# SOUTHLAND SENSING

MEASURE. ANALYZE. CONTROL.

# 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 - 1 ppm, 0 - 10ppm, 0 - 100ppm, 0 - 1000ppm and 0 - 25% in autorange or manual-range mode.

The analyzer offers the user 2 different digital communication options, both of which are bi-directional. These come 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 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 (TO2-133T) is unaffected by other background gases such as H2, He, or Hydrocarbons. The optional acidic cell (TO2-233T) works well when acid gases such as CO2 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*
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:	19.0 x 5.125 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 O2 Sensor
Sensor Life:	20 - 25 months
Temperature:	0 - 50 deg C
Temperature Compensation:	Digital
Warranty:	12 months Analyzer & Sensor
Weight:	13.0 lbs

\*Accuracy at constant conditions

### **Optional:**

Panel Mount Oxygen Configuration (OMD-677) [Dimensions: 10.78 x 7.47 x7.75 inch] TO2-233T Oxygen Sensor (for use in CO2)