

### **Tabletop Oxygen Analyzer for Air Separation Monitoring** Item # 07-0158 Model O2C Item # 07-0168 Model O2D

The Models O2C and O2D are general purpose oxygen analyzers for research, air separation monitoring, and industrial monitoring applications. Designed to measure oxygen in a range of 5-100% accurately and in the presence of other gasses such as including Ar, He, H2, CO2 and non-condensing H2O vapors. The Model O2C features an internal pressure regulator to connection to 1-75 psig source and the Model O2D features a sampling pump for flow control.





#### **Features**

## Self-Calibrating Oxygen Analysis for Continuous Monitoring

The Model O2 C and D analyzers provide high-precision oxygen measurement designed for air separation, industrial gas production, aerospace research, and laboratory applications. Using laser diode absorption technology, these analyzers deliver ultra-fast response times, exceptional accuracy, and long-term stability for real-time oxygen purity monitoring. Their versatile design, multiple sampling options, and reliable performance make them essential tools for industries requiring continuous, high-purity oxygen analysis.

## **Optimized for Air Separation & Industrial Gas Production**

The Model O2 C and D analyzers play a critical role in air separation and industrial gas applications, ensuring that oxygen purity meets precise specifications before distribution or further processing. These analyzers provide realtime monitoring of oxygen concentration in cryogenic air separation, membrane-based O<sub>2</sub> generation, and pressure swing adsorption (PSA) systems, optimizing efficiency and reducing losses.

#### **Ultra-Fast Response Time for Process Control**

With a sub-150 millisecond response time, these analyzers provide near-instantaneous oxygen concentration measurements, allowing quick adjustments in air separation plants, industrial gas pipelines, and aerospace test facilities. Rapid feedback ensures optimal process control and quality assurance.

#### High Accuracy and Long-Term Stability

Delivering oxygen concentration readings with  $\pm 0.2\%$  accuracy, the Model O2 C and D analyzers ensure consistent and precise measurement over extended periods. Laser diode technology eliminates sensor drift, reducing the need for frequent recalibration and ensuring stable operation in continuous production environments.

## Versatile Sampling for Air Separation & Industrial Applications

Designed for both extractive and inline sampling, these analyzers can measure oxygen concentrations in highpressure pipelines, low-flow gas streams, and cryogenic systems. Their ability to operate in dynamic environments with variable gas compositions makes them ideal for air separation units, gas production facilities, and industrial quality control.

## Multiple Output Options for Seamless System Integration

Equipped with analog (0-1V DC, 4-20mA) and digital (RS-232) outputs, the Model O2 C and D analyzers integrate effortlessly into air separation plants, industrial automation systems, and aerospace testing platforms. These flexible communication options enable real-time monitoring and remote system control, improving process efficiency and safety.

## **Accessories**



### Calibration Kit

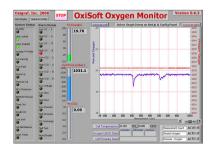
Two Regulator Valves, two tanks of calibrating gases (21.00 and 99.99% +/- 0.05%) with Cal Kit Tubing Assembly and hard plastic carry case. (35 Liter bottles: approx 100 calibrations.

# Sensor Inlet Filter



PTFE moisture barrier/dust barrier for sensor, no fittings . (Package of 5). 25MM (package of 1)

