



ALPHA OMEGA  
INSTRUMENTS

# SERIES 2520 & 3520 Portable Oxygen Analyzers



## FEATURES

- ✓ State-of-the-Art Sensor Technology
- ✓ Light Weight/Compact Design
- ✓ Rapid Speed of Response
- ✓ Built-in NICAD Batteries
- ✓ Uses Standard NICAD's
- ✓ Built-in Battery Charger
- ✓ Minimum Maintenance

## BENEFITS

- High Precision Measurements.
- Easy to Carry and Transport.
- Senses Changes in Gas Composition in Seconds.
- Provides >12 Hours of Continuous Operation with the Optional DC Sample Pump in Use.
- Replacement Batteries Can be Purchased Worldwide.
- Can be Powered From AC Adapter.
- Low Cost of Ownership.

## System Description

### Series 2520 Portable Percent Oxygen Analyzer

The Series 2520 Portable Percent Oxygen Analyzer is a light-weight, easy-to-use analyzer that provides accurate and repeatable percent oxygen measurements in a variety of gases. The rugged and compact design of the Series 2520 makes it ideal for industrial applications where spot oxygen measurements need to be made. The Series 2520 can be configured with one of several measuring ranges from 0-1% to 0-100% oxygen. The standard Series 2520 Portable Percent Oxygen Analyzer is equipped with a 3-1/2 digit liquid crystal display, in-line filter, built-in NICAD batteries, and an AC adapter that provides the ability to recharge the NICAD batteries even while powering the analyzer from the adapter.

The Series 2520 Portable Percent Oxygen Analyzer features a patented, extended life oxygen sensor with EES (Enhanced Electrolyte System) that provides exceptional measurement accuracy and stability. For applications where carbon dioxide is present in the sample gas, the EES retards passivation of the sensor anode by allowing the products of oxidation to dissolve in the electrolyte. In effect, the sensor is renewed continuously, resulting in an increase in sensor life. The output from the sensor is temperature compensated.

### Series 3520 Portable Trace Oxygen Analyzer

The Series 3520 Portable Trace Oxygen Analyzer is a high precision instrument designed to provide accurate trace oxygen measurements in a variety of laboratory and process gases. The Series 3520 can be configured with one of several measuring ranges from 0-50 parts per million (ppm) to 0-10,000 ppm. The Series 3520 is equipped with either a 3-1/2 or 4-1/2 digit liquid crystal display (depending on the range selected), built-in NICAD batteries, and an AC adapter that provides the ability to recharge the NICAD batteries even while powering the analyzer from the adapter.

The 3520 features an advanced electrochemical oxygen sensor. The improved mechanical design of the sensor ensures longer life and virtually eliminates leakage of caustic electrolyte, a nagging problem associated with sensors that require periodic electrolyte maintenance. The output from the sensor is temperature compensated. In addition, the sensor is equipped with manual isolation valves so that during times of inactivity, the sensor can be kept inerted and ready for use. A major advantage of the Series 3520 is that it does not require users to apply a correction factor to the readings when exposed to different gas compositions. With other analyzer types, if correction factors are not applied, readings can be off by a factor of three!

#### Specifications

##### Measurement Ranges:

#### Series 2520

0-1, 0-5, 0-10, 0-25, 0-50, and 0-100%.

#### Series 3520

0-50, 0-100, 0-500, 0-1,000, 0-5,000, and 0-10,000 ppm.

##### Accuracy:

± 1% of full scale.

± 1% of full scale.

##### Linearity:

± 1% of full scale.

± 1% of full scale.

##### Response Time:

90% of full scale in <15 seconds.

90% of full scale in <20 seconds typical.

##### Sensor Type:

Electrochemical.

Electrochemical.

##### Temperature Compensation:

Standard.

Standard.

##### Operation Temperature Range:

40° to 100°F (5° to 38° C).

40° to 100°F (5° to 38° C).

##### Sample Gas Pressure Limits:

0.1 to 1.0 psig.

0.1 to 1.0 psig.

##### Sample Flow Rate:

1.0 to 2.0 SCFH (0.5 to 1.0 liters/minute).

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##### Power Source:

Rechargeable NICAD batteries or 115 VAC/60 Hz using the AC adapter.

Rechargeable NICAD batteries or 115 VAC/60 Hz using the AC adapter.

##### Analog Output:

Not available.

Not available.

##### Warranty:

Two years electronics/1 year sensor.

Two years electronics/1 year sensor.

##### Enclosure:

Polycarbonate-rated NEMA 1.

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##### Display:

3-1/2 digit liquid crystal display.

3-1/2 or 4-1/2 digit liquid crystal display.

##### Gas Connections:

Quick connect.

1/4" compression fittings.

##### Dimensions:

5.8" H x 6.7" W x 3.4" D.

5.8" H x 8.8" W x 3.4" D.

##### Weight:

<2 pounds.

<4 pounds.

#### Optional Equipment

*DC Sample Pump  
High Capacity Filter*

*Pressure Regulator  
Flow Meter*

**Call Us Toll Free  
800-262-5977**



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