

GDA-S

Gas Detector Array - Stationary version

Supervision on Critical Infrastructure Detector for hazardous gases and chemical agents

The Gas Detector Array Stationary version is a continuously operated chemical agent detection system. It is used to supervise sensitive public structures, buildings and workplace areas.

The benefit using GDA technology is, that not only chemical warfare agents (CWAs) are selectively supervised but also the whole range of hazardous and less hazardous volatile compounds can be supervised since GDA technology offers the possibility to detect a very broad range of compounds in the gaseous phase.

The GDA-S version has been developed on the basic idea of combining several detection principles in order to achieve:

- a broad detection range and thus giving a high level of safety
- improved specifity through combined sensor responses can be used for library comparison.

The changes of the specifications made for the stationary GDA are:

- Fail safe flow system (e. g. pumps allowing long term continuous operation, redundancy included)
- Maintenance interval designed to be 1 year
- Connectivity personal computer connectivity offers all common kind of data interfacing
- Adaptable library system



The detector is rugged, reliable and dependable, even operating in adverse environments, but quickly and easily maintained at yearly service intervals.

Features

- Detection and identification of all the main hazardous gases and chemical warfare agents within seconds
- Hybrid Sensor Array: Unique combination of different detectors (IMS, PID, EC, MOS)
- Safe alarming concept
- Alarm and communication interface
- 24/7 operation / data stored
- Internal sensor protection system
- Easy to install
- Database is expandable
- Outdoor operation







defense

Nuclear





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Technical Data

Sampling

System continuous vapor sampling through internal pumps, internal sample dilution system

Recovery time less than typically 5 min

Measurement time seconds to less than 1 minute (depending on the compound)



Detection principles

Orthogonal technology for improved interferent rejection
- Ion Mobility Spectrometer (Ni63 ion source, positive and negative mode)
- Photo Ionization Detector (10.6 eV)
- Electrochemical Cell
- 2 Metal Oxide Sensors

Modes of operation
Agents detected

Agents detected

Detection principles

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GDA mode for hazardous compounds and chemical warfare agents
nerve, blister, blood & choking agents, toxic industrial chemicals,
data base is expandable
Identification

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based on pattern recognition methods, individual alarm thresholds are
possible

Environment Requirements

Temperature typical: -30°C – +50°C Humidity (relative) 5 % to 95 %, non-condensing

Power Requirements

Main power 30 W, powered by power supply of 100 – 240 Volt

Battery back-up Operation on Backup Battery
Battery to be recharged by internal charging circuit (UPS)

Communication

Computer interface serial port – RS 232, USB, Ethernet, Wireless communication and GPS optional

Devise Control / Data Handling

Requirements Win98SE, 2000, XP, Vista, Windows 7
Software WinMuster GDA

| Options | Safety Class | Warranty |
|----------------------------|--|-----------|
| Wireless communication GPS | Compliant to EN50270 / 1999 / type 1 & 2 device | 12 months |



50 kgwith batteries
and UPS
included

Dimension 600x600x200 mm