

smiths detection

bringing technology to life



U.S. Air Force photo by: Airman 1st Class Jason Epley/Released

Leading CBRNE assessment solutions
for emergency response

www.smithsdetection.com

CAPABILITIES

CHEMICAL

HazMatID™ Ranger
HazMatID™ 360
RespondeR RCI™
GasID™
HGVI™
LCD 3.2E™
LCD 3.3™
LCD-NEXUS™
CAM™
GID-3™



BIOLOGICAL

Bio-Seq™ PLUS
Prime Alert™
BioCheck™
Bio-ACT™ Solution
SmartBio™ Sensor



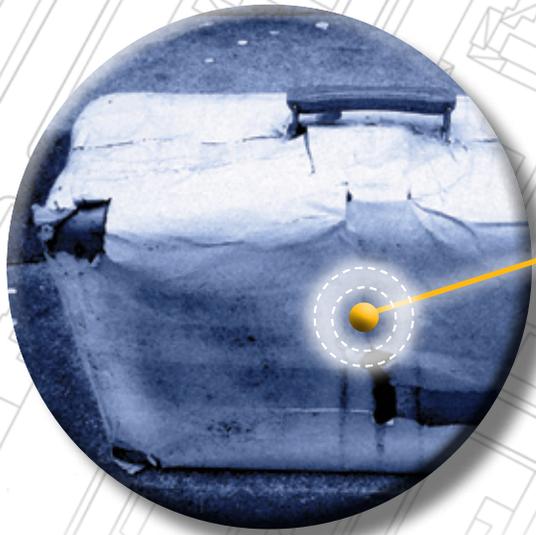


RADIOLOGICAL



NEW - RadSeeker™

**TRACE
NARCOTICS
& EXPLOSIVES**



MMTD™
NEW - SABRE™ 5000

SOLID & LIQUID IDENTIFICATION

HazMatID™ Ranger handheld solid and liquid identifier

The HazMatID Ranger is a chemical identifier for use in diverse field applications requiring handheld, backpack or robot portability. The HazMatID Ranger identifies white powders, WMDs, explosives, and toxic industrial chemicals and is ideal for diverse environmental missions.

- Proven FT-IR technology for field use
- Available database of over 32,000 spectra
- Detects the presence of biological substances
- Comes standard with HazMasterG3™ Extended Decision Support Software
- Ease of operation in protective gear
- Downrange control via Bluetooth®
- Touch sample operation
- Interface built upon HazMatID software
- Size: 12" x 7.5" x 4.5" (30.5 cm x 17.8 cm x 11.4 cm)



HazMatID™ 360 portable solid and liquid identifier

HazMatID 360 is the latest rugged, portable chemical analyzer that identifies a broad range of chemicals including unknown powders, WMDs, explosives, and toxic industrial chemicals. Its expanded capabilities give responders more information so they can make decisions, maintain safety, and avoid disruptions to public services faster. Upgrades to existing HazMatID systems available.

- Proven FT-IR technology for field use
- Expanded standard libraries to include over 9,000 spectra, upgradable to over 35,000 spectra
- Enhanced mixture analysis software
- Detects the presence of biological substances
- Priority threat alerts with integrated PEAC decision support software
- Chemical and hazard classification tools
- Extended & improved wireless capabilities
- Answers in less than 1 minute
- Size: 17.5" x 12" x 7.5" (44.4 cm x 30.5 cm x 19 cm)



SOLID & LIQUID IDENTIFICATION

Responder™ RCI, with BLS (Bottle Liquid Scanner) software new software enables rapid liquid screening through sealed containers

The Responder RCI is a rugged and portable solid & liquid chemical threat detector. It offers versatile sampling options to enable indirect or direct contact with material. New BLS software enhances rapid decision making capabilities by providing distinction between threat and non-threat liquids in less than 20 seconds.

