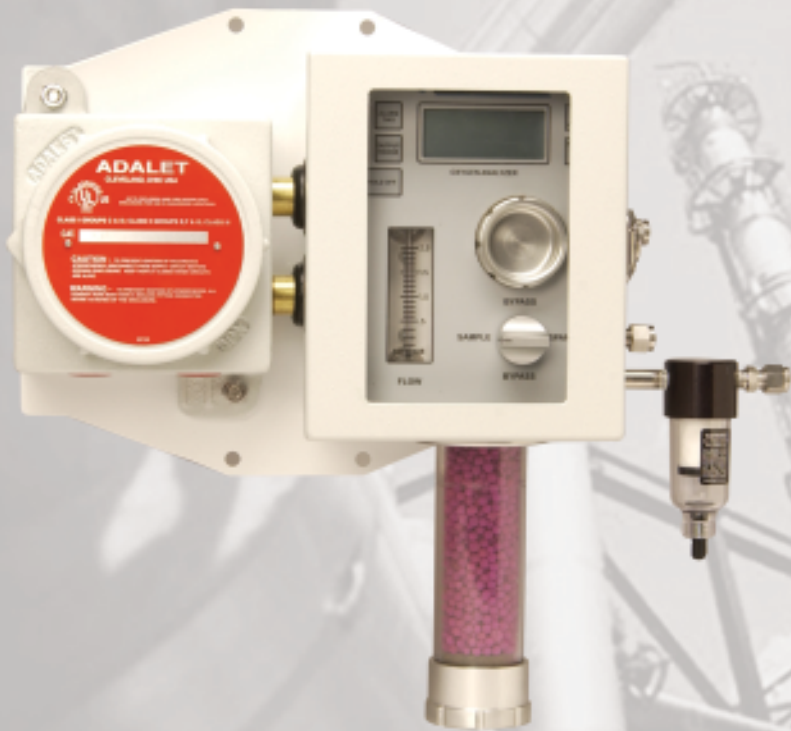




Advanced Micro Instruments, Inc.

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MODEL 2010BR

A sophisticated, compact, microprocessor-based trace oxygen analyzer with a complete sample system. Every imaginable feature comes standard at a low cost. Designed for Class 1, Div. 1, Groups B,C,D, applications.

The development of the **AMI Model 2010BR** began with a collection of inputs from hundreds of industry leading engineers and field technicians in the natural gas and Petrochemical business.

These inputs coupled with our advanced engineering techniques have resulted in a totally complete, compact, and versatile package that can truly be defined as state-of-the-art where oxygen analysis is required in flammable gas streams.

If necessary, the Model 2010BR can be mounted directly outside in all types of weather. An optional high-tech, low power proportional temperature controlled heater allows for an expanded temperature range of -40 to 115°F without an additional enclosure or wiring. This applies in either Class 1, Div. 1 or Div. 2 Groups B,C,D, area classifications.

The rugged, compact, complete design allows for quick and simple installation resulting in big savings.

AMI's advanced microprocessor based electronics offers everything but the kitchen sink, standard. For example:

- High-resolution single range LCD immediately reads from .01ppm to 25% without range changing delays or the need for manual adjustments.
- Microprocessor pulsed latching alarm relays. The latching relay is pulsed by the microprocessor controlling the logic state to either open or closed. This eliminates a continuous power drain when using a solar panel and battery for power.

- Programmable alarm delays: Settings range from 0-300min. This feature prevents alarm conditions due to quick O_2 spikes or short-term operator error.
- User selectable alarm setting: latching, non-latching, fail safe non-failsafe
- 10-user selectable output ranges: 0-10ppm, 0-50ppm, 0-100ppm, 0-500ppm, 0-1000ppm, 0-.500%, 0-1%, 0-5%, 0-10% and an air calibration range of 0-25%
- Alarm hold off button: Prevents false alarms when routinely calibrating and allows you to immediately silence (for a user programmable period of time of 0-300min.) an alarm condition when necessary at the touch of a button.
- Data logger. Logs data for 30 days at 1min intervals.
- Complete security feature: Front panel settings will not respond to unwanted tampering if the security feature has been initiated via laptop computer.
- Three standard isolated outputs to chose from: 0-1VDC, 1-5VDC or 4-20mA.
- Available in A/C or DC power.