Percent Oxygen     Percent CO2     Pressre Oxygen     Cell Temp Oxygen     Cell Temp Oxygen     Cell Temp Co2     Sample Flow     Marm Status			Calbrate High Calbrate High 100.00 Set 0 Calbrate Low 2010 Set 02 002 Cal High
Pressure Oxygen     Cell Temp Oxygen     Cell Temp Oxygen     Cell Temp Oxygen     Adam Status		Set Filters 6 O2 Filter 0 CO2 Filter Later Temp 33.84 °C	Calbrate High
Cell Temp Oxygen     Cell Temp Oxygen     Cell Temp CO2     Sample Flow     Marm Status		6 02 Filter 0 C02 Filter Laser Temp 33.84 °C	100.00 Set 0 Calibrate Low 20.00 Set 02
Cell Temp CO2     Sample Flow     Morm Status		6 02 Filter 0 C02 Filter Laser Temp 33.84 °C	100.00 Set 0 Calibrate Low 20.00 Set 02
Sample Flow     Alarm Status		0 CO2 Filter	Calibrate Low 20.00 Set 05
<ul> <li>Marm Status</li> </ul>		Laser Temp 33.84 °C	20.00 Set 02
		33.84 °C	
			C02 Cal High
- M 02			
	2	3.947 mA	0.00 Set CO
10 02 Pres (mb)		Cell Null Value	CO2 Cal Low
		298	32.50 Set CO
		Prediction Ga	
45.00 02 0 116		2 100 Set 0	02 Prediction Gain
0.00 CO2 MOOM V1.21.00	0405.00405	Pred Ibreshe	bio
Log Data		5 100 Set C	02 Pred Threshold
J A C		C02 Pred Ga	m_l
		2 0 Set C	202 Prediction Gain
ot A Parto		a O Set C	
	0 Sample Row 0 Alarm 15.00 02 0 110 0.000 002 NORM 1210 Destroyed 1 A Petro	W Sample Row         0         Narm Status           45.00         02         0         1100         422           0.00         002         WORM 13.11.0446.0446         0442           Log Data           1         1         1	Organization         April 2000         April



#### OxiSoft Software

Oxisoft is a graphical oriented tool for controlling and displaying Oxigraf oxygen analyzers. Data logging of concentration, temperature and pressure for both oxygen and CO2. Dual panels. One panel for Data Display and one for setup and configuration.

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# **Technical Data**

Performance Conditions		
Ambient Temperature (Operating)	5 to 40 °C 40 to 102 °F	
Ambient Temperature (Storage)	-20 to 60 ℃ -2 to 140 °F	
Cell Pressure	10.2 to 17.4 psia 70 to 120 kPascal 500 to 900 mmHg	
Warm-up for Full Accuracy	10 min	
Altitude	Two pt calibration required after change in altitude of 2000 feet	
Humidity	0 to 95% non-condensing	
Performance Specifications		
Range	5 to 100%	
Modes	Model O2 C- XC Model O2 D- XC+LN	
Pump	Model O2 D (Only)	
Pressure Regulator	Model O2 C- (Only)	
Inlet Fittings	CPC O-ring	
Resolution	0.1%	
Accuracy - Stability (8 Hrs)	±0.2% in LN mode (nitrogen mixtures only). ±0.4% in XC mode (O2 D only)	
Input Pressure	Model O2 C - 1 to 75 psig Model O2 D0.03 to 1.3 psig	
Flow (Using Pump)	Model OC - 50 to 500 ml/min adjustable. Model O2 D - 0 to 250 ml/min pump on 50 to 500 ml/min pump off	
Response Time	Model OC - 1 second at 350 ml/min, electronic Filter setting 0 to 6. Model O2 D- 150 ms at 250 ml/min, electronic Filter setting 0 to 3	
Sample Inlet	CPC O-ring quick connects, 1/8 " flex tubing barbs std.	
Analog Output	0 to 1.0 volts for 0 to 100% oxygen, 1.00K - 1% output resistance	
Digital Output	RS232: 9600 baud default, 8 bit, no parity	
Electrical Specifications		
Power Requirements	Voltage (DC)- 12 V, Current- 1.5 A	
External Power Supply	95 to 250 VAC, 47 to 63 Hz	
Mechanical Specifications		
Dimensions (W x H x D)	Model O2 C, D - 7.5x3.0x11.0 in190x76x280 mm Model O2 DAL (S) - 7.5x3.0x14.0 in190x76x356 mm	
Weight Instrument	4 Pound1.8 Kilogram	

