

Personal Sample Pump

**Light weight • Light Price • Heavy Duty** 





# AirChek 52

# Personal Sample Pump

The AirChek 52 pump is a rugged air sampling pump for evaluating airborne chemical levels. This battery-operated pump weighs only 20 ounces, and provides constant flow within a range of 1000 to 3000 ml/min reducible to 5 to 500 ml/min with the Constant Pressure Controller (CPC) and adjustable low flow holder accessories. Constant flow is maintained up to 25 inches water pressure at 2000 ml/min within  $\pm 5\%$ , and moderated with a built-in pulsation dampener. The AirChek 52 features an LCD time display which exhibits run time in minutes.

#### **Features**

- Simple design, easy to operate
- Lightweight only 20 ounces
- RFI-shielded case
- Flow compensation
- High and low flow capabilities meets most IH applications
- LCD with run time, flow fault, and low flow battery indicators
- Fault shutdown with time retention
- UL Listed
- Detachable "quick change" battery pack

Ideal for "on-worker" applications, this sampler can be used for STEL, TWA, or Ceiling sampling using sorbent tubes, filters and cyclones, impingers, or long-duration color detector tubes. A model of simplicity and reliability, the AirChek 52 sample pump is the workhorse of air sampling pumps for industrial hygiene studies or environmental testing. It is so reliable, we guarantee its performance for a period of one year from the date of purchase.

#### **Powerful Pneumatics**

The powerful AirChek 52 with its modular pneumatic system provides constant flow in the range of 1000 to 3000 ml/min. The flow rate can be reduced to the 5 to 500 ml/min range with the addition of the Constant Pressure Controller (CPC) and adjustable low flow holder accessories.

#### A High Standard of Safety

Intrinsically safe, the AirChek 52 pump is UL Listed for hazardous atmospheres of Class I Groups A,B,C,D; Class II Groups E,F,G; and Class III for Temp Code T3C.

## **Back Pressure Compensation**

Flow is compensated within  $\pm 5\%$  up to 25 inches water back pressure at 2000 ml/min, and is moderated with a built-in pulsation dampener. As back pressure increases, the motor voltage is automatically corrected to maintain a constant flow over the operating range, therefore, you will not sacrifice air volume accuracy even in dusty environments. If the flow is restricted for more than 15 seconds, the pump will shut down automatically, the timer will retain the valid run time, and a flow fault icon will appear on the LCD.

#### RFI and EMI Shielding

SKC's case material and unique circuitry are designed to provide shielding from radio frequency in the range of 27 to 1000 MHz. This shielding prevents fluctuations in the flow caused by electrical effects on the pump's control circuitry.

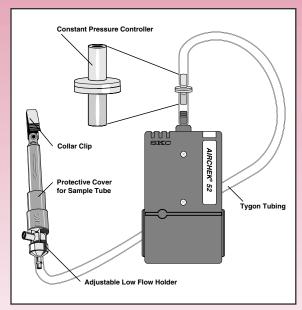
#### **Multiple Tube Sampling Capabilities**

The AirChek 52 pump can utilize the multiport adjustable low flow holders to operate up to four sorbent tubes simultaneously and at different flow rates. With multiple tube sampling, you'll reduce time in the field and use fewer pumps.

## **AirChek 52 Low Flow Capabilities**

The AirChek 52 air sampling pump becomes a fully versatile sampler with the use of the low flow Constant Pressure Controller (CPC). The CPC expands the flow range capabilities of the AirChek 52 sampler to include the 5 to 500 ml/min range.

This low-cost, lightweight adapter simply fits into the sampling train tubing allowing the pump to operate in a constant pressure mode. Adjustable low flow holders can then be used to collect up to four samples simultaneously and at different flow rates. The flow rate at each intake can be set from 5 to 500 ml/min.



