



Product Overview

- Bruker: The Gold Standard in CBRNE Detection

• Choose Innovation – Choose Bruker

Bruker is recognised as the leading authority on detection and identification technologies that mitigate the threat from toxic agents and harmful materials. These threats can encompass chemical weapons, toxic chemicals, biological agents, radioactive materials and explosives, all of which can devastate lives, threaten infrastructure and destroy property.

Bruker develops, manufactures and supplies technologies worldwide for a diverse number of clients that include most of the world's Militaries, Emergency Responder teams, Police Forces and numerous civilian clients that include security firms and safety teams.

We also supply many of our technologies to government departments, commercial enterprises and multi-national corporations who need to protect their employees and their customers from the threat from terrorism or from the accidental release of toxic materials.

Bruker is strongly committed to meeting its customers' needs by continuing to revolutionise the design, manufacture and distribution of detection tools based on our core technologies; by providing cost-effective solutions that are regarded as the 'Gold Standard' by threat mitigation experts.



• Prepare for a World of Changing Threats

Since our formation in 1980, our product line has grown significantly. The detection of chemical warfare agents and toxic chemicals remains the mainstay of our capability, and the ensuing years have seen extensive innovations and developments of new technologies to enhance our capabilities.

In addition to being acknowledged as the global supplier of "Gold Standard" detection systems, we are also the world leader in installed detection systems that help our users to protect National Critical Infrastructure.

Key Product Groups

- Portable Chemical Detection Systems
- Installed Chemical Detection Systems
- Installed Chemical/Radiation Detection Systems
- Mobile Chemical Identification Systems
- Critical Infrastructure Protection Systems
- Detection Systems for Maritime Applications
- Biological Threat Identification Systems
- Trace Explosives/Narcotics Detection Systems
- Radiation Detection and Identification Systems
- Detection Systems Integration Services
- Supplier of Complete Mobile Platform Solutions



Bruker serves the needs of the whole CBRNE community.

• Portable Chemical Agent Detection

• RAID-M 100*plus*



- Flexible, simple push button operation
- Fast, sensitive detection, identification and quantification of CWA / TIC
- Detection process unaffected by humidity levels
- Unique Bruker system protects the instrument from overloads
- For hand-held or in-vehicle deployment using vehicle mounts
- Non Radioactive version available

RAID-XP •

- Combines chemical and radiological detection in a single system
- Fast, sensitive detection, identification and quantification of CWA / TIC
- Ideal for perimeter protection applications
- Operates from rechargeable batteries or local power
- Can be integrated with mobile platforms using vehicle mounts



• Installed Chemical Agent Detection

• RAID-S2plus



- Variants offered for ship-based and submarine-based systems from Bruker; the market leaders in installed detection technologies
- Combined CWA/TIC detection / identification system
- Specifically designed for 24/7 long-term operation
- Operates as standalone unit or with several instruments in networks
- Standard product is rated to IP 65 for use indoors or outdoors

TIMON •

- Combined CWA/TIC detection and identification system
- Designed for use in vulnerable areas such as Critical Infrastructure Protection applications
- Operates 24/7 with maintenance intervals in excess of 18 months
- Ideal for monitoring underground rail systems and platforms
- Unobtrusive appearance that does not attract unwanted attention