The 2010BR incorporates our advanced patented cellblock technology consisting of a single compact metallic block that undergoes a complex machining process, followed with corrosion-resistant nickel plating. The block contains a series of drilled gas passages eliminating the need for long lengths of tubing and compression fittings; it uses critical orifices in place of needle valves and pressure regulators; it also contains a

MODEL 2010BR TRACE OXYGEN ANALYZER

unique integrated 3-way sample/span/shut off valve, and flowmeter. This sophisticated design results in quicker up and down scale response times and eliminates potential leak sources.

When the application requires, we add a quick-change H₂S scrubber and particulate/coalescing filter mounted directly to the block. Contents of the H₂S scrubber can be replenished in minutes without the use of any tools or potting compound.

The front panel sensor access makes sensor installation or replacement quick and easy. It also allows for a rapid, accurate calibration on ambient air (20.9%) without the use of tools. A span gas port comes standard for those who prefer a certified span gas calibration.

Our advanced design approach has separated us from the competition with the highest performance, yet lowest cost trace oxygen analyzer in the industry.

SPECIFICATIONS

- **10-standard user selectable output ranges:**
0-10ppm | 0-50ppm | 100ppm | 0-500ppm |
0-1000ppm | 0-.500% | 0-1% | 0-5% | 0-10% |
and a calibration range of 0-25%
- **Minimum detection:** 0.5% of range or 50ppb
- **Display:** High resolution single range 3½ digit LCD
- **Repeatability:**
±1% of full scale at constant temperature (on 10ppm
output range the repeatability is ±3% of scale)
- **Operating temperature range:**
32-115°F non heated
-40-115 °F with optional heater
- **Diurnal temperature specification:**
32-115°F, < ±3 of scale
-40-115 °F with optional heater < ±3 of scale
- **90% Upscale Response times:**
100ppm-25% < 10 sec.
0-10ppm < 25 sec.
0-5ppm < 50 sec.
- **Alarms (standard):**
2 fully adjustable oxygen concentration alarm set
points. Relay contacts 5A/115VAC
- **Isolated output signals:**
0-1VDC, 1-5VDC, or 4-20mA
- **Power requirements:**
10-28VDC or 115VAC < 40mA (non heated)
30 Watts approx. with heated option

- **Mounting:** Wall mount or 2" pipe
- **Area classification:**
Designed for use in Class I, Div. I, Groups BCD
- **Dimensions:** 10.00" W x 16.75" H x 6.00" D
- **Weight:** 15 lbs
- **Sensor access:** Easy, direct front panel access
- **Sample connections:**
316 S.S. ¼" compression fittings
- **Wetted parts:** Nickel-plated metallic

STANDARD FEATURES

- Designed to meet UL-913 and UL-1203
- Class I, Div. I, Groups B, C, D with flammable sample.
- High resolution single range 3½ LCD
- 10-user selectable output ranges
- 2 fully adjustable oxygen concentration alarms. Programmable relay contact closure logic.
- User programmable alarm delays. 0-300min.
- Alarm hold off: Programmable 0-300min.
- Complete system security
- Data logger
- RS232 bi-directional communications
- Isolated outputs: 0-1VDC, 1-5VDC, or 4-20mA
- Power requirements:
10-28VDC or 115VAC < 40mA (non heated)
30 Watts approx. with heated option
- Direct, easy front-panel sensor access
- Panel mount or 2" pipe mount
- Compact size
- Nickel-plated cellblock, 316 S. S. compression fittings
- 2 year warranty (excluding sensor)
- No calibration or support gases necessary
- Virtually unaffected by hydrocarbons and other oxidizable gases
- RFI protected
- Unaffected by change in flow rate (0.1-5 SCFH)



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