

ADVANCED MICRO INSTRUMENTS
An ENPRO Company

MODEL 201RS/RSP
PERCENT OXYGEN

ADVANCED PERCENT OXYGEN MEASUREMENTS MADE EASY

The **MODEL 201RS** and **MODEL 201RSP** are advanced Percent Oxygen Analyzers loaded with a full suite of standard features. The Analyzers' compact design includes AMI's proprietary ELIMINATOR CELL BLOCK technology that incorporates a complete sample system and combines it with our industry leading percent oxygen sensors. This combination delivers accurate, reliable and extremely fast response times in a panel mounted, virtually maintenance-free package.

ELIMINATOR CELL BLOCK FOR A LEAK-FREE DESIGN

The proprietary ELIMINATOR CELL BLOCK provides a unique, compact sample system approach and a flow-efficient sensor pocket machined into a solid metallic block. Precision cross-drilled intersecting gas passages eliminate the need for long lengths of tubing and leak-prone compression fittings. Our design also provides the user with direct front panel access for installing and replacing sensors and a surface mounted 3-way gas solenoid valve – activated from the front panel interface.

COMMON APPLICATIONS

- AIR SEPARATION
- AEROSPACE
- LABORATORY RESEARCH

POSITIVE PRESSURE OR ATMOSPHERIC/VACUUM SAMPLING

The **MODEL 201RS** is designed for percent oxygen measurements in positive pressure applications, while the **MODEL 201RSP** includes a sample pump for percent O_2 measurements in atmospheric or vacuum conditions.

FULL OF STANDARD FEATURES

The **MODEL 201RS** and **201RSP** are loaded with a full suite of advanced features without the typical 'up charges'. The standard features include: 10-user selectable analog output ranges, dual independent alarm relay contacts, comprehensive alarm logic, alarm bypass, and 3 levels of security settings. The data logging feature provides detailed time-stamped records for O_2 measurement, temperature, supply voltage and power brown-out history.

PROPRIETARY SENSOR TECHNOLOGY

AMI's proprietary oxygen sensors deliver unmatched performance for ultra-fast response times, accuracy, and reliability. Every sensor undergoes an intense battery of testing to ensure they meet our strict quality control standards. Our trace and percent oxygen sensors operate safely, accurately, and reliably in inert gas streams.

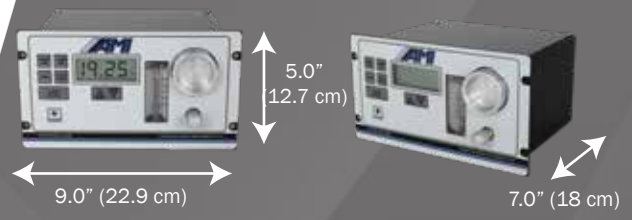
MODEL 201

MODEL 201RS

DESIGNED FOR
POSITIVE PRESSURE SAMPLES

MODEL 201RSP

INTEGRAL SAMPLE PUMP FOR
ATMOSPHERIC PRESSURE OR
VACUUM SAMPLES



PHYSICAL & ELECTRICAL SPECIFICATIONS

WEIGHT		GAS CONNECTIONS	WETTED PARTS
201RS	201RSP		
10 lbs (4.5 kg)	10 lbs (4.5 kg)	¼" 316 S.S. compression fittings	316 S.S. fittings, anodized aluminum cell block, acrylic flow meter & O-rings (Viton)

POWER
90 – 240 VAC <10W

Note: 2-year Warranty for Parts & Labor for any defects in materials or workmanship. 6-month Warranty for oxygen sensors

OPERATIONAL SPECIFICATIONS

OUTPUT RANGES (USER SELECTABLE)		AMBIENT OPERATIONAL TEMPERATURE		FLOW RATE (RECOMMENDED)	INLET GAS PRESSURE		OPERATIONAL CONDITIONS
STANDARD	OPTIONAL	201RS	201RSP		201RS	201RSP	
0 – 1.0% 0 – 5.0% 0 – 10.0% 0 – 25.0%	0 – 1000 ppm 0 – 5000 ppm 0 – 50.0% 0 – 100.0%	41°F to 113°F (5°C to 45°C)	41°F to 104°F (5°C to 40°C)	0.1 to 2.0 SCFH (0.05 – 1.0 Lpm)	0.5 – 15 psig (0.03 – 1.0 bar)	-6.5 to 15 psig (-0.5 – 1.0 bar)	Pollution Degree 2 Installation Category II

ANALYZER PERFORMANCE SPECIFICATIONS

90% FULL SCALE RESPONSE TIMES	ACCURACY	REPEATABILITY	DRIFT	HUMIDITY
< 10 sec	±1% of selected range or ±0.2% of oxygen, whichever is greater	±1% of selected range or ±0.1% of oxygen, whichever is greater	±1.0% of full scale in 4 weeks at constant temperature	<85%, non-condensing

ANALYZER KEY FEATURES

ELIMINATOR CELL BLOCK	Contains a Complete Sample System with all components, including the flow control valve, flow meter, sample, span, and seal-off solenoid valves, fully integrated
ALARMS	2 fully adjustable concentration alarms with configurable Alarm logic and Relay Contacts, featuring: ▸ Alarm Bypass ▸ Alarm Delays ▸ Trigger Above or Below Setpoint ▸ Latching/Non-latching ▸ Failsafe/Non-failsafe ▸ Open or Close on Alarm
ANALOG OUTPUTS	4 – 20mA isolated output signals and Modbus bi-directional RS485 communication
COMMAND CENTER	Software that works across AMI's Analyzers and gives users access to advanced functions: ▸ Error Status Display ▸ Data Logger with Adjustable Interval Setting ▸ Alarm Configurations ▸ Calibration Details
SAMPLE PUMP	▸ 201RSP includes a built-in sample pump for atmospheric pressure or vacuum samples

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