

ChemPro®100i



Handheld Chemical Detector

- **Industry leading CWA
and TIC detection**
- **Improved selectivity
and sensitivity**
- **Unique trend display**



Solutions for Security

Handheld Chemical Detector



Instead of conventional chemical warfare the defence and security organizations are facing new threat scenarios. Chemical accidents, terrorism or criminal activities are the actual challenges soldiers and first responders have to prepare for on a daily basis. Today's operating environment requires new versatile response tactics incorporating innovative detection equipment.

Industry leading sensitivity

The ChemPro100i is a handheld detector for field detection and classification of Chemical Warfare Agents (CWAs) and selected Toxic Industrial Chemicals (TICs). It provides industry-leading sensitivity and false alarm rejection in the most user friendly and low-maintenance package in its class.

KEY FEATURES

- Widest range of detectable chemicals
- Simple maintenance
- Easy to operate
- Versatility (CWA/TIC)
- Minimal false alarm rate
- Radiological and Biological detection with add-on modules

APPLICATIONS

- Locating leaks and faulty containers
- Monitoring of industrial sites
- Chemical safety of harbors and railways
- Customs and border control
- Monitoring of mass events and high security meetings
- Law enforcement agencies
- Battlefield detection and monitoring
- CBRN Reconnaissance and surveillance

Multisensor detection

The ChemPro100i uses an array of detection technologies to detect, classify and measure chemicals enabling simultaneous detection of the widest range of chemicals. The ChemPro100i 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 Costs & Logistics

The ChemPro100i, unlike traditional closed-loop IMS, doesn't have to purify or chemically modify the sample with consumable sieve packs or dopants. This substantially reduces cost of ownership compared to other chemical detectors. Transport, fielding and operation of the ChemPro100i are simple and easy because it doesn't require consumables and only needs maintenance every 3,000 hrs. (tracked by an internal clock). Even after 3,000 hrs you can still use the ChemPro100i if it passes its simple field check. With the ChemPro100i you won't be left in the middle of an incident with a CWA/TIC detector that doesn't work.

Exercise Yourself, Not Your Detector

Some CWA/TIC detectors need to be "exercised" or run once day/week/month or else they will not work when an emergency comes. The ChemPro100i can be stored for years and if it was working when you stored it, the ChemPro100i will work when you really need it.

Non-threatening Design

Other detectors have a very "military" look and some even look like weapons. The ChemPro100i has a non-threatening form factor. People have described it as a big PDA or a big cell phone, but nobody has ever confused it with a weapon so it is less likely to panic civilians.

Easier to use than a mobile phone

The intuitive user interface is so easy to use that if you can use a cell phone you can use the ChemPro100i. The large display is easy to read, even when wearing protective ensembles and large buttons are easy to push even with heavy gloves on. Interchangeable Li-Ion batteries can be quickly swapped out with a 6-AA battery pack without the use of any tools.

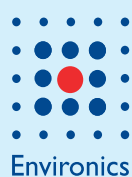
Full CBRN capability

The ChemPro100i's capability can be easily expanded to a full CBRN detection system by utilizing unique cost effective external add-on modules.



Technical data

Size	230x101x57mm (9"L x 4"W x 2"H)	Calibration	No calibration is required, but a simple confidence check is recommended before use
Weight	880 g (31 oz.) (w/Li-Ion battery installed)	Alarm Modes	<ul style="list-style-type: none"> • Audible (adjustable up to 85db) and visual alarms • Optional earphone alarm available
Sensors	Orthogonal detection using: <ul style="list-style-type: none"> • Open-loop (aspirated) IMS cell • Temperature, humidity, pressure and mass flow sensors • 6 Semiconductor sensors 	Temperature (Operating)	-30 °C to 55 °C (-22 °F -131 °F) up to 80 °C (175 °F) temporarily
Detection libraries	<ul style="list-style-type: none"> • Chemical Warfare Agent/CWA (std) • First Responder (optional) • Toxic Industrial Chemicals/TIC (optional) • CWA Precursors (optional) • Volatile Organic Compounds/ VOC (optional) 	Temperature (Storage)	-40°C to 71 °C (-40 °F -160 °F)
Battery	Easily interchangeable Li-Ion rechargeable and alkaline (6xAA) packs included	Humidity	0-95% non-condensing
Operating Hours	<ul style="list-style-type: none"> • 8 hours continuous use on rechargeable Li-Ion • 5 hours continuous use on alkaline AA-batteries • 12 hours continuous use on Li-Ion AA-batteries 	Dust & water resistance	IP67: Dust tight (resists blowing sand MILSTD-810F) and protected against water immersion when inlet is closed
Battery Recharge Time	5 hours using the standard power supplies Unit will run and charge simultaneously	Shock & vibration resistance	High impact composite case passes vibration & drop tests (MIL-STD-810E)
Power	110 – 250 VAC, 50 – 60 Hz ChemPro100 Mains Power Supply (standard) 9.5 – 32 VDC ChemPro100 Vehicle Power Supply (optional)	EMI/RFI Interference	Highly resistant to electromagnetic & radio interference and doesn't generate electromagnetic interference
User Interface	Graphical LCD display with blue backlight and 3 operation keys	Use in potentially flammable environments	Will not ignite a n-Hexane atmosphere (MIL-STD-810F)
Sampling	1,3 LPM internal pump with continuous airflow	Other features	<ul style="list-style-type: none"> • RS-232 / USB communication port • User adjustable data logging. Optional User Interface Program needed for downloading the data to a computer. • Belt clip and over the shoulder carry bag standard
		Warranty	<ul style="list-style-type: none"> • 1-year standard warranty • 2, 3, 4 and 5 year warranties available



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