

Gilian Gilibrator® 3

Primary Dry Cell Calibrator • Convenient and Accurate With Stable Back Pressure

The New Standard in Calibration Devices

The Gilibrator 3 is the most advanced calibrator on the market, designed to provide performance, reliability, and ease-of-use. The Gilibrator 3 truly sets the standard for calibration integrity and data reporting. The Gilibrator 3 is a Primary air flow calibrator by NIOSH definition, and delivers NIST traceability through Sensidyne's ISO 17025 accredited laboratory.

Gilibrator 3 features include:

- Fast and easy to use dry calibrator
- StablFlow™ provides constant low back pressure to device being calibrated
- Patent pending pulse-free valve technology maintains calibration integrity
- Touch screen color display that is visible in direct light
- Multiple flow cells with a common base adds convenience and saves cost
- Gilian CONNECT PC compatible for data retrieval, record keeping, and statistical analysis of data
- SmartCalSM capable with GilAir Plus® pumps

Calibrations in the Field, the Lab, or Wherever You Go

The Gilibrator 3 delivers maximum convenience, accuracy, and data integrity. The calibrator is designed for mobility with an advanced rechargeable Lithium Iron Phosphate (LiFePO4) battery. It has a modular design for quick changes of liquid-free, dry flow cells, addressing calibrations from 5 cc/min to 30 LPM. ISO 17025 calibration certificates available from Sensidyne.

Modularity

Quick disconnect fittings allow for easy flow cell exchange:

- Low: 5 to 450 cc/min
- Standard: 50 to 5,000 cc/min
- High: 1LPM to 30LPM



Gilibrator® 3 with **STABLFLOW**

08:48 04/10/2018		Averaging Mode		🏠
Flow Rate (L/min)		Flow Average (L/min)		
2.006		2.009		⚙️
		0.70% 2sigma		
▶	↺	📁	VOL	
Temperature (°C)	Pressure (mmHg)	Sample Count		
24.6	764.4	15 of 15		
100% 🔋	Flow Cell: Dry Std (50 cc/min - 5 LPM)			

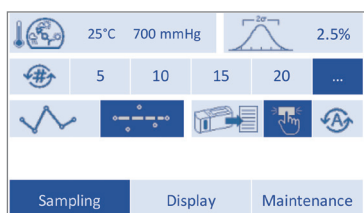
Live reading during air sampling calibration



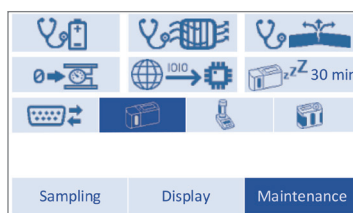
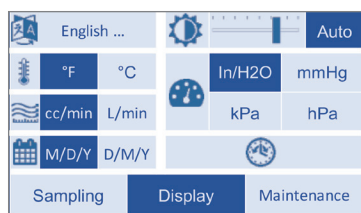
High, standard, & low flow cell modules are easily interchanged

Configure to Your Requirements

The Gilibrator 3 can be configured to meet the user's calibration needs. The user may select between Continuous or Averaging modes. In Averaging mode, the user may select a sample set between 3 and 20 samples to be averaged. In addition, the user can define statistical parameters for 95% confidence level of averaged samples. Within the settings screen, the user is able to define engineering units of measurement, date, time, temperature, and choose from a selection of languages in the devices library.



Screens for Sampling, Display, and Maintenance



Design Features

The Gilibrator 3 display window and internal LED lighting allows for visual verification of a dry cell. The Patent Pending design equalizes pressure on the pump regardless of puck travel direction. This feature allows for minimal disturbance of the airflow generated by the instrument under calibration. Since the Gilibrator 3 does not vary the back pressure presented to the device under calibration, the calibration process is faster and more accurate. Unlike competitor dry cell calibrators, the Gilibrator 3 uses a fixed sensing array, which eliminates the potential for misalignment of photo sensors, and lowers operational costs.

Accurate Air Flow Calibration Capabilities

The Gilibrator 3 has live, instantaneous flow measurement, accurate within 1% of reading. The constant, low interference back pressure throughout the calibration sets allow for consistent airflow accuracy.

Easy Data Input and Access to Critical Information

The Gilibrator 3 offers the best user interface capabilities, with full touch screen keyboard for completing data

Part Number	Description
910-1701-US-R*	Gilibrator 3 Deluxe Kit, All Three Dry Cell Sizes
910-1702-US-R*	Gilibrator 3 Low Flow Dry Cell Kit
910-1703-US-R*	Gilibrator 3 Standard Flow Dry Cell Kit
910-1704-US-R*	Gilibrator 3 High Flow Dry Cell Kit
910-1705-US-R*	Gilibrator 3 Low Flow and Standard Flow Dry Cell Kit
910-1706-US-R*	Gilibrator 3 Standard Flow and High Flow Dry Cell Kit
910-1707-US-R*	Gilibrator 3 Low Flow and High Flow Dry Cell Kit

* Kits are available with US, EU, and UK cords for charging system. All kits include control base, interchangeable dry cell, DC charger/AC power supply, and tubing, in hard shell carry case.

input, and user defined fields for maintaining sample integrity. The Gilibrator 3 displays the last calibration and serial numbers for both the Base and connected Flow Cell, and displays a reminder of next calibration due date. In addition, the user can track use of the calibrator through displayed cycle counts for both the base and for the flow cell.

Digital Calibration Records Improve Report Reliability

The Gilibrator 3 can generate printable calibration reports, the need for pen or paper has been eliminated. The calibrator base

can store 100 time-stamped calibration events in its on-board memory. This feature allows calibration data in sampling reports and historical records for statistical analysis to be retrieved from the on-board memory.

Datalogging and Downloading

The Gilibrator 3 comes with an SD Card slot, which allows increased storage and alternate transfer of calibration data via exporting of bitmap and .csv files. Bitmap calibration reports display sample information, saved instrument settings, and individual sample results. Exporting of .csv files allows data archiving in Excel that can be used for input into larger data comparison sets.

Specifications	
Flow Ranges	Low 5-450cc/min, Standard 50-5000cc/min, High 1-30LPM
Volumetric Accuracy	1% of reading†
Temp. & Pressure Sensor	YES, in flow stream
Time per Measurement	1-15 seconds
Sampling Mode	Instantaneous, Averaging
Averaging Function	Selectable; 3 to 20 Measurements
Gas Compatibility	non-corrosive, non-condensing
Flow Modes	Pressure or Suction
AC Adapter / Charger	12 VDC
Battery System	Lithium (LiFePO4)
Battery Run Time	3 hours max flow, 8 hours continuous use (min brightness),
Battery Charge Time	12 VDC Adaptor 3 hr, , USB 7 hrs (unit off)
Warranty	24 Months (1 Year Battery)
Operating Temperature	0-50° C (32-122° F)
Storage Temperature	0-70° C (32-158° F)
Operating Humidity	0-85% RH, non-condensing
Storage Humidity	0-100% RH, non-condensing
Display	Color Graphic LCD, HMI Touch Screen
Data Port	RS-232 (for Pump interface), USB (for data)
Transportable Storage	SD Card
Protective Case	Standard or Deluxe carrying case for 1 or 3 Cells
Dimensions (HxWxD)	6.6" x 9.2" x 3.2" (168 x 234 x 81mm)
Weight	Base: 2.8 lbs / 1,270 g, Low Flow Cell: 0.8 lbs / 363g, Std Flow Cell: 0.85 lbs / 385g, High Flow Cell 1 lb / 454g
Certifications	UL601010, CE, RoHS

† Or 0.003 LPM, whichever is greater