

### Online Trace Oxygen Analyzer w/ Integral Sample System



The OMD-675 is designed to measure trace oxygen in the sub 1 ppm region. The unit combines an advanced set of electronic features with our industry leading precision electrochemical oxygen sensor technology. The result is a highly reliable and cost effective design with an easy-to-use user interface.

The analyzer comes with a 0 - 1 PPM full scale low range with a resolution of 0.001 ppm. The analyzer can also be configured for 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0-10000PPM and 0 - 25% in auto-range or manual-range mode.

The analyzer offers the user a digital communication output. This comes in the form of MODBUS RS485 RTU.

Alarm functionality comes in the way of 2 fully adjustable form C non-latching relay contacts. These can be configured as NO or NC and can be set as HIGH or LOW with optional delay mode. A power failure alarm is also standard and comes as a form C non-latching relay contact.

The oxygen sensor used in the OMD-675 is based on the galvanic electrochemical fuel cell principal. All oxygen sensors are manufactured in house by Southland Sensing Ltd. under a strict quality program.

The standard cell (TO2-133) is unaffected by other background gases such as H<sub>2</sub>, He, or Hydrocarbons. The optional acidic cell (TO2-233) works well when acid gases such as CO<sub>2</sub> or Natural Gas are present.

The sensors are self-contained and minimal maintenance is required - no need to clean electrodes or add electrolyte.

### Applications:

- Air Liquefaction and Separation
- Pure, Gaseous Hydrocarbon Stream Monitoring
- Gas Purity Certification
- Process Monitoring of Gaseous Monomers
- Semiconductor Manufacturing
- Protective Atmosphere Blanketing of Feedstock

0 - 1 PPM Low Range; 0 - 25% High Range

Resolution of 0.001 Parts-Per-Million Oxygen

Integral Sample System w/ Bypass Valve

Bi-Directional Communication Link

Extensive Electronic Features & Outputs

19" Rack Mount Configuration

Electrochemical Sensor Technology

### Specifications

|                           |                                                               |
|---------------------------|---------------------------------------------------------------|
| Accuracy:                 | < +/- 1% of Full Scale Range*                                 |
| Calibration:              | Periodically                                                  |
| Alarms:                   | (2) Adjustable Relay Contacts<br>(1) Power Fail Relay Contact |
| Analyzer Range:           | Configurable                                                  |
| Range ID:                 | 4 - 20 mA analog output<br>0 - 1 V DC analog output           |
| Communication:            | Bi-Directional MODBUS<br>RS485 RTU                            |
| Output:                   | 0 - 1V DC, 0 - 10V DC<br>Isolated 4 - 20mA                    |
| Power:                    | 100 - 240 VAC                                                 |
| Display:                  | Large with Backlight                                          |
| Dimensions:               | 19.0 x 5.125 x 7.75 inch                                      |
| Enclosure:                | Anodized Aluminum                                             |
| Weight:                   | 13.0 lbs                                                      |
| Pressure:                 | Inlet, 0 - 50 PSIG                                            |
| Flow Rate:                | 0.5 - 5 SCFH                                                  |
| Temperature:              | 0 to 50° C                                                    |
| Temperature Compensation: | Digital                                                       |
| Sensor:                   | TO2-133 Oxygen Sensor                                         |
| Gas Connections:          | 1/8" Compression Tube                                         |
| Sample System:            | Flow Control, 4-way sample /<br>Bypass Valve, Flow Indicator  |
| Repeatability:            | < +/- 1% of reading                                           |
| Sensor Warranty:          | 12 months                                                     |
| Analyzer Warranty:        | 12 months                                                     |

\*Accuracy at constant conditions

### Optional:

Panel Mount Oxygen Configuration (OMD-677)

[Dimensions: 10.78 x 7.47 x 7.75 inch]

TO2-233 Oxygen Sensor (for use in CO<sub>2</sub>)

Order Information:

Record Part Number with selected options in Blank Indicated Area of Form

Model Number:

OMD-675 Oxygen Analyzer

Selected Range

- 1
- PPM Configuration: 0 - 1 PPM, 0 - 10 PPM, 0 - 100 PPM, 0 - 1000 PPM, 0 - 25%
- 10
- PPM Configuration: 0 - 10 PPM, 0 - 100 PPM, 0 - 1000 PPM, 0 - 10000 PPM, 0 - 25%

Selected Sensor:

- 1
- Trace Analysis Standard (TO2-1x): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000ppm, 0 - 25%
- 2
- Trace Analysis Acidic (TO2-2x): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000ppm, 0 - 25%
- 3
- Trace Analysis Standard (TO2-133): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%
- 4
- Trace Analysis Standard (TO2-233): 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm, 0 - 10000 PPM 0 - 25%
- 5
- Percent Analysis Standard (PO2-160): 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%
- 6
- Percent Analysis Acidic (PO2-24): 0 - 1%, 0 - 5%, 0 - 10%, 0 - 25%, 0 - 100%
- 9
- Hybrid Analysis (TO2-19): 0 - 1000 ppm, 0 - 10000 ppm, 0 - 25%

Gas Connections:

- 4
- 1/4" Compression Tube Fittings
- 6
- 6mm Compression Tube Fittings
- 8
- 1/8" Compression Tube Fittings

OMD-675 -        -        -               Use This Part Number When Ordering

\*\* For assistance when ordering, contact our inside sales specialist \*\*