR CELL BLOCK™** provides a unique sample system approach that virtually eliminates all potential leak paths while optimizing flow efficiencies. The sample system & flow efficient sensor pocket are machined directly into a solid metallic block and interconnected with small diameter, precision-drilled, intersecting gas passages. Finally, we integrate our specially engineered 3-way Selector Valve, a metering valve, pressure sensor and flow meter directly into the machined block. This approach eliminates long lengths of leak-prone tubing, delivers up to a 400% faster measurement response time, and provides front panel access to the sensor while minimizing overall Analyzer size.

## PROPRIETARY SENSOR TECHNOLOGY

AMI uses proprietary manufacturing techniques to produce its exclusive electrochemical oxygen sensors. The patented designs produce a sensor that yields an extremely quick response, high reliability and longer product life. AMI's oxygen sensors provide an industry-leading resistance to H<sub>2</sub>S, in concentrations up to 500 ppm. This eliminates the need for a maintenance-intensive H<sub>2</sub>S scrubber for the sample gas. AMI also puts 100% of our sensors through a battery of performance tests across multiple temperature ranges to insure they meet our strict quality standards.



## COMMAND CENTER SOFTWARE



AMI's powerful COMMAND CENTER User Interface communicates with all AMI Gas Analyzers. It provides technicians with access to advanced features for configuring and troubleshooting the Analyzer. Users can program alarms to be fail safe or non-fail safe, latching or non-latching, and set as independent alarm delays. They can also access the automatic data logging files, available on all fixed and portable Analyzers. The data logs provide time-stamped records of gas measurement, gas pressure, analyzer temperature and power outage events that can assist with solving intermittent problems.

# OXYGEN SENSORS



|                           | <b>T-2</b>                                       | <b>T-4</b>  | <b>P-2</b>                     | <b>P-3</b>                    | <b>P-4</b>         | <b>P-5</b>  |
|---------------------------|--|---|--------------------------------|-------------------------------|--------------------|---|
| <b>Max Range</b>          | 0 - 10,000 ppm                                   | 0 - 10,000 ppm                                    | 0 - 50%                        | 0 - 25%                       | 0 - 100%           | 0 - 25%   |
| <b>Min Range</b>          | 0 - 5 ppm  | 0 - 5 ppm   | 0 - 1,000 ppm                  | 0 - 1,000 ppm                 | 0 - 1.0%           | 0 - 1,000 ppm                                     |
| <b>Min Detection</b>      | 0.05 ppm   | 0.05 ppm  | 10 ppm                         | 100 ppm                       | 1,000 ppm          | 100 ppm   |
| <b>Special Conditions</b> | <10 ppm H <sub>2</sub> S<br>100% CO <sub>2</sub> | <500 ppm H <sub>2</sub> S<br>100% CO <sub>2</sub> | O <sub>2</sub> in<br>inert gas | Up to<br>100% CO <sub>2</sub> | Enriched<br>Oxygen | <500 ppm H <sub>2</sub> S<br>100% CO <sub>2</sub> |

AMI uses proprietary manufacturing techniques to produce its patented electrochemical oxygen sensors. Every sensor manufactured in our Costa Mesa, CA facility undergoes a battery of performance tests, including response times, noise, drift and linearity across multiple temperature ranges, to insure they meet our strict quality standards.

Note: For high CO<sub>2</sub> background gas, the O<sub>2</sub> Analyzer must include additional programming at the factory.

# H<sub>2</sub>S SENSORS



**WIDE RANGE  
H<sub>2</sub>S SENSOR**

| <b>Sensor Type</b> | <b>Low Range</b> | <b>High Range</b> |
|--------------------|------------------|-------------------|
| Max Range          | 0 - 200 ppm      | 0 - 2000 ppm      |
| Min Range          | 0 - 10 ppm       | 0 - 100 ppm       |
| Min Detection      | 0.1 ppm          | 0.1 ppm           |

# ACCESSORIES

## PRE-CONDITIONING

AMI's pre-conditioning accessories provide protection from liquids, such as glycol, water, compressor oils or other fluids, that can damage an Analyzer. Vertically-mounted Demisters reduce saturated gas temperature and condense out liquids. The LRP's unique membrane allows gas flow while preventing liquids from passing through.



**DEMISTER II**



**LRP  
with DEMISTER**



**LRP**



**LRP WITH  
REGULATOR**

## PROTECTION

For applications in extreme cold weather down to -40°F or harsh environmental conditions.



**EXTREME WEATHER  
ENCLOSURE**



**PROTECTIVE CARRY CASE**

## SAMPLE PUMPS

Sample pumps draw sample in ambient pressure applications or pressure down to -7 psig. Designed to meet Class I, Div 2, Groups C & D requirements.



**FIXED  
SAMPLE PUMP**



**PORTABLE SAMPLE  
PUMP**

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