

The BUCK *Libra Plus*™ LP-1 personal air sampler consists of a pump contained in a high impact steel fiber filled Lexan, antistatic, and RFI/EMI-shielded case, exclusive electronic circuit board for constant flow control (patent pending), an LCD display with 2 lines of 16 characters, a single diaphragm pump mechanism, and a rechargeable NiMH battery pack.

The purpose of this pump is to draw air contaminants in through a sampling media such as long-duration color detector tubes and absorbent sample tubes; to gauge personal exposure to gases, vapors, particulates, aerosols, etc.

No tools are required to operate this pump and a password protected keypad locking system provides uninterrupted operation. The main display allows quick selection to RUN (for sampling) or MENU (to reset pumps data)

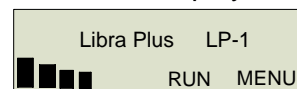
Other features include elapsed time, flow rate, and accumulated volume. The built in timer counts down the sampling time up to 40 hours and automatically turns the pump off with all data is saved.

Features:

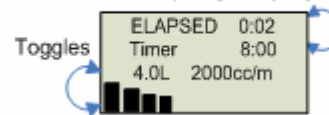
- Accuracy: $\pm 5\%$ of compensation range
- Flows up to 0.6 LPM
- Runs long-duration color detector tubes
- Can be used with a variety of sorbent tubes
- Flow compensation for filter plugging and battery voltage
- High backpressure capability
- "Auto-restart" within one minute of a flow fault
- One-hour rechargeable single pack batteries and optional extended run with use of triple packs
- Battery pack rechargeable while attached or separately
- Compact, rugged, and quiet
- Stainless steel belt clip with built-in tripod connector
- Key pad lock system
- One year warranty



Main Display



Sampling Display



Flow Range 100-600 cc/min
Low Flows 5-99 cc/min with
Optional Low Flow Holder



Rev. 7-2011

Performance Profile

Flow Range: 100-600 cc/min
5-99 cc/min with optional Universal Low Flow holder part no. APB-109033

Compensation Range:

- 600 cc/min up to 15": water back pressure
- 500 cc/min up to 25": water back pressure
- 300 cc/min up to 42": water back pressure
- 200 cc/min up to 36": water back pressure
- 100 cc/min up to 10": water back pressure

Accuracy: ± 5% of Compensation Range

Run Time: In Hours

Flow Rate cc/min	@ stated backpressure (inches if water)						
	3"	5"	10"	15"	20"	30"	40"
600	11	10	9	8			
500	15	12	11	10	9		
400	17	16	15	14	13	12	
300	21	20	18	16	15	13	12
200	22	21	20	19	18	17	
100	26	25	23				

Data Storage: Last flow rate, elapsed clock time, and accumulated volume is saved into memory until cleared for next sampling.

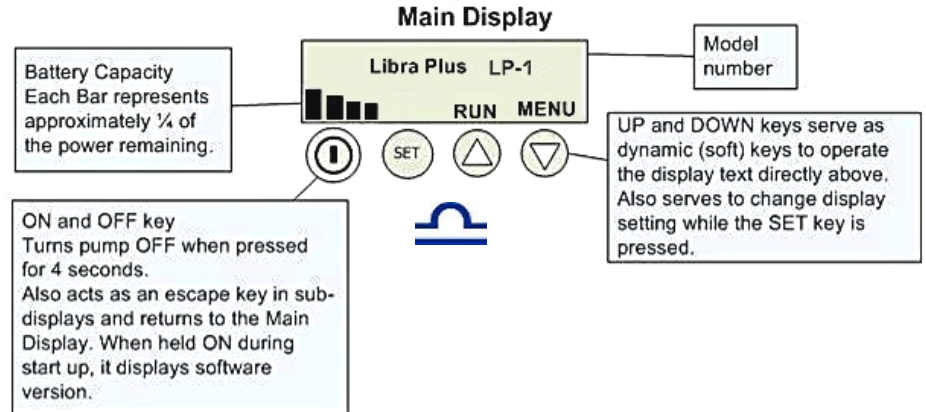
Display: Backlit LCD with 2 lines of 16 Characters

Normal Operation: Battery Level, Flow Rate, Elapsed Time, Volume Collected, Timer

Flow Fault Displays: Flow Fault, or Filter Off

Operating Instructions

LIBRA PLUS OPERATION DISPLAYS



Specifications

Power Supply:

Single Pack, NiMH Batteries: 4.8V, 2.15 Ah

Triple Pack, NiMH Batteries 4.8V, 6.45 Ah

Recharge Time:

	Charger:		
Battery	QuickOne™	QuickFive™	Standard
Single Pack	1-2Hrs	1-2Hr s	10-12Hrs
Triple Pack	4-6Hrs	4-6Hrs	10-12Hrs

Quick-Chargers: Input Voltage 100 to 240 VAC

Standard-Chargers: Input Voltage 120 VAC or 230 VAC

Approvals: CE EMC Directive (EMCD) 89/336/EEC
UL and cUL (pending), ATEX (pending)

Temperature:

Operating 32°F to 113°F (0°C to 45°C)

Storage 32°F to 113°F (0°C to 45°C)

Charging 41°F to 104°F (5°C to 40°C)

Case: Polycarbonate steel fiber filled, RFI/EMI-shielded

Size: 4.5"H x 4"W x 2"D

(11.4 cm H x 10.2 cm W x 5 cm D)

Weight: 19 oz (539g)

Part No.	Description
APB-906800	Buck Libra Plus LP-1 Single pk 120VAC*
APB-906820	Buck Libra Plus LP-1 Single pk 230VAC*
APB-946500	Buck Libra Plus LP-1 5Pk Pump kit**
APB-109033	Universal Low flow holder 5-100cc/min

*Pump kit includes pump with a single pack NiMH battery, standard 120VAC battery charger, Luer hose adapter, shirt/hose clip, 3 feet of vinyl hose, non adjustable tube holder and operating manual. Kit does not include universal low flow holder for sorbent tubes sampling.

** Pump 5-pack kit includes 5 each: pumps with single pack NiMH batteries, Luer hose adapter, shirt/hose clip, and 3 feet of vinyl hose. Also included is two operating manuals, one QuickFive™ charger 100-240VAC, non adjustable tubeholder and a durable hard plastic 1500 Pelican case with lifetime warranty that accommodates additional accessories. Kit does not include universal lowflow holder for sorbent tubes sampling.

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