SOUTHLAND SENSING

MEASURE. ANALYZE. CONTROL.

OMD-775 Oxygen Analyzer

Product Specification Sheet

Online Oxygen Purity Analyzer w/ Integral Sample System





The OMD-775 is designed to measure elevated oxygen levels (21% - 100%) for online applications. The unit combines an advanced set of electronic features with our industry leading precision electrochemical oxygen sensor technology. The analyzer also has built in temperature and barometric pressure compensation, the result is a highly reliable and cost effective design with an easy-to-use user interface.

The analyzer comes standard with a 0-100% full scale range with a resolution of 0.01%. The analyzer can also be configured by the end user in the field for suppressed ranges of 50-100%, 80-100% and 90-100%. The analyzer comes with the ability to auto-range through all four ranges, this is accomplished with the choice of a voltage or current analog output.

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 is performed by 2 fully adjustable form C nonlatching 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-775 is based on the galvanic electrochemical fuel cell principal and is compensated for both pressure and temperature giving the user added accuracy. All oxygen sensors are manufactured in house by Southland Sensing Ltd. under a strict quality program.

The analyzer is a cost-effective, yet similarly performing, alternative to paramagnetic oxygen sensors packaged in a 19" rack mount for easy installation and operation.

Applications:

Air Liquefaction and Separation
Gas Purity Certification
Oxygen Monitoring of Medical Gases
Ozone Generation PSA, VPSA
Measurement in Wastewater Treatment Plants

0/50/80/90 - 100% Suppressed Ranges
Advanced Digital Temperature Compensation
Integral Barometric Pressure Compensation
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:	0/50/80/90 - 100%
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 30 Seconds
Sample System:	Flow Control, 4-way sample /
	Flow Indicator
Sensor:	PO2-1120 Percent O2 Sensor
Sensor Life:	20 - 25 months @ 100% O2
Temperature:	0 - 50 deg C
Temperature Compensation:	Digital
Warranty:	12 months Analyzer & Sensor
Weight:	13.0 lbs

^{*}Accuracy at constant conditions