- Raman technology
- Expandable threat database
- High probability of detection and low false alarm rates
- Can be configured to perform broad-range identification of over 15,000 substances
- Optional laser safety enclosure available for installation in high-traffic areas
- Size: 8.75" x 7.5" x 4" (22.2 cm x 19 cm x 10 cm)



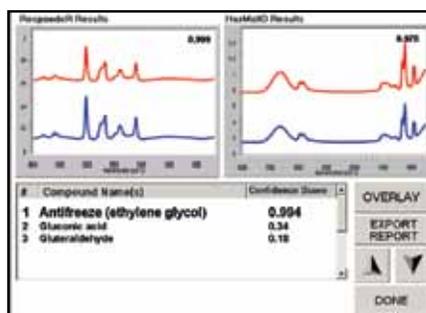
FT-IR and Raman Spectroscopy technologies that complement each other

Raman and FT-IR are both vibrational spectroscopy but they are not the same. Using them together offers distinct advantages.

For example, materials that are strong in Raman can be weak in FT-IR, and vice versa.

Obtaining confirmatory results with orthogonal techniques, such as FT-IR and Raman, helps validate a course of action, reduces risk and improves on-scene chemical analysis.

Results from the Responder RCI can be wirelessly transmitted to the HazMatID™ 360 to aid in spectral comparison and interpretation between complementary technologies.



Spectra from the Raman Responder RCI™ and the HazMatID Ranger can also be wirelessly transmitted to an external laptop to aid in user interpretation between complementary technologies and more informed decision making.

GAS & VAPOR IDENTIFICATION

GasID™ portable gas & vapor identifier

The GasID is a durable, portable chemical identifier for volatile organic compounds, flammables, TICs and TIMs, corrosives, and WMDs.

- Proven FT-IR technology for field use
- Identifies over 5,500 gases and vapors
- No calibration required
- Multiple sample devices offer user versatility
- Results in minutes
- Size: 17.5" x 12" x 7.5" (44.4 cm x 30.5 cm x 19 cm)



GAS & VAPOR IDENTIFICATION

HGVI™

hazardous gas & vapor identifier

The HGVI is a hand-held, multi-sensor instrument that rapidly detects, identifies and quantifies TICs and CWAs. Offering one-touch operation, the HGVI is simple to operate in Level-A gear in any environment.

- Complementary sensors including Ion Mobility Spectrometry (IMS), Photoionization Detection (PID) and Taguchi Gas Sensors (TGS) working together in one instrument to increase accuracy
- Driven by H-Fusion™, advanced software developed to interpret results of multiple sensors
- Gamma radiation dosimetry
- Utilizes a non-radioactive IMS source
- GPS and wireless communications capabilities
- Automatic detection, identification and monitor modes of operation
- Size: 17" x 5.5" x 5" (43.2 cm x 14 cm x 12.7 cm) (not including the handle)

**LINX™**

Wireless Communications Kit for HGVI™

LINX enables multiple HGVI readings to be transmitted out of a hotzone to a single control center. The LINX kit provides state-of-the-art remote monitoring technology. It aids in faster integration of information and decision making ability when time is of the essence to safely track airborne threats, locate a source of a contamination or to establish a safety perimeter.



The LINX Wireless Communications Kit network can be configured to communicate with up to 16 individual HGVI systems and communicates results back to the command center via the wireless RF modem built into the system.

AIR SAMPLING

LCD lightweight chemical detector

The LCD is a detect-to-warn device that samples the air continuously for chemical warfare agents (CWAs) and toxic industrial chemicals (TICs). It can be worn to enable personnel and/or squad protection by detecting threats at or below immediately dangerous to life and health (IDLH) levels.

- Non radioactive IMS source technology
- Detects an extensive library of CWAs and TICs
- Simultaneous detection of nerve and blister agents
- Fast response and clear-down time
- Operates reliably in extreme environments
- Requires no routine maintenance or calibration
- Impressive battery life from one set of AA commercial batteries
- Power and communications adaptor (PCA) and vehicle mount also available
- LCD 3.3 size: 4.15" x 7.06" x 1.86" (10.54 cm x 17.93 cm x 4.72 cm)
LCD 3.2E size: 4.33" x 7.09" x 2.0" (11 cm x 18 cm x 5.08 cm)



LCD 3.2E™
Offers 3 modes of detection operation: CWA, TIC, Survey

LCD 3.3™
Offers identification of CWAs

COMPATIBLE WITH SENSALINX
SEE PAGE 14

LCD-NEXUS™ man-portable chemical agent detector

LCD-NEXUS is a portable and ruggedized CWA identifier and TIC detector, providing highly sensitive and selective detection; capable of measuring chemical concentrations down to miosis levels with accurate discrimination. LCD-NEXUS can be deployed, stand alone or operated as part of a network and is also suitable for fixed, semi-permanent, or moving platforms.

