The AMI model 201RSP is the ideal solution for measuring percent oxygen in atmospheric pressure sample applications in a general purpose environment. In a compact size, and at low cost, it provides a comprehensive electronic package and sample system using AMI's patented cell block technology. The 201RSP uses internal surface mount solenoid valves for sample/span selection and to seal off the sensor in the event of loss of power, and it provides an internal long-life pump to draw samples through the analyzer from atmospheric pressure sources such as glove boxes or controlled-atmosphere soldering lines.

- Display reads oxygen from 0.00% up to 25% with no range changes.
- Analog output and alarms can be configured to operate over any of four ranges from 0-1% to 0-25% for best resolution.
- Analog output 4-20mA, isolated.
- Complete sample system built in to AMI's patented cell block.
- Very rapid response time from air to low percentage levels.
- Easily replaceable sensor, no tools required.
- P-2 sensor standard, other sensors optional.
- Alternative sensors available for CO2 samples.
- Alternative low range (0-1000ppm and 0-5000ppm) and high range (0-50%) versions available.
- Simple, versatile installation.
- Operates off 117VAC with very low power consumption.
- Analog output can be easily calibrated to an external device.
- 2 independent, fully adjustable alarm settings with relay contacts.
- Complete alarm logic programming: latching or non-latching, open or close on alarm, high alarm or low alarm, alarm-on delays and alarm hold-off.
- Integral data logger: Logs data for 15 days @ 1min intervals and 30 days @ 2min. intervals, etc.
- USB connectivity to a PC: Allows complete access to the internal functions and settings.
- ModBus Industry standard protocol over RS485.
- Oxygen Sensor life indication.
- Calibration history.

Unlike competitive analyzers, AMI sensor replacement requires minimal downtime due to the front panel sensor access and the patented AMI cell block.

Alarm set points, the output range (range over which the 4-20mA output and the alarm operate), and calibration are controlled by press buttons. These features can be disabled via the user interface if desired for greater security.

The analyzer supports ModBus RTU over RS-485 for complete integration into a SCADA system.

Complete control over the analyzer’s operation, and access to its many diagnostic features, are available via the AMI software running on a PC, connected via a standard USB cable. Diagnostic features include up to fifteen days of datalogging, calibration history for the previous five calibrations; brownout and power up history, including memory errors if any; ambient temperature, calibration history, complete sensor diagnostics including oxygen and temperature exposure history.
FEATURES

- 4 user selectable output ranges
- 3 ½ digit LCD
- 2 fully adjustable oxygen concentration alarms
- Alarm hold off/Bypass
- RFI protected
- 4-20mA isolated analog output
- Advanced analog output calibration synchronizes the analog output with any external monitoring system
- Data logger
- Fully programmable alarm delays
- Calibration history
- USB port for configuration and access to advanced features
- Modbus using Bidirectional RS485 for industry-standard communications
- Low minimum detection limit 0.01%
- Various sensors available for different applications
- Excellent repeatability
- Extended operating temperature range
- Fast upscale/downscale response times
- Patented Cellblock Technology: Allows for all components such as flow control valve, flow meter, Sample, span and seal-off solenoid valves and compression fittings to be an integral part of the cellblocks, eliminating long lengths of tubing and fittings.
- Unaffected by changes in flow rate from 0.1 to 2.0 SCFH
- Built-in sample pump for atmospheric pressure samples
- Panel mount
- Compact size
- 2 year warranty for analyzer, parts and labor
- 6 month sensor warranty, life expectancy 1-2 years.
- These items require the AMI User Interface Program

SPECIFICATIONS

- 201R Series Standard ranges:
  - 0 – 1%, 0 – 5%, 0 – 10%, 0 – 25%
- Optional ranges: 0-1000ppm, 0-5000ppm, 0-50%
- Sensitivity: 0.5% of full scale
- Repeatability: +/- 1% of full scale at constant temperature
- Operating temperature: 41°F to 113°F.
- Sample pressure: atmospheric.
- Humidity: < 85%, non-condensing
- Operational conditions: Pollution degree 2, Installation category I I.
- Drift: +/- 1% of full scale in 4 weeks at constant temperature
- Expected cell life: 9 months to 2 years.
- Response time:
  - 90% of full scale in less than 10 sec (dependent on sensor)
- Output: 4-20mA isolated.
- Alarm contacts: 230/117VAC @ 5A, or 28VDC @ 5A, resistive
- Power requirements: 90-240VAC <10W.
- Absolute Maximum Power voltage 264VAC 60Hz.
- ¼” stainless steel compression fittings for sample, span gas and exhaust.
- Overall dimensions: 9” w x 5” h x 7” d
- Weight 10 lbs