

# GILBRATOR-2<sup>®</sup> Diagnostic Calibration System



**Primary standard accuracy and performance validation for sampling pump air flows from 1 cc to 30 LPM**

Sensidyne's GILBRATOR-2<sup>®</sup> System provides the user with a convenient and highly automated way to check almost any commercially available air sampling pumps for proper air flow function before their deployment.

The system consists of an electronic GILBRATOR-2<sup>®</sup> Base, which is used with any of three sizes of wet bubble cells.

These patented interchangeable components are also available as part of kits which can also include a complete calibration diagnostic panel. All cells use a twist-on bayonet design for quick and easy mounting to the base. All are certified for accuracy, traceable to NIST. Sensidyne recommends calibration of your Gilibrator System at least once a year.





The Gilibrator 2 Base can be used with any of three cells

## Gilibrator-2 Cells

Three bubble-type cells are available, for airflow ranges of:

- 1 to 250 cc (low flow cell);
- 20 cc to 6 L/pm (standard flow cell); and
- 2 to 30 L/pm (high flow cell)

When used with the GILIBRATOR-2<sup>®</sup> Base, these unique, interchangeable wet cells automatically generate perfect bubble films at the touch of a button, using infrared technology to read the bubble flow rate, which is then calculated and displayed.



## GILIBRATOR-2<sup>®</sup> Base

Easy to operate, microprocessor-controlled unit features simple on/off and reset touchpad with large LCD screen that displays flow rate, the calculated average of multiple flow samples in a series, and the sample number. Light in weight, it operates with either AC power or rechargeable NiCad batteries (8 hour life), for easy portability in either the lab or the field.



## GILIBRATOR-2<sup>®</sup> Diagnostic Kits

Offers the industrial hygienist a complete, portable calibration laboratory.

Consists of GILIBRATOR-2<sup>®</sup> Base with three wet bubble cells in a cushioned carrying case, with a full diagnostic panel built into the top lid of the case. The panel uses an interchangeable rotameter design for 2 - 5,000 cc flow capability and will run any of several diagnostic tests:

- "Load" simulation – Offers two load simulations for high and low flows to imitate line backpressures.
- Back pressure reading – A built-in Magnehelic<sup>®</sup> gauge allows visual monitoring of in-line backpressures up to 30 inches H<sub>2</sub>O.
- Leak checking – Built-in Magnehelic<sup>®</sup> gauge allows visual leak testing and monitoring capabilities.
- Pump flow adjustment – Rotameters allow instant visual indication of approximate flow rates, assisting in properly adjusting airflows.

## Specifications

### Low Flow Cell

**Dimensions:** 2"W x 4"H x 2.1"D (51W x 102H x 53D mm) Weight: 0.4 lbs. (.18 kg)

### Standard Flow Cell

**Dimensions:** 2.5"W x 6"H x 2.6"D (64W x 152H x 66D mm) Weight: 0.82 lbs. (0.37 kg)

### High Flow Cell

**Dimensions:** 3.5"W x 8.1"H x 3.7"D (89W x 206H x 94D mm) Weight: 2.26 lbs. (1.02 kg)

### Flow Range, Accuracy

Low Flow Cell, 1 - 250 cc/min., ±1% of reading accuracy; Standard Flow Cell, 20 cc to 6 L/pm, ±1% of reading accuracy; High Flow Cell, 2-30 L/pm, ±1% of reading accuracy

### Temperature Limits:

Operating Temperature: 5° to 35°C (41o to 95°F); Storage Temperature: 0° to 50°C (32° to 122°F)

### Electrical:

DC Power Source: Internal Battery Pack; AC Power Source: Continuous operation through adapter/charger;

**Battery Charge Time:** 14 Hrs.; Expected Battery Life: over 300 charge/recharge cycles; Transmission Link:

RS-232; Interface Connectors: Charger Jack (2.1 mm barrel jack), Printer Jack (DB-25), Sensor Jack - Wet Cell (DB-9)

### Optional Printer, PC Interface Kit

An optional thermal dot matrix printer is available for hard copy printouts of calibration data and can be included in Kits. Also optionally available is a new Windows<sup>®</sup> compatible PC Interface Kit for real-time data download to and manipulation with a personal computer. It includes a cable for connecting the computer to the RS-232 port of the GILIBRATOR-2<sup>®</sup> Base, as well as PC software that allows the user to log in pump and calibrator serial numbers, data, operator name, flow rates, averaging data, number of samples, sample sequence, and standard deviation data



# Gilian<sup>®</sup>