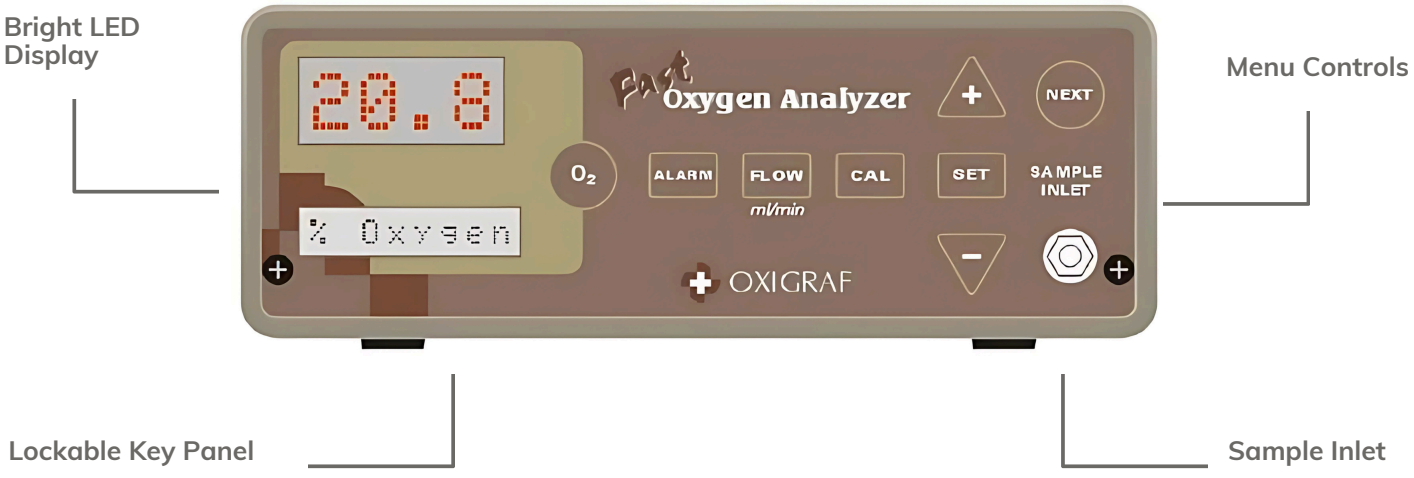
General Research Tabletop Oxygen Analyzer

Item # 07-0006 Model O2

The Model O2 is a versatile research grade oxygen analyzer for measuring 5-100% oxygen concentrations. The unit includes an integrated gas sampling pump, flow controller, bright LED display for oxygen concentration and status indication, touch panel controls for ease of operation, Includes XC/LN Modes for 1 Volt DC analog and a terminal strip with relay outputs and a 4-20 ma analog output, a separate digital RS-232 output, and LEUR type front panel connection for response times. The front panel allows control of flow, alarm set-points, calibration, and other user features. The Model O2 has a CE clearance and can be used in research and other applications, but not approved for human medical use or diagnostics. Oxigraf OxiSoft software is also included with the unit for computer display and data logging.



Features

Precision Oxygen Analysis for Research and Industrial Applications

The Model O2 is a research-grade, single-channel tabletop oxygen analyzer designed for high-precision measurement of oxygen concentrations ranging from 5% to 100%. With an integrated gas sampling pump and advanced laser diode technology, this unit provides fast, reliable, and accurate oxygen analysis for laboratory, industrial, and safety applications.

XC and LN Modes for Enhanced Accuracy

The Model O2 includes XC (Cross Calibration) Mode and LN (Laser Normalization) Mode, providing flexibility for different measurement conditions:

- LN Mode (Laser Normalization Mode): Optimized for nitrogen-based gas mixtures, this mode provides high-precision readings with a stability of ±0.2%, ensuring minimal drift in controlled environments.
- XC Mode (Cross Calibration Mode): Designed for applications involving complex gas mixtures, including noble gases, hydrocarbons, fluorocarbons, CO_2, and N_2O, this mode ensures accurate oxygen readings even in varying background gas compositions, with a stability of ±0.4%.

Fast & Reliable Oxygen Measurement

The Model O2 utilizes laser diode absorption technology, delivering precise oxygen concentration readings with an accuracy of ±0.2% (LN mode) and a rapid response time of 150 milliseconds at a 250 mL/min flow rate. Unlike electrochemical sensors, it provides consistent performance without frequent calibration or sensor replacement, reducing downtime and maintenance costs.

Integrated Sampling Pump for Continuous Monitoring

A built-in sampling pump ensures constant gas flow and accurate readings, making it ideal for laboratory research, industrial gas analysis, and safety monitoring applications. The unit's microprocessor-controlled flow sensor maintains stability, while a hydrophobic filter prevents contamination and extends the device's lifespan.

Multiple Output Options for Seamless Integration

The Model O2 supports analog (0-1V DC, 4-20mA) and digital (RS-232) outputs, allowing for easy integration into automation systems, laboratory data acquisition setups, and industrial control platforms. These flexible output options enable real-time monitoring and remote data logging.

Compact, Durable, and Reliable

Designed for tabletop use, the Model O2 is compact and lightweight (7.5 x 3.0 x 11.0 inches, 5 lbs) while maintaining industrial-grade durability. With no moving parts, it resists mechanical vibration and environmental disturbances, ensuring long-term reliability in demanding research and industrial environments.

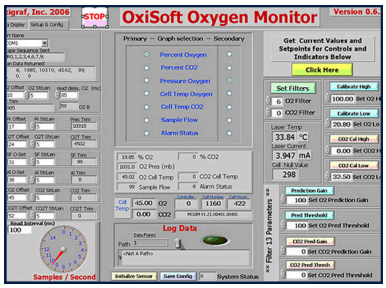
Accessories

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.

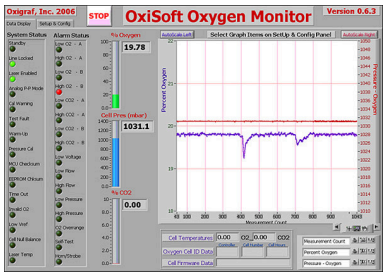
Sensor Inlet Filter

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



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 °C -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	5 min
Altitude	Two point calibration required after change in altitude of 2000 feet
Humidity	0 to 95% non-condensing
Performance Specifications	
Range	5 to 100%
Modes	XC/LN Modes
Pump	Yes
Inlet Fittings	Luer
Resolution	0.1%
Accuracy - Stability (8 Hrs)	±0.2% after 5 minute warm up in LN mode (nitrogen mixtures) ±0.4% after 5 minute warm up in XC mode
Flow (Using Pump)	50 to 250 ml/min adjustable.
Response Time	150 ms @ 250 ml/min flow. (12 software averaging filters available from front panel).
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)	7.5 x 3.0 x 11.0 in190 x 76 x 280 mm
Weight Instrument	Instrument 5 lbs (2.3Kg), power module 1.5 lbs (0.7Kg)