

# BUCK Elite<sup>TM</sup> - 1

**TechBrief** T100-901

The BUCK Elite is a data logging, programmable 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 sorbent tubes, bubble impingers, longduration color detector tubes; to gauge personnel 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. Easy programming software allows the pump for unattended Start/Stop operation with the capability for up to ten different ON/OFF durations with repeat options. The PC link capability lets you download the sampling data into a PC with Windows® XP or 7 operating system using the RS232 COM port and the Buck PC link cable.

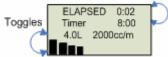


### **Main Display**



Flow Range 0.1 to 0.6 LPM Low Flows 5-99 cc/min with **Universal Low Flow Holder** 

## Sampling Display ELAPSED 0:02



BUCK

### **Features:**

- Capable for Data logging and Programmable for multiple Start/ Stop and Duration Sampling.
- Runs 20+ hours @ 300cc/min (@ 5+backpressure)
- Flow range 0.005-0.6LPM. 5cc/min . 99cc/min using Universal low flow Holder (included).
- High back pressure compensation, up to 36+of w.c.@300cc/min
- Accuracy: ±5% of compensation range.
- Flow compensation for filter plugging and battery voltage.
- %uto-restart+within one minute of a flow fault.
- Includes single pack battery and run time could be extended with the use of optional triple pack.
- Battery pack rechargeable while attached or separately
- Compact, rugged, and quiet.
- Stainless steel belt clip with built-in tripod connector.
- Key pad lock system.

Rev. 7.5.11



Toll-Free (Canada): 1-866-840-0014



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## Performance Profile

Model: LP-1

Flow Range: 0.1-0.6 LPM (100-600 cc/min)

5 - 99 cc/min

With Universal Low Flow Holder

P.N. APB-109033

Compensation Range:

600 cc/min up to 10+water back pressure

500 cc/min up to 25+water back pressure

300 cc/min up to 36+water back pressure 200 cc/min up to 25+water back pressure

100 cc/min up to 10+water back pressure

Accuracy: ± 5% of Compensation Range

Run Time (hrs) at different backpressure and flow rate

(cc/min) Backpressure (inches of water)
Flow Rate 3+ 5+ 10+ 15+ 20+ 30+ 36+

100 26hr 25hr 23hr

200 22hr 21hr 20hr 19hr 18hr 17hr

300 21hr 20hr 18hr 16hr 15hr 13hr 12hr

400 17hr 16hr 15hr 14hr 13hr 12hr

500 15hr 12hr 11hr 10hr 9hr

600 11hr 10hr 9hr

Low Flow using Universal Low Flow Holder 5 to 99cc/min 8 hours

Data Storage: Flow rate, elapsed clock time, accumulated

volume, temperature, DP and any Flow Faults

are logged in the memory for download to PC

Display: Backlit LCD with 2 lines of 16 Characters

Normal Operation: Battery Level, Flow Rate, Elapsed

Time, Volume Collected, Timer, DP & Temp.

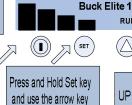
Flow Fault Displays: Flow Fault, or Filter Off

## **Operating Instructions**

### **Main Display**

Battery Capacity. Each bar represents approximately 1/4 of power remaining.

ON and OFF key turns pump off when pressed for 4 seconds. Also acts as an escape key in sub-displays and return to the Main display.



to change display values

UP and DOWN key serve as dynamic key to operate and display text directly above. Also serves to change display settings while SET key is pressed.

MENU

## **Specifications**

**Power Supply:** 

Single Pack, NiMH Batteries: 4.8V, 2.15 Ah Triple Pack, NiMH Batteries 4.8V, 6.45 Ah **Recharge Time:** Charger:

<u>Battery</u> *QuickOne*ï *QuickFive*ï Standard Single Pack 1-2Hrs 1-2Hrs 12Hrs Triple Pack 4-6Hrs 4-6Hrs 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)

PRODUCT	DESCRIPTION
APB-908100*	Buck Elite <sup>™</sup> . 1 Single Pack Pump kit with 120V wall charger.
APB-908120*	Buck Elite <sup>™</sup> . 1 Single Pack Pump kit with 230V wall charger.
APB-947300**	Buck Elite <sup>™</sup> -5 5 pk Pump kit with Quick Five charger and Pelican case.

Rev. 07.05.11

For more information, contact us:

Toll-Free (Canada): 1-866-840-0014



<sup>\*</sup> 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, operating manual, adjustable Universal low flow holder for sorbent tube sampling and non adjustable tube holder.

<sup>\*\*</sup> 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, non adjustable tube holder and adjustable Universal low flow holder for sorbent tube sampling. Also included is two operating manuals, one *QuickFive* charger 100-240VAC, and a durable hard plastic 1500 Pelican case with lifetime warranty that accommodates additional accessories.