

# AP4C

M910 E10 000



Hand held, portable monitoring and detection unit used by military, civil defense, and environmental agencies

## Purpose

The AP4C is a portable chemical contamination control device used to detect directly chemical agents in the form of vapor, aerosols, dust and with the S4PE in the form of liquid.

The AP4C is particularly suitable for military use in rough conditions:

- Fast turn on
- Immediate measurement
- Single-handed operation
- Simplicity of use
- Ability to be turned off without precautions...
- Flameproof.

**The AP4C detects all nerve, all blister and all blood agents.** The high sensitivity and fast response time make the AP4C especially suitable to check up contamination. It also fits check up after decontamination.

## List of detected chemicals

Tabun GA	Arsine SA
Sarin GB	Diphenylchloroarsine DA
Soman GD	Adamsite DM
Cyclo-sarin GF	Deiphenylcyanoarsine DC
Vx	BZ
VX	CNS
Distilled mustard HD	Bromobenzylcyanide CA
Nitrogen mustard HN-1	CS
Nitrogen mustard HN-2	CR
Nitrogen mustard HN-3	Chloropicrin PS
Phosgene CX	Runcol
Lewisite L	Precursor of OPA
Mustard lewisite mixture HL	Precursor of DF
Phenyldichloarsine PD	EDMP
Ethyldichloarsine ED	
Methyldichloarsine MD	
Hydrogen cyanide AC	
Cyanogen chloride CK	

## Operating principle

The AP4C is a flame spectrophotometer. A continuous stream of air is burned into a combustion chamber, which has a constant supply of hydrogen.

A miniaturized spectrophotometer measures the luminous emitting variations of the flame.

The electrical signal from the photo sensor is processed in real time by a micro controller board.

## New features

- Internal data storage
- Downloads
- ATP45 format messages



## Detection

- Detects simultaneously agents on the four channels.
- Detects agents in all forms: vapor – aerosols – droplets – dust agents and frozen agents.
- Detects persistent agents spread on most of surfaces (VX, thicked SOMAN, HD at low temperatures).
- Detects agents in water, on the skin (medical use).
- Capability to detect TIC's: PH<sub>3</sub>, PARATHION on P channel – PCl<sub>3</sub>, NH<sub>3</sub>, NO<sub>x</sub> on HNO channel – SO<sub>2</sub>, SF<sub>6</sub>, CS<sub>2</sub>, H<sub>2</sub>S, H<sub>2</sub>SO<sub>4</sub> on S channel – AsH<sub>3</sub> on As channel.

## Use specifications

- Ultra fast response time: 2 seconds.
- Ultra fast return-to-zero after detection even in high concentration
- Continuous detection: no need to change filter after positive detection.
- Starts up within 2 minutes. Restart in 30 seconds. No calibration during the use. Built-in test included.

## Maintenance

- Storage period: No maintenance required during storage period
- Use period: Check up 1 time per year.

## Characteristics

- Size (LxW): 385 mm x 100 mm x 138 mm (15.15" x 3.94" x 5.43")
- Weight – in operation: 2,1 kg (4½ lbs)
- Power supply: battery or external supply (12-28 V DC with power block) or rechargeable battery
- Temperature range
  - in operation: -32°C to +50°C
  - in storage: -39°C to +71°C
- Sensitivity in vapors, aerosols, droplets and dust in the air:
  - 10 µg/m<sup>3</sup> for all G, V agents
  - 0.5 mg/m<sup>3</sup> for H, HD and HL
  - 1.5 mg/m<sup>3</sup> for L, SA
  - 10 mg/m<sup>3</sup> for HN, HCN

- Sensitivity in liquid form ON SURFACE:
  - Superficial contamination: 15 mg/cm<sup>2</sup> of VX
  - Absorbed contamination after 15 minutes: 6 µg/cm<sup>2</sup> of VX
- Sensitivity in water:
  - 100 µg/l of GB – 75 µg/l of VX – 5 mg/l of HD
- Operational up to 10 000 feet altitude (3 000 meters).
- Wireless networking capability.

**NOTA:** The detector can be transformed into an alarm system by adding a simple accessory (alarm module) in place of the battery drawer. The alarm can be remote controlled on a special display up to 400 meters. Use: Surveillance of offshore airports, camps...

AP4C is sold with different accessories in a case: UC AP4C ref: M910 E00 003



## PROENGIN

1, rue de l'Industrie,  
78210 Saint-Cyr l'Ecole FRANCE  
Tél: (33) 1 30 58 47 34 / Fax: (33) 1 30 58 93 51  
E-Mail : contact@proengin.com