# O2 Gas Sensor

Order Code O2-BTA

## What's Included

- O<sub>2</sub> Gas Sensor
- 250 mL gas sampling bottle (Nalgene bottle with lid)

#### **Quick Start**

- Connect the sensor to the interface (LabQuest Mini, LabQuest 2, etc.).
- Start the appropriate data-collection software (Logger Pro, Logger Lite, LabQuest App) if not already running, and choose New from File menu.

The software will identify the sensor and load a default datacollection setup. You are now ready to collect data.

If you are collecting data using a Chromebook  $^{\mathsf{TM}}$ , mobile device such as  $i\mathsf{Pad}^{\mathfrak{D}}$  or Android  $^{\mathsf{TM}}$  tablet, or a Vernier wireless sensor or interface, please see the following link for up-to-date connection information:

## www.vernier.com/start/o2-bta

#### Tips

 Very important: Do not place the sensor into any liquid. The sensor is intended only for measuring gaseous, not aqueous, O<sub>2</sub> concentration.

For full product documentation, see

www.vernier.com/manuals/o2-bta

Note: Vernier products are for educational use only.

# CO<sub>2</sub> Gas Sensor

Order Code CO2-BTA

#### What is Included

- CO2 Gas Sensor
- 250 mL gas sampling bottle (Nalgene bottle with lid)

#### **Quick Start**

- 1. Set the range switch on the sensor.
- 2. Connect the sensor to the interface (LabQuest Mini, LabQuest 2, etc.).
- 3. Start the appropriate data-collection software (Logger *Pro*, Logger Lite, LabQuest App) if not already running, and choose New from File menu.

The software will identify the sensor and load a default datacollection setup. You are now ready to collect data.

If you are collecting data using a Chromebook<sup>TM</sup>, mobile device such as iPad<sup>®</sup> or Android<sup>TM</sup> tablet, or a Vernier wireless sensor or interface, please see the following link for up-to-date connection information:

#### www.vernier.com/start/co2-bta

Note: Vernier products are for educational use only.

#### **Tips**

• Choose the desired range on the sensor. Most experiments will use the Low range (0–10,000 ppm). The High range would be appropriate when measuring human respiration, as expired air is typically 40,000–60,000 ppm CO<sub>2</sub>.

- Allow the CO2 Gas Sensor to warm up for about 90 seconds before collecting data. During warmup, the readings will be very low.
- Do not allow liquids to come in contact with the CO<sub>2</sub> Gas Sensor. The sensor is intended only for measuring gaseous, not aqueous, CO2 concentration.

For full product documentation, see

www.vernier.com/manuals/co2-bta



## Measure. Analyze. Learn. Vernier Software & Technology

13979 S. W. Millikan Way • Beaverton, OR 97005-2886 Toll Free (888) 837-6437 • (503) 277-2299 • FAX (503) 277-2440 info@vernier.com • www.vernier.com

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# Go! Link® (GO-LINK)

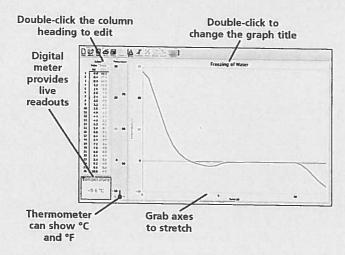


Go! Link is a single-channel USB interface used to connect many Vernier sensors directly to a Windows or Macintosh computer. Some Vernier sensors can also be used when Go! Link is connected to a Chromebook to a complete list of compatible sensors, visit www.vernier.com/go

## **Getting Started**

Go! Link with a Computer

- 1. Install Logger Lite® or Logger Pro® software on your computer.
  - · Logger Lite is free and can be downloaded at www.vernier.com/loggerlite
  - Logger *Pro* has many additional features and is available for purchase at www.vernier.com/lp
- 2. Connect Go! Link to the computer's USB port and the sensor to the Go! Link.
- 3. Start the software. The sensor will be recognized and in most cases will display the live reading. Note: The thermometer shown below is only displayed when using a temperature probe.
- 4. Click Collect to begin collecting data, if desired, or open an experiment.



## Go! Link with a Chromebook

- 1. Install Graphical Analysis™ (version 1.2 or newer, available in the Chrome web store in late spring 2015).
- 2. Connect Go! Link to the Chromebook's USB port and the sensor to the Go! Link.
- 3. Launch Graphical Analysis. The sensor will be recognized and in most cases will display the live reading.
- 4. Start data collection, if desired.

**NOTE:** Vernier products are designed for educational use. Our products are not designed nor are they recommended for any industrial, medical, or commercial process such as life support, patient diagnosis, control of a manufacturing process, or industrial testing of any kind.

## **Specifications**

USB specification

Maximum sampling rate 200 samples/second

Resolution 12 bit

#### **Related Products**

Go! Link Teacher Pack (order code: GL-TP)

Save money by purchasing a Teacher Pack of eight Go! Links. Includes free download of Logger Lite software. More information is available at www.vernier.com/go

Go! Temp® (order code: GO-TEMP)

Go!Temp is an easy-to-use temperature probe that connects directly to the USB port of a computer, LabQuest, or Chromebook. Includes free download of Logger Lite software. More information is available at www.vernier.com/go-temp

Go! Motion® (order code: GO-MOT)

Go! Motion is a motion detector that connects directly to the USB port of a computer, LabQuest, or Chromebook. Includes free download of Logger Lite software. More information is available at www.vernier.com/go-mot

Warranty

Vernier warrants this product to be free from defects in materials and workmanship for a period of five years from the date of shipment to the customer. This warranty does not cover damage to the product caused by abuse or improper use.



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