- Non radioactive IMS source technology
- Detects and identifies CWAs at miosis levels
- Detects a wide range of Toxic Industrial Chemicals
- Rapid detection and clear-down times
- Superior false alarm rejection capability
- Low cost of ownership and low unit cost
- Size: 7.25" x 6.5" x 10.63" (18.4 x 16.5 x 27 cm)



COMPATIBLE WITH SENSALINX
SEE PAGE 14

CAM™**hand-held chemical agent monitor**

Primarily used to assess contamination levels of personnel, vehicles and equipment, the CAM is a handheld nerve, blood, blister and choking agent monitor.

- Ion Mobility Spectrometry (IMS) technology
- Option available to detect other agents such as TICs
- Rapid response to very low levels of agent concentration
- Ergonomic and rugged design for operation in a wide range of environmental conditions
- Enhanced auto-switching feature to continuously and automatically detect nerve and blister agents
- Size: 13.8" x 3.2" x 5.7" (35 cm x 8 cm x 14.50 cm)

**GID™-3****man-portable chemical agent detector**

The GID-3 is a rugged, battle-proven chemical warfare detector that is used by militaries worldwide. It is ideally suited to vehicle applications.

- Ion Mobility Spectrometry (IMS) technology
- Agents detected include nerve, blood, blister and choking agents
- Option available for selected CWA and TIC detection
- Size: 10.75" x 7.01" x 6.5" (27.3 cm x 17.8 cm x 16.5 cm)
Battery Box & Battery Size: 3" x 7" x 6" (7.62 cm x 17.78 cm x 15.24 cm)
Vehicle Mount Size: 16" x 13" x 8" (40.64 cm x 33.02 cm x 20.32 cm)



BIOLOGICAL ASSESSMENT

Bio-Seeq™ PLUS biological agent identifier

The Bio-Seeq PLUS is a portable high precision instrument that detects trace levels of specific BWA threats (both bacterial and viral) through DNA replication. The membrane keyboard with extra large keys is designed for use while wearing full protective gear.

- Hand-held, fully field portable LATE PCR technology
- Detects trace levels of specific BWA agents as low as 100 organisms
- Identifies biological warfare agents such as Anthrax (pX01 and pX02), Tularemia, Plague and Pan-Orthopox
- Lab quality results in 65 minutes
- Supports up to 6 independent simultaneous assays
- Size: 12" x 7" x 3" (30.5 cm x 18 cm x 7.5 cm)



Prime Alert™ bio-detection and threat verification system

Prime Alert is a field-proven, portable bio-detection system that screens unknown powder samples for suspicious levels of all microbes and key bio-toxins in minutes.

- DNA tag technology
- Performs highly accurate, broad spectrum analysis
- Detects the presence of potentially life-threatening biological microbes and biotoxins Ricin, Botulinum and SEB
- Results in under 10 minutes
- Rugged, field portable and can be decontaminated
- Complementing orthogonal technology to provide the highest level or result accuracy in field analysis
- Size: 7.1" x 1.6" x 3.5" (18 cm x 4 cm x 9 cm)



BioCheck™ powder screening test kit

The BioCheck is a fast and simple test kit allowing emergency responders to rapidly screen suspicious powder samples for the possible presence of protein, common to biological warfare agents.

