



OZONE SOURCE CALIBRATOR MODEL OG-3

INSTRUCTIONS FOR USE

General

The OG-3 Ozone Source Calibrator has been developed to fulfill the need for field calibration of our ozone instruments. It uses a precision UV micro-lamp that emits .1 ppm of ozone for an easily-followed set of calibration conditions. (1 ppm output calibrators are also available). The OG-3 does not substitute for a complete laboratory set-up generally required for primary calibration. The OG-3 is very useful for checking instruments in the field to verify that they are basically still within calibration, and it can be used to recalibrate them at .1 ppm if usable but not standards-traceable calibration is all that is required. Otherwise, the OG-3 is still useful to indicate when an ozone sensing instrument should be returned to the laboratory for recalibration.

The OG-3 is available in one of two ozone calibrations (specified when purchased): .1 ppm or 1 ppm. The value set for your OG-3 is marked on the label on the underside of the calibrator.

Operation

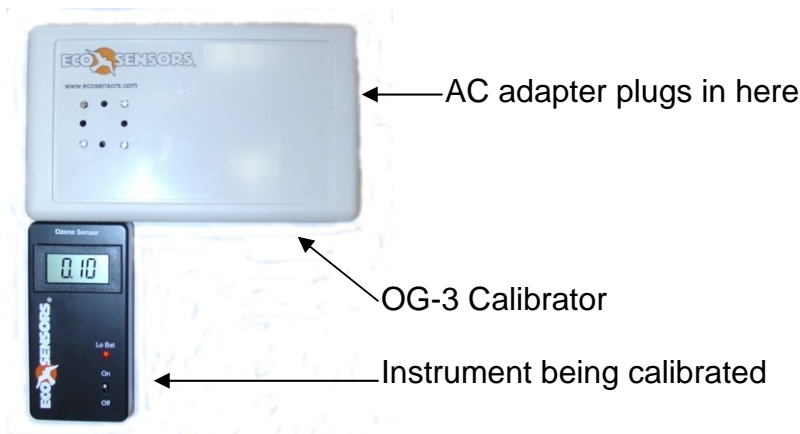
The OG-3 and the ozone sensing instrument to be checked should be placed on a table top in a room free of air currents and extraneous gases and chemical vapors. There should be no VOCs (volatile organic compounds) present.

Connect the AC adapter to the OG-3 calibrator. The fan should be running and a blue light can be seen through the 10 mm diameter hole near on the side of the calibrator. If the fan is not running, the OG-3 probably is not receiving the correct power (12 VDC at 300 mA). If the fan is running but the lamp is not operating, contact your distributor or the factory for further assistance.

Allow the calibrator to run for about 30 minutes and the ozone sensing instrument to be tested to warm up for 30 minutes. Slide the sensor ozone sensing instrument to be tested into the 10 mm diameter hole at the side of the OG-3. (See illustration below).

After about a minute the ozone sensing instrument should respond and will climb to a steady value. When the OG-3 ozone calibration source and the sensing instrument under test have stabilized (typically after 3 minutes and when the ppm reading does not change for about 10 seconds or so) the data should be noted, and another instrument can be tested. The OG-3 should be disconnected from its power source when not in use to prolong the lamp life.

A lamp should show stable and constant output for about 500 uses or several years of regular use. Return the OG-3 to your distributor or to Eco Sensors, Inc. for a lamp replacement and recalibration.



Service and Maintenance

The only two components of the calibrator that are likely to fail are the fan and the lamp. These should only be replaced at the factory. Do not attempt board-level repairs yourself. The lamp circuit has very high voltage.

FAN - The fan can eventually get noisy or decline in speed due to wear and tear.

LAMP - The lamp's ozone output should not decline significantly for about 500 calibration sessions.

Specifications

- Ozone source: UV lamp designed for high ozone output.
- Output ozone concentration: .1 ppm (standard) or 1 ppm (upon request when purchased).
- Accuracy: approximately 10%.
- Warm-up time: 30 minutes.
- Recommended instrument connect time for calibration: 3 minutes.
- Temperature range: 10-27 degrees C (50-80 degrees F).
- Size: 36 mm X 95 mm X 160 mm (1.41" X 3.75" X 6.30").
- Weight: 255 grams (9 ounces).
- Power requirement: 12 volts DC at 300 mA.

Warranty

This product is warranted against defects in materials and workmanship for one year following the date of purchase of the original owner. This warranty does not cover damage to the product as a result of misuse, accident, damage, modifications or alterations, and does not apply if the instructions in this manual are not followed.

If the product should become defective during the warranty period, it should be returned freight prepaid with proof and date of purchase and a description of the problem to your distributor or to the address indicated by calling Eco Sensors, Inc. customer service at (800) 472-6626 or e-mailing at sales@ecosensors.com.

KEEP THIS MANUAL FOR YOUR RECORDS

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General website: www.ecosensors.com