

OMD-677 Oxygen Analyzer

Product Specification Sheet

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

*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