Even the most microscopic leak path allows trace oxygen to enter a pressurized gas system at atmospheric pressure. Without a highly-engineered Oxygen Analyzer complete with a crux of sought-after advanced features, your pressurized gas system can be at risk for leaks.

The WATCHDOG combines AMI’s patented designs with several advanced features from the Command Center Electronics Platform™ to provide fast, reliable oxygen measurements from 0.0ppm to 25.0%. Inside the WATCHDOG’s design is the innovative Eliminator Cell Block™. All sample handling components (flow meter, needle valve and a 3-way Sample/Span/Off Selection Valve) are integrated into a solid metal block with internal drilled passages and an incredibly gas-efficient sensor pocket. This design eliminates the need for ‘off-the-shelf’ fittings or tubing. The Block also provides easy access to the sensor pocket, conveniently located behind the front panel. The WATCHDOG is designed to meet requirements for Class 1, Div. 2, Groups C,D hazardous areas.

The Analyzer utilizes T-2 and T-4 Oxygen Sensors with Bullet Sensor Technology™ for unsurpassed accuracy. The Command Center Electronics Platform™ that is available for use with the WATCHDOG contains a DataLogger for oxygen readings, brown-out history, power-up history, calibration history and USB Virtual COMPort and Modbus bi-directional RS485 communication. If you want an Analyzer with a strong focus for trace oxygen measurements, then look no further than the WATCHDOG.

AND Available at the RIGHT PRICE
## TECHNICAL SPECIFICATIONS & FEATURES

### PHYSICAL

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>7.0”W x 6.5”H x 4.5”D (compact size) (17.8 cm x 16.5 cm x 11.4 cm)</td>
</tr>
<tr>
<td>Weight</td>
<td>6.0 lbs (2.7 kg)</td>
</tr>
<tr>
<td>Digital Display</td>
<td>4-digit LCD (reads full scale from 0.05 ppm to 25.0%)</td>
</tr>
<tr>
<td>Mounting</td>
<td>Wall mount or 2.0” pipe</td>
</tr>
<tr>
<td>Gas Connections</td>
<td>¼” 316 S.S. compression fittings</td>
</tr>
<tr>
<td>Wetted parts</td>
<td>316 S.S. fittings, electro-less nickel-plated cell block, gold-plated contacts, acrylic flow meter &amp; Vitron O-rings</td>
</tr>
<tr>
<td></td>
<td>2 - year warranty for Parts &amp; Labor for any defects in materials or workmanship</td>
</tr>
</tbody>
</table>

### TECHNOLOGY

Method of Measurement: Electrochemical Oxygen Sensor

**Eliminator Cell Block™** with a Complete Integral Sample System

**Command Center Electronics Platform™** (accessed through the **Command Center User Interface Software**)

- Datalogger for Oxygen Readings, includes graph of complete readings over a 15-day period or Excel file containing raw numerical data for custom analysis
- Error Status Display alerts users to any error(s) detected by the Analyzer
- Brown-out history stores the last 5 brown-out incidents and recoveries
- Power-up history stores the last 10 times the unit was powered-up
- Calibration history stores the last 5 calibrations with time, date, span factor and calibration gas
- USB Virtual COMPort and Modbus bi-directional RS485 communication for advanced features

Analyzer uses **T-2 & T-4** Oxygen Sensors, which utilize **Bullet Sensor Technology™** (O₂ sensors have a 6-month warranty)

### PERFORMANCE

Minimum detection limit: 50 ppb of Oxygen

90% upscale response times for these specified ranges:

- <10 sec for 10 ppm – 25.0%, <25 sec for 0.0 – 10 ppm

Fast downscale response:

- <15 min (after 1 min exposure to air to return below 10 ppm)

Repeatability: ±1% of range or ±0.2 ppm of oxygen, whichever is greater

Diurnal Temperature Specification: <±3% of scale over temperature range

Data Collection Capacity provides 15 days of data recording @1 datapoint per minute

Inlet gas pressure: 0.5 – 150 psig (0.03 – 10.3 bar)

RFI-protected

### OPERATION

Output Ranges (user selectable):

- 0 – 10 ppm, 0 – 50 ppm, 0 – 100 ppm, 0 – 500 ppm,
- 0 – 1000 ppm, 0 – 0.5%, 0 – 1.0%, 0 – 5.0%, 0 – 10.0%,
- 0 – 25.0%

(selection simultaneously sets the Datalog so both functions operate on the same range)

Ambient Operating Temperature Range: 25°F to 115°F (3.9°C to 46°C)

Recommended flow rate: 0.1 to 2.0 SCFH (0.05 – 1.0 Lpm)

*SCFH = standard cubic feet/hour

1 – 5 VDC and 4 – 20mA isolated analog output signals

Advanced analog output calibration for use when syncing with an EFM or other external device

### AREA CLASSIFICATION

Area Classification: Designed to meet requirements for Class 1, Div. 2, Groups C,D applications

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