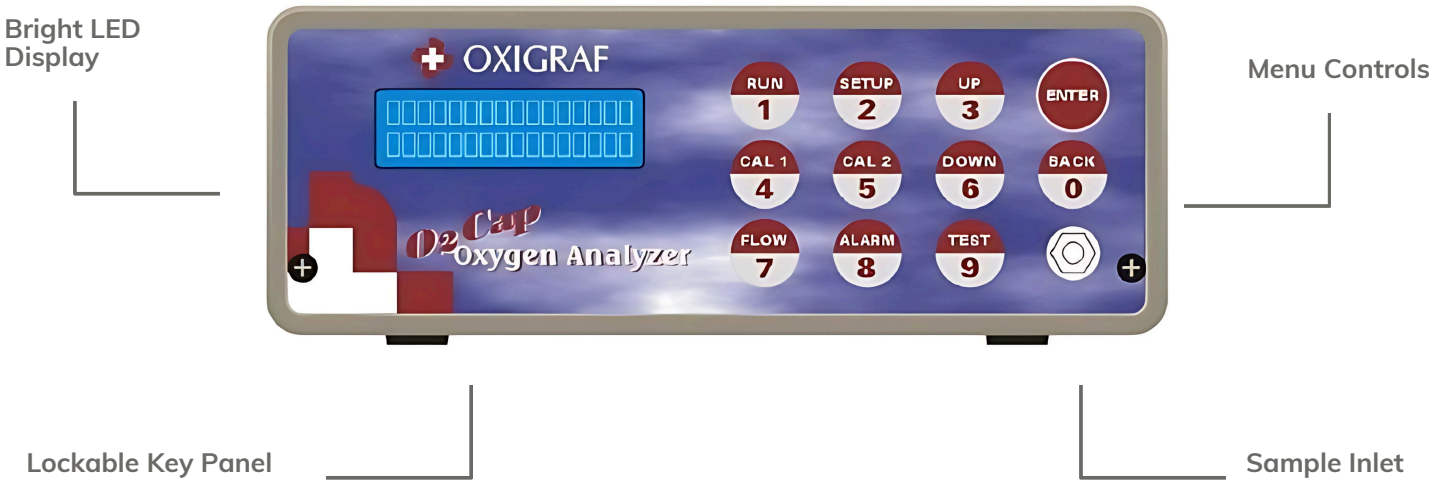
Oxigraf

Oxygen and CO2 Analyzer for Capnography

Item # 07-0193 Model O2 Cap

Item # 07-0387 Model O2 Cap B

The O2Cap family integrates an Oxigraf oxygen sensor with a NDIR CO2 sensor for dual gas measurements for research, industrial and laboratory measurements. Measure Oxygen concentrations from 5-100% and CO2 from 0-10%. Perform capnography tests with fast breath by breath measurement. The units come with a pump for gas sampling system, bright vacuum fluorescent alphanumeric display (VFD), touch panel keypad, a rear 0-1VDC analog output for O2 readings, and either a rear terminal strip with limit detection relays and 4 – 20 mA analog outputs or a second CO2 analog output, and a RS232 digital interface.



Features

Self-Calibrating Oxygen & CO_2 Analysis for Continuous Monitoring

The Cap Series analyzers utilize laser diode absorption technology to deliver high-speed, high-accuracy CO_2 and O_2 measurements for medical ventilation, anesthesia monitoring, and industrial gas analysis. Designed for continuous, real-time gas monitoring, these compact and energy-efficient analyzers provide fast response times, long-term stability, and seamless OEM integration, making them an ideal choice for critical care and industrial applications.

Ultra-Fast Response Time for Real-Time Monitoring

With a sub-150 millisecond response time, the Cap Series delivers near-instantaneous detection of CO_2 and O_2 concentration changes. This rapid measurement capability ensures precise real-time ventilation monitoring, enabling immediate adjustments in anesthesia, emergency medicine, and industrial process control

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Self-Calibrating for Long-Term Stability

Unlike sensors that require frequent recalibration, the Cap Series features a self-normalizing system that maintains accuracy over extended periods. This eliminates downtime due to manual calibration, ensuring continuous, reliable operation in high-demand medical and industrial environments.

High Accuracy in Complex Gas Mixtures

Designed to maintain precise readings even in the presence of multiple gases, the Cap Series ensures stable and interference-free measurements in anesthesia monitoring, respiratory care, and industrial CO_2 monitoring. This makes it a trusted solution for applications requiring consistent accuracy in varying gas conditions.

Compact & Low-Power for Seamless OEM Integration

With a lightweight, energy-efficient design, the Cap Series is optimized for integration into portable medical ventilators, anesthesia machines, and industrial monitoring systems. Its low power consumption makes it an excellent choice for battery-powered and mobile applications, ensuring continuous monitoring without excessive energy demands.

Long-Term Reliability Without Sensor Degradation

Built for continuous operation, the Cap Series is engineered to provide years of stable performance without sensor drift or degradation. This reliability ensures consistent gas analysis in life-critical applications, reducing the need for frequent replacements or recalibrations.

Versatile Data Outputs for Easy System Integration

Featuring both analog (0-1V DC) and digital (RS-232) outputs, the Cap Series allows seamless integration into medical monitoring systems, industrial process controls, and laboratory data acquisition platforms. These multiple output options ensure compatibility with a wide range of existing systems.

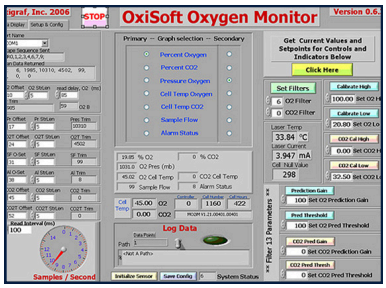
Accessories

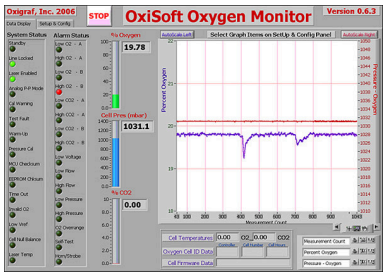
Calibration Kit

Two tanks of calibration gases, (10% CO2/5% O2 & 99.99%O2) with regulators, calibration tubing assemblies, and hard plastic carry case.

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 psi 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% Oxygen, 0 to 10% CO2.
Modes	XC+LN
Pump	Yes
Inlet Fittings	Luer Fittings
Resolution	0.1% in 5 to 100% range (O2), 0.01% in 0 to 10% ranges (CO2)
Accuracy - Stability (4 Hrs)	±0.1% CO2 after 5 minute warm up± 0.1% in Oxygen LN mode± 0.3% Oxygen in XC mode
Input Pressure	-0.03 to 1.3 psi
Flow (Using Pump)	50 to 250 ml/min adjustable.
Response Time	150ms at 150 ml/min, filter setting 0 to 3.
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)