- Protein Assay
- Laboratory proven to detect Anthrax, Plague & Ricin
- Results in 5 minutes
- Easy to use and economical



BIOLOGICAL ASSESSMENT

SmartBio™ Sensor
real-time field portable biological warfare agent detector

The SmartBio Sensor is a continuous, real-time detector of biological agents (including microbes, bio-toxins and genetically modified agents) in ambient air. The SmartBio Sensor early warning capability is uniquely combined with its ability to capture and archive bio-agents for further analysis. Portable and battery operated for field use.



- Multichannel fluorescence and pattern recognition
- Real-time detection of biological agents in air, including bio-toxins
- Archives viable microbes on coupons, aiding in bio-identification
- Easily portable
- Low power requirements
- No fluidics or additional reagents required
- Detect genetically modified agents
- Size: 14 x 8 x 7 (43.2 x 20.3 x 17.8) - including battery

Bio-ACT™ Solution
advanced assessment & confirmatory technologies

Bio-ACT is an advanced package solution utilizing a diverse range of complementary technologies to rapidly confirm the identity of - or rule out - the presence of high threat biological warfare agents in the field.

Bio-ACT's unique and practical assessment approach tests for all classes of suspicious material, including:

- Chemicals
- Bio-Toxins
- Bacteria & Bacterial Spores
- Viruses



TRACE DETECTION

MMTD™ multi-mode threat detector

Hand-held explosives and narcotics trace detector optimized for use in extreme environmental conditions.

- Ion Mobility Spectrometry (IMS) technology
- Simultaneous dual mode detection & identification of explosives and narcotics from a single sample
- Remote monitor & operation capability
- Optimized for increased range of explosive detection for IED including peroxides and taggants
- CWA & TIC detection & identification available
- WiFi & Ethernet capabilities
- Rugged (IP54, up to 54°C & 3' drop)
- Size: 19" x 8.5" x 8" (48.3 cm x 21.6 cm x 20.3 cm)



NEW

SABRE™ 5000 tri-mode, hand-held threat detector

The SABRE 5000 is the smallest, lightest tri-mode handheld system available for detecting trace amounts of explosives, chemical warfare agents, toxic industrial chemicals or narcotics. New and enhanced system features include expanded vapor detection capability giving a wider range of substance identification, faster clear-down for better throughput and built-in troubleshooting for an improved user experience.

- Optimized detection of peroxides (used in home-made explosive devices and Improvised Explosive Devices) in vapor mode
- Faster clear down with truncated alarm
- Self-diagnostics with maintenance
- Continuous automatic vapor sampling in both positive and negative modes for CWA/TIC detection
- Size: 14.5" x 4" x 4.5" (36.3 cm x 11 cm x 13 cm)



DETECTION & IDENTIFICATION

NEW

RadSeeker™
handheld radioisotope identifier

RadSeeker is the only hand-held radiation detector developed with, and approved by the US Domestic Nuclear Detection Office. With one-button touch operation and an easy-to-use interface that provides identification results in 30 seconds, responders receive quick, clear, precise and accurate assessment of a radiation threat. Utilizing two types of sensors for both gamma & neutron detection, RadSeeker reduces the time, distance and exposure in threat assessment and replaces old detection technology.

- Locates the source of radioactive material
- Advanced spectrum processing and identification algorithms provide superior identification accuracy
- Detects and identifies an unlimited amount of sources, masked or unmasked
- Automatic stabilization and requires no field calibration
- Provides a threat assessment, "Threat" or "No-threat", for each isotope identified
- Only handheld radiation detector to fully meet/exceed the ANSI. N42.34 -2006 requirements
- Size: 7" x 12" x 4.5" (17.8 cm x 30.5 cm x 11.4 cm)



SENSOR MANAGEMENT

NEW

Sensa-LINX wireless communications system

Sensa-LINX provides an early warning and reporting capability for sensors to communicate detection, identification and geo-location data to a remote command post.