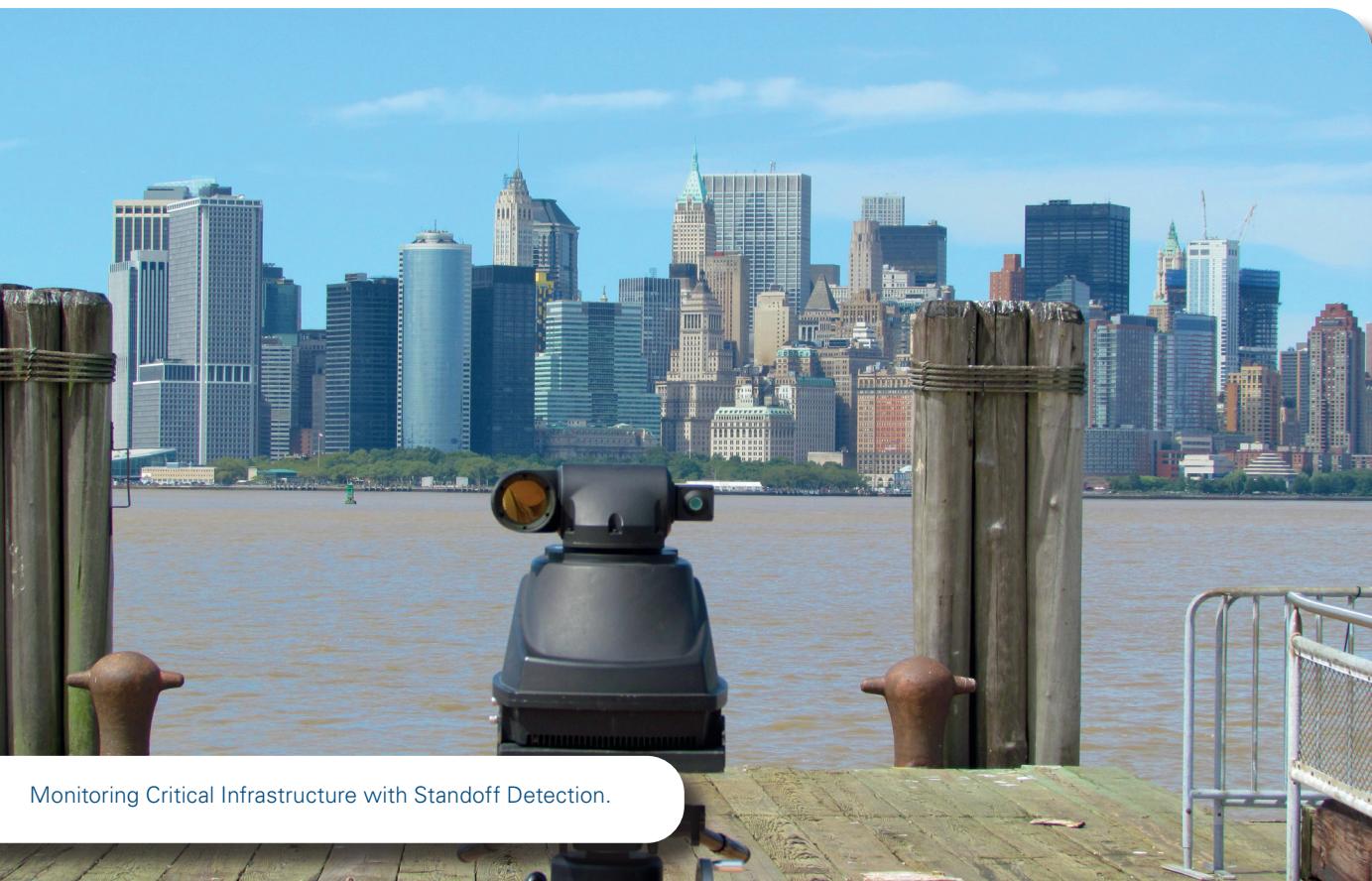
Protecting Critical Infrastructure with the unobtrusive TIMON.

● Standoff Detection

RAPIDplus ●

The compact, ruggedised new RAPIDplus has been designed to provide standoff detection of 16 CWA and more than 80 TIC simultaneously.

- Substances can be detected and identified in real time at distances up to several kilometres
- Ideal for wide area threat monitoring in applications such as sports stadiums and high profile events
- Integrates a new colour camera with the scanning head
- New software overlays detection events on a panoramic image of the environment
- Can be deployed either on a tripod or mobile platforms
- Suited to integration in airborne platforms such as helicopters and larger Unmanned Aerial Vehicles (UAV)
- Maritime version available



• Chemical Identification Solutions

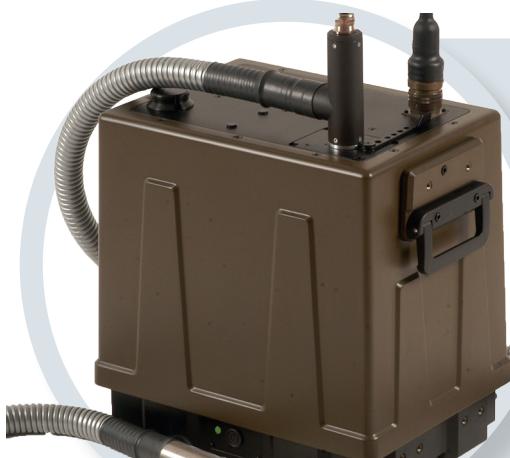
E²M •

The Bruker Enhanced Environmental Mass Spectrometer, E²M, is a compact, lightweight, mobile GC/MS system.

- Fast, reliable on-site identification of organic chemicals in any medium
- Designed to meet identification requirements of First Responders and Homeland Security groups
- Developed in co-operation with German Fire Brigades and Disaster Management Authorities
- Very low consumables burden and low through-life cost
- Applications: environmental protection, mobile on- site analysis and event monitoring



• MM2



The Bruker MM2 sets a new benchmark in GC/MS technology for military deployment.

