



The AP4C-F is a chemical Warfare Agents and Toxic Industrial material detector for fixed sites

Feature Highlights

- Simultaneous detection of mixed agents
- Very short response time and reset time
- Adapted to harsh environmental conditions
- Networking with up to 10 detectors
- No maintenance for one year.

AP4C-F is a chemical warfare agent detector to be used in a battlefield or urban environment on moving platforms for reconnaissance missions. AP4C-F detects in real time and simultaneously all category 1 chemical warfare agents and numerous toxic industrial materials.

All nerve agents, blister agents, and blood agents can be detected thus making the AP4C-F an instrument of safety. AP4C-F can detect all those agents under vapour, aerosol or liquid form.

AP4C-F is installed as a fixed alarm system and does not require any other maintenance or human intervention during one year, other than the addition of one litre of water per month.

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	Lewisite
Methyldichloarsine MD	
Hydrogen cyanide AC	
Cyanogen chloride CK	

AP4C-F has the same capacity of chemical detection and the same specifications as the AP4C. It is typically installed at the air intake of buildings or critical infrastructures.

Set up procedure, calibration, filter change, purge procedure, and switch off procedure are NOT necessary.

AP4C-F can be networked with other instruments. Upon alarm it can trigger the closing of the building ventilation system.

Operating principle

It is based on flame spectrophotometry technology. It operates by analysing the light spectrum of a flame of hydrogen. If chemical warfare agents or industrial toxic materials are present in the atmosphere, some specific chemical bonds will emit a characteristic light spectrum that will be recognized by the AP4C optical system.

Chemical qualification

Reports available from international independent and recognized laboratories on demand.

Characteristics

Applications	Control of contamination, surveillance of sites
Principle	Flame spectrophotometry
Detected gases	Chemical warfare agents (CWA): GA (Tabun), GB (Sarin), GD (Soman), HD (Yperite), VX, Runcol (HT), Cyanhydric acid (HCN), Chlorine cyanogen (AC)
	Toxic Industrial materials: Ammonia (NH ₃), NO _x , H ₂ S...
Detection time	2 seconds
Power supply	24 VDC x 3 A max
Size	321 mm x 170 mm x 223 mm (12.63" x 6.69" x 8.77")
Lifespan	One month
Weight	15 kg
Temperatures	-25°C to +50°C (operation)
	-32°C to +71°C (storage)

• Sensitivity in vapors, aerosols, droplets and dust in the air:

- 10 µg/m³ for all G, V agents
- 0.5 mg/m³ for H, HD and HL
- 1.5 mg/m³ for L, SA
- 10 mg/m³ for HN, HCN

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