



BUCK Elite™ - 5 Pump

Tech Brief
T100-905

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.

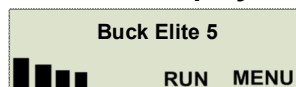
The purpose of this pump is to draw air contaminants in through a sampling media such as 25 and 37mm filter cassettes, bubble impingers, long-duration color detector tubes; to gauge personnel exposure to gases, vapors, particulates, aerosols, etc.

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 using the RS232 COM port and the Buck PC link cable.

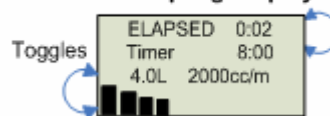


Main Display



Flow Range 0.8 to 6 LPM
Low Flows 5-799 cc/min
with Low Flow Holder

Sampling Display



Features:

- Capable for Data logging and Programmable for multiple Start/ Stop and Duration Sampling.
- Runs 17 hours @ 2.0 LPM (37 mm 0.8µ filter)
- High back pressure compensation, up to 50" of w.c. @ 2LPM
- Accuracy: $\pm 5\%$ of compensation range
- High backpressure capability for 25mm 0.45µ asbestos filters
- Flow compensation for filter plugging and battery voltage
- Dual flow range easily handles Impingers, cyclones, and tubes
- Auto-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
- One year warranty



Rev. 01.01.19



BUCK Elite - 5

TechBrief
T100-905

Performance Profile

Model: LP-5

Flow Range: 0.8-6 LPM (800-6000 cc/min)
50 799 cc/min

With Universal Low Flow Holder
P.N. APB-109030

Compensation Range:

5000 cc/min up to 10" water back pressure
4000 cc/min up to 20" water back pressure
3000 cc/min up to 36" water back pressure
2000 cc/min up to 50" water back pressure
1000 cc/min up to 30" water back pressure
800 cc/min up to 15" water back pressure

Accuracy: $\pm 5\%$ of Compensation Range

Run Time (hrs) at different back pressure and flow rate
(cc/min) Backpressure (inches of water)

Flow Rate	5"	10"	15"	20"	30"	40"	50"
1000	27hr	21hr	17hr	14hr	10hr		
2000	17hr	16hr	15hr	13hr	9hr	7hr	5hr
3000	16hr	14hr	11hr	9hr	7hr		
4000	15hr	11hr	9hr	8hr			
5000	11hr	8hr	6hr				

Low Flow using Universal Low Flow Holder
5 to 799cc/min 8 hours

Times:

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.

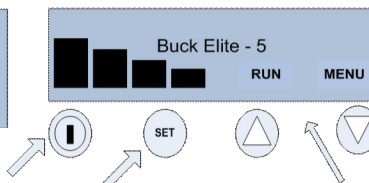
Flow Fault Displays: Flow Fault, or Filter Off

Operating Instructions

Buck Elite-5

Battery Capacity. Each bar represents approximately $\frac{1}{4}$ 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.



Press and Hold Set key and use the arrow key 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.

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	QuickFive [®]	Standard Smart Charger
Single Pack	2-3Hrs	2.5Hrs
Triple Pack	7-8Hrs	7-8Hrs

Quick-Chargers: Input Voltage 100 to 240 VAC

Standard Smart: 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-908000	Buck Elite™ -5 Single Pack Pump kit with 120V standard smart wall charger
APB-908020	Buck Elite™ -5 Single Pack Pump kit with 230V standard smart wall charger
APB-947200	Buck Elite™ -5 5 pk Pump kit with Quick Five charger and case

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* Pump kit includes pump with a single pack NiMH battery, standard smart 120VAC battery charger, Luer hose adapter, shirt/hose clip, 3 feet of vinyl hose and operating manual. Universal low flow holder for sorbent tubes sold separately.

** 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, and a durable hard case that accommodates additional accessories. Universal low flow holder for sorbent tubes sold separately.

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