- Equipped with improved gas chromatography/ mass spectrometry technique
- Latest generation of quadrupole mass spectrometers
- Designed to meet exacting Military Standards (MIL- STD)
- Optimised for long-term performance in many types of mobile platforms
- Designed for use in arduous conditions - even on tracked military vehicles
- No reliance on supplies of bottled gas
- Complex consumables are not required

Accessories and System Integration

- Accessories and integration tools greatly expand the utility of the MM2
- Flexible heated probes provide multiple deployment options
- All GC modules are mounted directly on the inlet to the MM2
- Thermal desorption units and remote control sampling devices offered
- The unique double wheel assembly (shown), for surface measurements



● Biological Detection

● pBDi



- Universal detection for toxins, bacteria and viruses
- Direct identification of up to 6 agents in 20 mins
- Powerful and simple-to-use ELISA-based technology
- Uses a unique electrical biochip technology embedded in a disposable consumable
- A battery-operated system with a ruggedized tablet PC
- Minimum sample preparation required
- Automated data processing and “Traffic Light” based displays

● Trace Explosive/Narcotics Detection

DE-tector flex ●

- High sensitivity bench top trace explosives trace detection system
- Non-radiation HEPI™ source reduces compliance burdens
- Based on industry-standard ion mobility spectrometry (IMS) technology
- Uses standard, re-usable, sample swabs to collect trace explosives from surfaces
- Touch screen operation, with traffic light icons, makes it quick and easy to use
- 1hour full operation on battery



● RoadRunner



- Hand-held, battery-operated, touch screen explosives trace detection system
- Non-radiation HEPI™ source reduces compliance burdens
- Based on advanced IMS technology with sensitivity equal to that of a bench top system
- Use with sample swabs for particulate collection from surfaces
- Functions as a direct explosives vapour "sniffer" on vapours
- Includes trace narcotics detection as standard



Handheld RoadRunner detecting narcotics and explosives in an airport.

• Radiation Detection and Identification

• SVGps

- Easy to use, hand-held, hardened α , β , γ radiation detector
- Integrates Geiger-Mueller tubes and semiconductor detectors
- Offers automatic range switching and simple four-button set up
- Powered from a standard Li-ion rechargeable battery
- An integrated GPS module is coupled to an internal data logger. Download these data via USB



• Bruker Radiation Probe



- Robust installed gamma dose rate detector
- Designed for radiation detection and monitoring on critical assets
- Ideal for protection applications on ships, submarines and reconnaissance vehicles
- Standard data output is over RS422 for easy integration with user data systems
- With IP 66 protection as standard, the probe readily survives decontamination

● Total Capability in CBRNE

Bruker designs, develops and manufactures a wide range of detection technologies, recognised worldwide as the Gold Standard in detection instruments. Now, responding to customer requirements that have developed over the last decade, our approach has been enhanced through the provision of a solutions-based 'Total Capability' approach.

- Our scope of supply ranges from individual detectors, through solution-based packages.
- We take the overall responsibility for your project, delivering a finished solution that fulfils your requirements.
- We assign a Project Management team to your Contract. They work closely with you and your chosen suppliers to advise on the best configuration.
- Third-party sensor systems, sensor networks, data collection and data fusion, hazard warning and reporting software are all within our scope of supply.
- We support you to formulate Standard Operational Procedures (SOP) including recommendations for evacuation and medical support where requested.
- We ensure we deliver your contract on-time and within budget.



Delivering your project on time and in budget.

• Global Resources – Local Focus



Bruker has support centres of technical expertise in every major area of the world providing sales, applications and engineering support for our complete product range. With more than 6,000 employees at 90 locations worldwide you can be confident that the support team fronts a uniquely integrated global resource. Research and development specialists, applications professionals and highly trained engineers in every field are dedicated to your investment in our equipment.

Superior Detector Performance

For highly sensitive detection, identification and quantification of chemical, biological, explosive and radiation threats. Superior performance and high reliability comes as standard.

Applications Support

Systems are configured to meet your needs and result from our detailed evaluation of your requirements.

Standards & Compliance

All our systems are manufactured in ISO9001 compliant factories; so you can be assured of superior quality and performance.

Software & Data Systems

Designed to industry standards on the Microsoft® platform, our software can be integrated with your security management software.

Training

User Training and User-Level Maintenance is part of our standard Scope of Supply. Our goal is simple; to minimise your cost of ownership.

Low Maintenance

All our systems are designed for extended maintenance periods and reduce the through-life-costs of your investment.



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