



# **MODEL 1000RS**

PORTABLE TRACE OXYGEN

# INDUSTRY'S #1 PORTABLE TRACE O<sub>2</sub> ANALYZER

The **MODEL 1000RS** Portable Trace Oxygen Analyzer is the undisputed leader when measuring ppm levels of oxygen in the natural gas industry. Patented innovations and key features are packed into a compact, rugged design. The patented Cell Block and sensor technology combination produce an incredibly fast and reliable  $O_2$  measurement. The datalogging feature serves as a critical tool when searching for difficult intermittent leaks in the field.

#### THE ELIMINATOR CELL BLOCK™ ADVANTAGE

**Compact and Leak Free Design** – This unique sample system approach virtually eliminates all potential leak paths while optimizing flow efficiencies. The sample system and flow-efficient sensor pocket are machined directly into a solid metallic block and interconnected with precision-drilled, intersecting gas passages – eliminating the need to use long lengths of tubing and leak-prone compression fittings.

Integrated Valve for Rapid Response – The 4-way valve allows the user

to fully purge air from the sample lines with process gas while bypassing the  $\rm O_2$  sensor. A simple 90° rotation of the 4-way valve to 'Sample Mode' results in a rapid, accurate response to trace oxygen levels in the pipeline gas. This valve eliminates the typical lag time associated with a new gas connection, where the oxygen reading spikes to air, resulting in a slow recovery down to ppm levels. Once sampling is complete, rotate the 4-way valve to the 'OFF' position to isolate the sensor from unwanted air exposure between measurement sites.

#### TRULY PORTABLE AND DESIGNED FOR THE FIELD

At just 5 lbs (7.3 kg), the **MODEL 1000RS** is the smallest, lightest, fastest and most accurate portable Trace Oxygen Analyzer in the industry.

### **LOCATING THE TOUGHEST LEAKS**

The unit is designed to track down 'hard-to-find' oxygen leaks in the field even at low ppm levels. The **MODEL 1000RS** comes standard with an onboard data logger, used for measuring  $O_2$  levels, temperature and time. The long-life rechargeable battery makes unattended operation possible while trying to track down intermittent oxygen spikes.

# COMMON APPLICATIONS

- NATURAL GAS
- ▶ AIR SEPARATION
- AEROSPACE

# **MODEL 1000RS**

### **PHYSICAL & ELECTRICAL SPECIFICATIONS**

WEIGHT	GAS CONNECTIONS	WETTED PARTS
5.0 lbs (2.3 kg)	Input: Female Quick Disconnect fitting. Supplied with mating male quick disconnect fitting coupled to %" compression fitting  Exhaust: Male barb fitting for %" flexible tubing	316 S.S. fittings, electro-less nickel plated cell block, gold-plated contacts acrylic flow meter & O-rings (Viton, kalrez, and Buna-N)

#### POWER

Rechargeable Nickel Cadmium Batteries (350 hours of continuous operation)



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
0 - 10 ppm       0 - 5000 ppm         0 - 50 ppm       0 - 1.0%         0 - 100 ppm       0 - 5.0%         0 - 500 ppm       0 - 10.0%         0 - 1000 ppm       0 - 25.0%	25°F to 115°F (–3.9°C to 46°C)	0.1 to 2.0 SCFH (0.05 – 1.0 Lpm)	0.5 – 150 psig (0.03 – 10.3 bar)

### **SENSOR & ANALYZER PERFORMANCE SPECIFICATIONS**

T-2 SENSOR	T-4 SENSOR	90% UPSCALE RESPONSE TIMES FOR SPECIFIC RANGES		REPEATABILITY	ACCURACY	APPROVALS
Max Range: 0 –10,000 ppm	<b>Max Range</b> : 0 −10,000 ppm	<25 sec for 0.0 – 10 ppm	<10 sec for 10 ppm – 25.0%	±1% of range or ±0.2 ppm of oxygen, whichever is greater	±1% of full scale range at constant conditions	CSA-approved for Class 1, Div. 1, Groups B,C,D hazardous areas
Special Conditions: <10 ppm H <sub>2</sub> S, 100% CO <sub>2</sub>	Special Conditions: <500 ppm H <sub>2</sub> S, 100% CO <sub>2</sub>					

### **ANALYZER KEY FEATURES**

Contains a Complete Sample System with all components fully integrated, including the flow meter, metering valve and 4-way Selection (ON/OFF) Valve

ons:

Calibration Details
Security Settings
Time-stamped data logger with adjustable interval recording for:
O<sub>2</sub> measurement - Temperature - Battery voltage

Accessories
Flexible High Pressure Sample Tubing
Auxiliary Power Adapter

