

# AP4C-F

CBRNegetics Ltd



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 battle\_eld 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. 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.

### CHARACTERISTICS

<b>Application</b>	Control of contamination, surveillance of sites
<b>Principle</b>	Flame spectrophotometry
<b>Detected Gasses</b>	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 <sub>3</sub> ), NO <sub>x</sub> , H <sub>2</sub> S...
<b>Detection Time</b>	2 seconds
<b>Power Supply</b>	24 VDC x 3 A max
<b>Size</b>	321 mm x 170 mm x 223 mm (12.63" x 6.69" x 8.77")
<b>Lifespan</b>	1 month
<b>Weight</b>	15kg
<b>Temperatures</b>	-25°C to +50°C (operation) -32°C to +71°C (storage)

### LIST OF DETECTED CHEMICALS

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