ChemProDM

Chemical Detector
for Vehicle Solutions

- Industry leading sensitivity in CWA and TIC detection
- Compatible with EnviScreen monitoring software
- Simple maintetance −low lifecycle costs

Environics

For your SAFETY

ChemProDM

Chemical Detector for Vehicle Solutions

The ChemProDM provides industry–leading sensitivity in CWA and TIC detection in rugged housing.

The ChemProDM is a reliable and fast chemical detector module for fixed applications where a local user interface and built-in rechargeable battery are not needed. ChemProDM uses the Open Loop IMS technology to detect & identify Chemical Warfare Agents (CWAs) and Toxic Industrial Chemicals (TICs). Depending on the circumstances the suitable chemical library can be chosen for each mission.

KEY FEATURES

- Industry leading sensitivity in CWA and TIC detection
- Radiation detection with add-on-module
- Low lifecycle costs
- Minimal maintenance
- Built in GPS locationing (optional)
- Flexibility and upgradeability

APPLICATIONS

- Vehicle solutions
- CBRN System Solutions

Multisensor Detection

The ChemProDM uses an array of detection technologies to detect, classify and measure chemicals enabling simultaneous detection of the widest range of chemicals. The ChemProDM is a truly orthogonal detector, it's heart remaining the Environics' unique open-loop Ion Mobility Spectrometry (IMS) sensor. The performance is improved with additional sensors that provide a wider range of detectable TICs and improve false alarm rejection.

Lowest Life–Cycle Cost

One of the many advantages of open-loop IMS technology is that unlike conventional technology where systems require regular replacement of the molecular sieve or other filters, the ChemProDM has only one regular consumable – a simple dust filter.

Flexibility and Upgradeability

The ChemProDM's flexible technology allows the inclusion of the widest variety of chemical compounds in the gas libraries. Protection can be provided in most situations with minimal amount of false alarms. New libraries can be downloaded to the device via serial port by using a simple PC-based User Interface Program.

Connectivity and Add–On Modules

The ChemProDM can be connected to a wide variety of add-on modules and accessories. With these optional products, the capabilities of a standard ChemProDM can be enhanced to form a full CRN detection system. Two serial ports enable communication with external information systems, and a versatile DC power input enables the use of the ChemProDM with a wide variety of DC power supplies and rechargeable batteries.

The ChemPro RAU is a small and light-weight remote alarm unit designed to provide alarm information where it is needed. The basic user interface operations of ChemProDM can also be used via RAU.

The ChemPro Radiation Detection Module (RDM) enables the ChemProDM to detect traces of gamma and X-ray radiation. The current dose rate, the accumulated dose reading and alarms are indicated on the display of remote alarm unit.

Technical Data

ChemProDM

Size (H x W x D)	Approx. 175 x 110 x 63 mm without external filter
Weight	Approx. 1,2 kg
Power source	9 - 36 VDC Vehicle Power
Remote power	110 - 250 VAC with optional Mains Power Supply
Operational temperature range	-30 to +55°C (-22 to +131°F)
Storage temperature range	-40 to +71°C (-40 to +160°F)
Humidity	0-95% non-condensing
Dust & Water Resistance	• MIL-STD-461E and 810E compliant * • Waterproof
Detection Libraries	Chemical Warfare Agent/CWA (std) Optional libraries available
GPS	Integrated GPS (optional)
Communication	Serial communication interface with two RS-232/RS-485 ports
Alarms	Programmable storage of alarms

Optional Add–On Modules

ChemPro RAU (Remote Alarm Unit)

Size (H x W x D)	Approx. 122 x 110 x 78 mm
Weight	Approx. 1kg with wall mounting bracket
Buzzer	Piezo functioned
Lights	LED status light
Display	Graphical LCD display with white backlight
Power	• Internal Li-Ion Rechargeable Battery • 9 - 36 VDC Vehicle Power • 110-250 VAC with optional Mains Power Supply
Communication	RS232/RS485

ChemProDM RDM (Radiation Detection Module)

Size (H x W x D)	Approx. 121 x 110 x 63
Weight	Approx. 1kg with wall mounting bracket
Detected Radiation	Gamma and X-ray radiation
Detection Technique	Geiger-Müller tube
Dose Rate	From 50 keV to 1.3 MeV
Measurement Range	0.04 μSv/h to 100 mSv/h
Response Time	Fast mode 2,5 seconds Normal mode 3 min. at ambient radiation levels
Power Source	Uses the power of ChemProDM

* The ChemProDM is based on ChemProPD, which has been tested against these standards by independent and Environics' test laboratories during the product development process.

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