



## GILIBRATOR-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 GILIBRATOR-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 GILIBRATOR-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 GILBRATOR-2® Base can be used with any of three different wet cells.

### Wet Cells

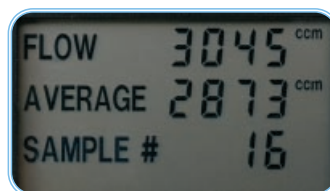
Three bubble-type cells are available, for air flow ranges of:

- 1 to 250 cc (low flow cell);
- 20 cc to 6 LPM (standard flow cell); and
- 2 to 30 LPM (high flow cell).

When used with the GILBRATOR-2® 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.

### GILBRATOR-2® 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.



### GILBRATOR-2® Diagnostic Kit

Offers the industrial hygienist a complete, portable calibration laboratory. Consists of GILBRATOR-2® 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 to 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 back-pressures.
- Back pressure reading – A built-in Magnehelic® gauge allows visual monitoring of in-line back pressures up to 30" H<sub>2</sub>O.
- Leak checking – Built-in Magnehelic® gauge allows visual leak testing and monitoring capabilities.
- Pump flow adjustment – Rotameters allow instant visual indication of approximate flow rates, assisting in properly adjusting air flows.



Deluxe Wet Cell Diagnostic Kit

### Specifications

#### Low Flow Wet Cell

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

#### Standard Flow Wet Cell

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

#### High Flow Wet Cell

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

#### Flow Range, Accuracy

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

#### Temperature Limits:

**Operating Temperature:** 5° to 35°C (41° 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 (2.1mm barrel jack), Printer Jack (DB-25),

SensorJack - Wet Cell (DB-9)

THE SENSIDYNE ANSWER CENTER

800.451.9444 (or 727.530.3602; fax 727.539.0550)

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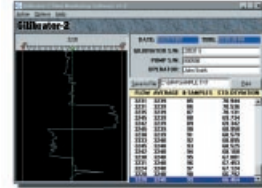




Deluxe Wet Cell Kit with printer

### 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® 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 GILBRATOR-2® 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.



## Gilibrator 2 Part Numbers & Descriptions

GILBRATOR-2 Item	Part No.	Description
<b>Low-Flow Wet Cell Kit (1 to 250 cc)</b>	800272 (120v) 800272-2 (230v) 800272-2-CE (230v, CE version)	Control base, low flow cell, DC charger/AC power supply, tubing, and soap solution with dispenser, in hard shell carry case.
<b>Std. Flow Wet Cell Kit (20 cc to 6 LPM)</b>	800271 (120v) 800271-2 (230v) 800271-2-CE (230v, CE version)	Control base, standard flow cell, DC charger/AC power supply, tubing, and soap solution with dispenser, in hard shell carry case.
<b>Std. Flow Wet Cell Diagnostic Kit</b>	800844-2 (120v) 800844-2-230 (230v) 800844-2-230-CE (230v, CE vers)	Same items as Standard Flow Wet Cell Kit, but carry case also includes built-in diagnostic panel with rotameters and pressure gauge.
<b>High-Flow Wet Cell Kit (2 to 30 LPM)</b>	800270 (120v) 800270-2 (230v) 800270-2-CE (230v, CE version)	Control base, high flow cell, DC charger/AC power supply, tubing, and soap solution with dispenser, in hard shell carry case.
<b>Deluxe Wet Cell Kit (All Three Cell Sizes)</b>	800275 (120v, w/ printer) 800275-2 (230v, w/ printer) 800275-2-CE (230v, CE, w/ printer) 801804 (120v, no printer) 801804-1 (230v, no printer) 801804-1-CE (230v, CE, no printer)	Control base, three interchangeable wet cells for low, standard, and high flow rates, DC charger/AC power supply, tubing, and soap solution with dispenser, in hard shell carry case. Thermal printer not included, but available as option.
<b>Deluxe Wet Cell Diagnostic Kit</b>	800844-4 (120v, w/ printer) 800844-4-230 (230v, w/ printer)	Same items as Deluxe Wet Cell Kit, but carry case also includes built-in diagnostic panel with rotameters and pressure gauge.
<b>Calibrator Control Base</b>	850190 850190-1 (CE approved)	Includes NiCad Battery Pack. Charger sold separately.
<b>Control Base Charger</b>	401984 (120v) 7017010 (230v) 400674 (120v) 400794-1 (230v)	For Gilibrator 2 Base (part numbers 850190 and 850190-1) For Gilibrator 2 Base (part numbers 850190 and 850190-1) For Gilibrator Base (obsolete) (part number 800268) For Gilibrator Base (obsolete) (part number 800268)
<b>Low Flow Sensor &amp; Cell Assembly (1 to 250cc)</b>	800267-1 (CE approved)	Sensor and cell assembly only. Includes calibration certificate.
<b>Standard Flow Sensor &amp; Cell Assembly (20cc to 6 LPM)</b>	800266-1 (CE approved)	Sensor and cell assembly only. Includes calibration certificate.
<b>High Flow Sensor &amp; Cell Assembly (2 to 30 LPM)</b>	800265-1 (CE approved)	Sensor and cell assembly only. Includes calibration certificate.
<b>Replacement Battery Pack</b>	700560	For Gilibrator-2 Control Base only.
<b>Replacement Battery Pack</b>	400692	For Gilibrator Control Base only.
<b>PC Interface Kit</b>	850260	Includes special RS-232 connecting cable and software
<b>Printer Module, 110v</b>	800274	Includes printer paper, connecting cable and AC adapter.
<b>Printer Module, 230v</b>	800274-230	Includes printer paper, connecting cable and AC adapter.
<b>Control Base Upgrade</b>	850190U	For use with Piston Cell.
<b>Cable For Printer</b>	800311	Includes 16-inch connecting cable.
<b>Printer Paper</b>	400681 402103 402127	For Gilibrator Printer Module, part no. 400793 (five pack) For Gilibrator 2 Printer Module, 110v, part no. 801806 (one pack) For Gilibrator 2 Printer Module, 230v, part no. 700721 (one pack)
<b>Soap for Wet Cell (8 oz.)</b>	800450	For both Gilibrator and Gilibrator 2.
<b>Soap Dispenser</b>	400667	For both Gilibrator and Gilibrator 2.