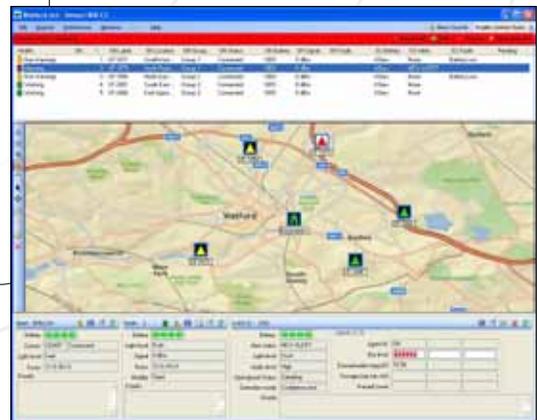
- Easily deployable and re-deployable network of sensors
- Global solution based on license exempt frequency
- Provides real time sensor mapping
- Integrates with LCD 3.3 and LCD-NEXUS chemical identifiers
- Sensor Node Size: 4.33 x 5.7 x 1.67" (11 x 14.5 x 4.25cm)



Sensa-LINX Network



Sensa-LINX wirelessly integrates LCD 3.3 and LCD-NEXUS detectors. Sensors deployed around a perimeter continuously transmit geo referenced data via a Sensor Node radio modem to a remote Command & Control (C2) base station.



The C2 software provides the operator with Situational Awareness on a GIS map enhancing the wider Common Operating Picture.

customer focus & service

Smiths Detection strives to build customer partnerships to enable **optimum product performance, limited operating costs, and maximum team capabilities.** Through a variety of multi-layered solutions, Smiths Detection ensures the unique needs of customers are addressed and handled with care.

ReachBack™ & ReachBackID™

Values | Dedication | Promise

ReachBack stands for our philosophy about customer care and satisfaction and our commitment to provide you with superior 24/7/365 expert technical support & service, around the world.

Highlights of ReachBack include:

- Direct access to product specialists 24/7/365
- Remote troubleshooting, diagnostics and operation support
- Our promise – doing what it takes to ensure the customer is able to carry out his/her mission with the utmost confidence

ReachBackID

24/7/365 spectral interpretation support and applications expertise on FT-IR and Raman technologies.

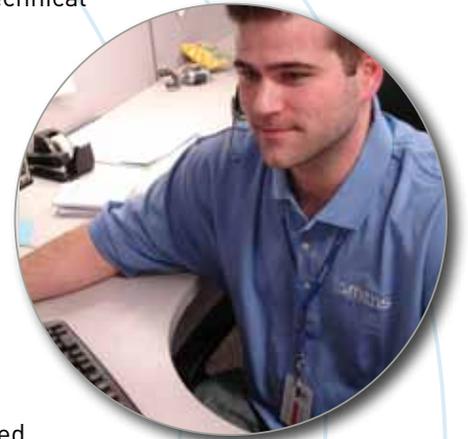
ReachBackID includes all the highlights of ReachBack, plus enhanced decision making support by ensuring you have around the clock access to highly trained scientists who understand the needs and challenges facing front line defenders.

The ReachBackID team is a group of elite scientists with 75+ years of collective experience in spectral analysis, including IR and Raman spectral interpretation, chemical classification, and hazardous materials chemistry.

**Currently available in English only & subject to contract terms & conditions.*

Partnership Programs and Service Packages

As an organization we understand how important it is to have confidence in your equipment when mitigating a potential CBRNE incident. From software updates to providing loaner systems, Partnership Programs and service packages ensure your equipment continues to perform at the highest level throughout the lifetime of ownership.





Training

Smiths Detection offers a full line of training programs. Topics include “Basic Product Operation” to intensive “Advanced User” courses. For your convenience, we are able to hold courses at our facilities, or we will host them at a location of your choice.

Workshops & Roadshows

Workshops and roadshows are tailored to meet the needs of regional teams’ skills. These sessions give teams the opportunity to access experienced trainers, refresh skills, expand their knowledge base, and sample new technologies and equipment.



Smiths Detection knows what it takes to support an array of products over their full life cycle. We strive to **ensure equipment performs optimally and customer needs are effectively addressed.** In addition to a **global support** presence charged with providing the highest quality customer care, we encourage and expect the participation of everyone at Smiths Detection to generate and develop ideas to achieve customer satisfaction.

smiths detection

For product information, sales or service
please go to **www.smithsdetection.com**