

# Quick Start Guide for Model GB300 Portable Oxygen Analyzer

## REV 1

The Quick Start Guide describes the steps to successfully start, calibrate, and use the GB300 instrument.

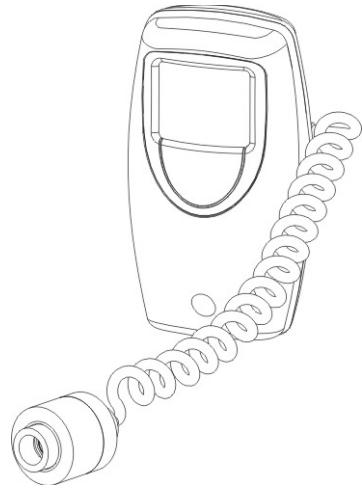
## Components

The GB300 Portable Oxygen Analyzer includes:

- Instrument and carrying case
- R17D sensor
- Sensor interconnection cable
- T adapter P/N A268
- Barbed hose adapter P/N F1717
- 3 AA batteries
- Quick Start Manual

Optional items:

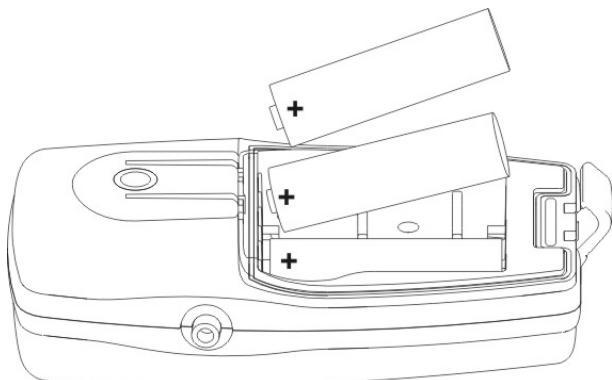
- RS232 digital output
- Interface cable: 0-1 vdc P/N B75554
- Interface cable: RS232 P/N B75555



## Set Up

Set up is simple:

1. Install the cable and sensor
2. Install 3 AA alkaline batteries.
3. Calibrate



## Battery Installation

1. Hold the instrument face down.
2. Using a coin, gently twist to open the hinged battery compartment door latch.
3. Lift up door near latch and pull out.
4. Install 3 AA alkaline batteries observing proper polarity.

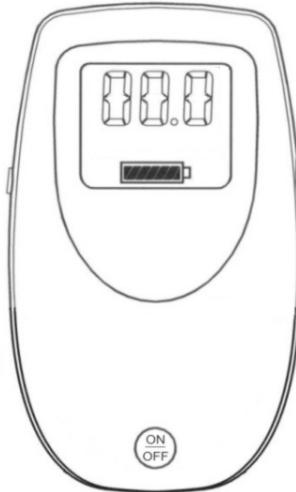
*Note: Use only alkaline batteries*

## Cable and Sensor Assembly

1. Insert the coiled cable connector into the right side of the instrument and secure the locking nut.
2. Remove the sensor from its protective package. **Caution:** If you see signs of moisture or liquid in the protective bag do not open the package. Sensor contains caustic, which causes severe burns and may be fatal if swallowed. The Material Safety Sheet can be found in the service section of our web site at <[www.teledyne-ai.com](http://www.teledyne-ai.com)>
3. Connect the coiled cable to the sensor and secure the locking nut.

## Calibration

1. After installing the batteries and sensor the LCD will read 00.0 and the battery indicator will show a full charge with all bars activated. On initial start up with a new sensor, allow the unit to stabilize for about 10 minutes before proceeding to the next step.
2. With the sensor exposed to room air or 100% oxygen, press and hold the ON/OFF key down until the LCD starts to count from 3 to 0. Release the key as soon as the count starts and wait for the LCD to read 20.9 plus or minus a few percent. **Note:** Holding ON/OFF key down during the automatic calibration sequence will shut the unit off when released. Excluding factors such as temperature, humidity, and trace amounts of other gases, the air we breathe contains 20.9% oxygen (calibration point) and 79.1 % nitrogen. Subsequent calibrations require that you first turn the unit on by pressing the ON/OFF key once. When the LCD displays a value, press and hold the ON/OFF key until the LCD starts to count down as noted above.



## Gas Sampling

For flowing gas applications use the supplied adapter P/N C53790. When sampling, do not pressurize the sensor as this will lead to incorrect readings. The sensor is a partial pressure device. Any change in pressure from the calibration point will affect the reading.

## Turning the Unit OFF

Press and release the ON/OFF key.

### Specifications:

Range: 0-100% oxygen

Response time: 90% of final value in less than 10 seconds.

Sensor life: 36 months in air.

Battery life: Approximately 2000 hours.

Power: 3 AA alkaline batteries

Standard Output: 0-1 vdc.

Operating Temperature: 0-40 °C

Warranty: One (1) year against defects in material and workmanship.