

# 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**

**B**XSeries 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 2010B**

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.



# B 151

#### **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.

# PERCENT OXYGEN 4 Output Ranges Ranges between 0-25%

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

# HYDROGEN SULFIDE (H,S)



# **MODEL 3010B**

TRACE H<sub>o</sub>S

4 Output Ranges: 0-200 ppm Optional Ranges: 0-2000 ppm

Compact, low-cost design for continuous measuring trace levels of  $H_2S$  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  $\rm H_2S$  monitors. High accuracy ( $\pm$  1%) compared to sample tubes ( $\pm$  10 to 15%).

# MOISTURE (H<sub>2</sub>0)



## BARRACUDA MODEL 4010L

Tunable Diode Laser (TDL) TRACE MOISTURE RANGE: 0.0 - 20.0 lbs (0.0 - 420ppm) H<sub>2</sub>O

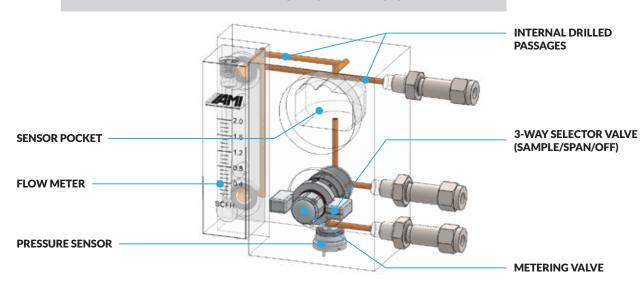
Most advanced TDL Moisture Analyzer in the Industry. Patented design makes the **MODEL 4010LX** highly reliable, very compact and extremely cost-effective. The **MODEL 4010LX** is packed with desirable features while being a fraction of the cost of other TDL Analyzers.

#### **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
- Analyzer Guardian Technology provides protection against water slugs
- 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**<sup>TM</sup> 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  $\rm H_2S$ , in concentrations up to 500 ppm. This eliminates the need for a maintenance-intensive  $\rm H_2S$  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.

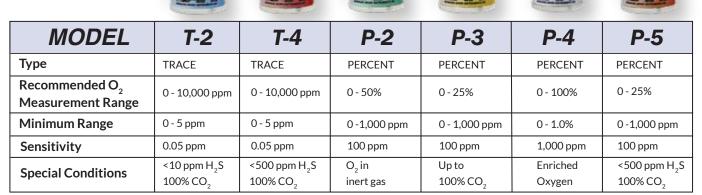


#### **COMMAND CENTER SOFTWARE**



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**



#### **NOTES**

Any sensor can be used in  $O_2$  applications above its recommended operating ranges, however, it may shorten the sensor's lifespan. The minimum range of the sensor is dependent on the sensor as well as the AMI Analyzer it is used within.

Sensitivity is the minimum change in O<sub>2</sub> in the gas stream that will be detected by the sensor.

Notify the factory for use in CO<sub>2</sub> background gas above 50%. The AMI O2 Analyzer will require additional programming.

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



Sensor Type	Low Range	High Range
Measurement Range	0 - 200 ppm	0 - 2000 ppm
Minimum Range	0 - 10 ppm	0 - 100 ppm
Sensitivity	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 Analyzer Guardian's unique membrane allows gas flow while preventing liquids from passing through.



#### **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



- **®** 714.848.5533
- www.amio2.com