AirChek 52 with CPC

#### Lightweight, Durable

Measuring approximately 5 x 3 x 1.75 inches and weighing only 20 ounces, its small size, light weight, and durable construction allows the AirChek 52 pump to withstand the rigors of "on-worker" use, time and time again. Rechargeable NiCad batteries provide a reliable power source that can be restored overnight. The AirChek 52 pump is the lightweight, inexpensive workhorse pump designed for rugged and repeated

Now a full range of flow rates is available in one lightweight, low-cost, heavy-duty sampler to use with:

- Filters and cyclones
- Impingers
- Sorbent tubes
- Long-duration color detector tubes

#### A Variety of Ordering Options

The AirChek 52 pump and accessories can be purchased together in a single or five pack pump kit or separately for a more customized kit. Accessories include single or 5-station battery chargers, adjustable low flow holders, impinger holders, protective nylon carry pouches with shoulder strap and belt, and noise-reducing pouch that reduces noise from 62.5 dBA to 55 dBA\*. *Note: Kits do not contain all the accessories listed here.* See page 4 for ordering information.

\* Tested at a one-meter distance with AirChek 52 operating at 2 L/min with 37-mm, 0.8 µm MCE filter cassette in line.



# Specifications — AirChek 52

Operating Range: 5 to 3000 ml/min (5 to 500 ml/min requires Adjustable

**Low Flow Holder and Constant Pressure Controller)** 

Weight: 20 ounces (566 gm)

Dimensions:  $5 \times 3 \times 1.75$  inches;  $(12.7 \times 7.6 \times 4.4 \text{ cm})$ 

Compensation 1000 ml/min up to 25 inches Range: (inches water back pressure) 2000 ml/min up to 15 inches

Flow Control: Constant flow to  $\pm 5\%$  of set point

Flow Fault: If flow is restricted, pump stops and holds time display

Run-time: 8 hours minimum at 2000 ml/min and 25 inches water

back pressure. Dependent on media used.

LCD Time Display: 3-digit display of run time in minutes

Battery Pack: Built-in rechargeable NiCad battery pack, 4.8 V, 1.8 Ah

Class II Groups E,F,G; Class III Temp Code T3C

ATEX model available. Contact SKC.

Operating

Temperature: 32 to 113 F (0 to 45 C)

Storage

Temperature: -4 to 113 F (-20 to 45 C)

Charging

Temperature: 32 to 113 F (0 to 45 C)

Humidity: 0 to 95% Relative

Multiple Sampling: Adjustable low flow holder accessory allows user to take

up to four simultaneous samples. CPC required.

RFI Shielding: • Complies with requirements of EN 55022 1987 Class

B, and EN 50082-1:1992

• Frequency range of radiated susceptibility test was

27 to 1000 MHz. C € marked

Additional Features: • Fully encapsulated electronics for corrosion resistance

• Detachable "quick change" battery pack

• Simple design—easy to operate

• Low battery fault with LED indicator

• Built-in pulsation dampener

• Built-in replaceable particulate trap

· Built-in accessory mount

• Smooth surface allows for easy decontamination

• Replacement parts in preassembled modules

• Quiet operation

• One-year limited warranty

# **Ordering Information**

AirChek 52 Pump only (without charger).......Cat. No. 224-52

#### AirChek 52 Single Pump Kit

Includes AirChek 52 pump with battery pack, single charger, filter cassette holder, tool kit, operating manual, and carry case.

Low Flow Constant Pressure Controller ...... Cat. No. 224-26-CPC

#### Adjustable Low Flow Holders

Single	224-26-01
Dual	
Tri	224-26-03
Quad	

# AirChek 52 5-pack Pump Kits for High Flow Sampling

Includes 5 AirChek 52 pumps with battery packs, filter cassette holders, screwdriver kits, operating manuals, one five-station charger (100-240 V), and carry case.

100-240 V ...... Cat. No. 224-52K5

# For Universal Sampling

Includes 5 AirChek 52 pumps with battery packs, filter cassette holders, screwdriver kits, constant pressure controllers, low flow holders with covers (Type A), operating manuals, one five-station charger (100-240 V), and carry case.

100-240 V ...... Cat. No. 224-52K5D

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