

## Online Trace Oxygen Analyzer w/ Integral Sample System



The OMD-677 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 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 - 1 ppm, 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm and 0 - 25% in auto-range or manual-range mode.

The analyzer offers the user 2 different digital communication options, both of which are bi-directional. This comes in the form of MODBUS RS485 ASCII or RS232.

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 nonlatching relay contact.

The oxygen sensor used in the OMD-677 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 (TO2-133T) is unaffected by other background gases such as H<sub>2</sub>, He, or Hydrocarbons. The optional acidic cell (TO2-233T) 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
- Panel Mount Configuration
- Electrochemical Sensor Technology

### Specifications

Accuracy:	< +/- 1% of Full Scale Range*
Alarms:	(2) Adjustable Relay Contacts (1) Power Fail Relay Contact
Analysis Range:	0-1/10/100/1000ppm/25%
Calibration:	Periodically
Communication:	Bi-Directional RS232 MODBUS RS485 ASCII
Dimensions:	10.78 x 7.47 x 7.75 inch
Display:	Large with Backlight
Enclosure:	Brushed Stainless Steel
Flow Sensitivity:	0.5 - 5 SCFH
Gas Connections:	1/8" Compression Tube
Output (Analog):	0 - 1V DC, 0 - 10V DC Isolated 4 - 20mA
Power:	100 - 240 VAC
Pressure:	Inlet, 0 - 50 PSIG
Range ID:	4 - 20 mA analog output 0 - 1 V DC analog output
Response Time:	T90 in 10 Seconds
Sample System:	Flow Control, 4-way sample / Bypass Valve, Flow Indicator
Sensor:	TO2-133T Trace O <sub>2</sub> Sensor
Sensor Life:	20 - 25 months
Temperature:	0 - 50 deg C
Temperature Compensation:	Digital
Warranty:	12 months Analyzer & Sensor
Weight:	12.0 lbs

\*Accuracy at constant conditions

### Direct Fit Field Replacement:

- Designed to replace competitive analyzers:
- Teledyne: 3000TA, 3000TA-XL
  - All: GPR-1600, GPR-1600MS, PI2-MS-1000