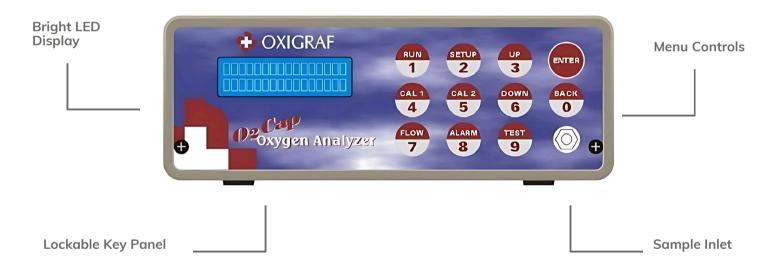


Oxygen and CO2 Analyzer for Capnography- High Altitude #07-7035 O2Cap(AL)

#07-7037 O2Cap(AL-S)

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.



Model O2 Capnography versions

#07-0193 O2Cap comes with LUER fitting and gas sampling pump.

#07-0387 O2CapB replaces Terminal Strip w/ second BNC analog output for CO2 on the regular O2Cap.

#07-7035 O2Cap(AL) comes with CPC O-ring fitting & gas sampling pump to handle lower pressure inputs.

#07-7037 O2Cap(AL-S) comes with Swaglok fittings

Features

Self-Calibrating Oxygen & CO2 Analysis for Continuous Monitoring

The Cap Series analyzers utilize laser diode absorption technology to deliver high-speed, high-accuracy CO₂ and O₂ 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 CO₂ and O₂ concentration changes. This rapid measurement capability ensures precise real-time ventilation monitoring, enabling immediate adjustments in anesthesia, emergency medicine, and industrial process control

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 CO₂ 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.

Cap(AL)-S: Enhanced with Swagelok® Fittings for Secure Connections

The Model O2 Cap(AL)-S model includes Swagelok® fittings, providing high-integrity gas connections that enhance leak resistance, durability, and system reliability. This is particularly important in high-pressure industrial applications, cryogenic air separation, and aerospace environments, where minimizing leaks and ensuring a secure gas pathway is essential for measurement accuracy and system efficiency.

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 Oxygen Monitor

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.

Oxygen and CO2 Analyzer for Capnography- High Altitude #07-7035 O2Cap(AL) #07-7037 O2Cap(AL-S)

Technical Data

Ambient Temperature (Storage) -20 to 60 °C -2 to 140 °F 10.2 to 17.4 psi 70 to 120 kPascal 500 to 900 mmHg Warm-up for Full Accuracy 5 min Two point calibration required after change in altitude of 2000 feet -lumidity 0 to 95% non-condensing Performance Specifications Range 5 to 100% Oxygen, 0 to 10% CO2. XC+LN High flow micro pump for low pressure operation from 1200 to 55mbar (0-60.000 feet altitude) nlet Fittings Luer Fittings Resolution 0.1% in 5 to 100% range (O2), 0.01% in 0 to 10% ranges (CO2) ±0.1% CO2 after 5 minute warm up± 0.19% in Oxygen IN M mode± 0.3% Oxygen in XC mode nput Pressure -0.03 to 1.3 psi Flow (Using Pump) So to 250 ml/min adjustable. Response Time 150ms at 150 ml/min, filter setting 0 to 3. Analog Output RS232: 9600 baud default, 8 bit, no parity Electrical Specifications		
Ambient Temperature (Operating) Ambient Temperature (Storage) -20 to 60 °C -2 to 140 °F -20 to 120 kPascol 500 to 900 mmHg Warm-up for Full Accuracy 5 min 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. XC+LN Pump High flow micro pump for low pressure operation from 1200 to 55mbar (0-60,000 feet altitude) Accuracy - Stability (4 Hrs) Accuracy - Stability (4 Hrs) Resolution 10 to 95% non-condensing 5 to 100% Oxygen, 0 to 10% CO2. Accuracy - Stability (4 Hrs) -0.1% in 5 to 100% range (O2), 0.01% in 0 to 10% ranges (CO2) -0.1% CO2 after 5 minute warm up± -0.1% in Oxygen LN modes -0.3% Oxygen LN modes -0.0% to 1.3 psi -0.0% to 1.3 psi -0.0% to 1.0 wolts for 0 to 100% oxygen, 1.00K - 1% output resistance -0.0% put to 1.00 wolts for 0 to 100% oxygen, 1.00K - 1% output resistance -0.0% point of the control of t	Performance Conditions	
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55mbar (0-60,000 feet altitude) Luer Fittings Resolution 0.1% in 5 to 100% range (O2), 0.01% in 0 to 10% ranges (CO2) ±0.1% CO2 after 5 minute warm up± 0.1% in 0xygen LN mode± 0.3% Oxygen in XC mode nput 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	Modes	XC+LN
Resolution 0.1% in 5 to 100% range (O2), 0.01% in 0 to 10% ranges (CO2) ±0.1% CO2 after 5 minute warm up± 0.1% in 0xygen LN mode± 0.3% Oxygen in XC mode nput 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	Pump	
±0.1% CO2 after 5 minute warm up± 0.1% in Oxygen LN mode± 0.3% Oxygen in XC mode nput 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	Inlet Fittings	Luer Fittings
Accuracy - Stability (4 Hrs) 0.1% in Oxygen LN mode± 0.3% Oxygen in XC mode -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	Resolution	0.1% in 5 to 100% range (O2), 0.01% in 0 to 10% ranges (CO2)
Flow (Using Pump) 50 to 250 ml/min adjustable. 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	Accuracy - Stability (4 Hrs)	0.1% in Oxygen LN mode±
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	Input Pressure	-0.03 to 1.3 psi
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	Flow (Using Pump)	50 to 250 ml/min adjustable.
Digital Output RS232: 9600 baud default, 8 bit, no parity Electrical Specifications	Response Time	150ms at 150 ml/min, filter setting 0 to 3.
Electrical Specifications	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	Power Requirements	Voltage (DC)- 12 V Current- 1.5 A
External Power Supply 95 to 250 VAC, 47 to 63 Hz	External Power Supply	95 to 250 VAC, 47 to 63 Hz
Mechanical Specifications	Mechanical Specifications	
Dimensions (W x H x D) 7.5x3.0x14.0 in190x76x356 mm	Dimensions (W x H x D)	7.5x3.0x14.0 in190x76x356 mm
Weight Instrument 5 lbs (2.3Kg), power module 1.5 lbs (0.7Kg)	Weight Instrument	Instrument 5 lbs (2.3Kg), power module 1.5 lbs (0.7Kg)