





# **Critical Infrastructure Protection**

Nuclear Radiation Threat Mitigation – Bruker **Sentry™** 

Innovation with Integrity

Safety & Security

## **Choose Innovation – Choose Bruker**

Bruker is recognised as the leading authority on the use of detection and identification technologies to mitigate the threat from the accidental or deliberate release of toxic gases, explosives and radioactive materials that could kill and injure civilians.

We offer the world's most comprehensive range of threat detection and identification solutions and can help you to assess how these can be best employed to protect people and property.

We develop, manufacture and supply technology worldwide for a range of customers and end users that need to protect people and property. These include, but are not limited to governments, commercial enterprises and multi-national corporations who need to protect their emplyees and clients from the ever-increasing threat from terrorism.

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 solutions that are regarded as the 'Gold Standard' by threat mitigation experts.



Bruker Detection products are carefully manufactured and configured in Germany, and are not subject to ITAR (International Traffic in Arms Regulations) controls".

# Nuclear Threat Mitigation: Bruker Sentry<sup>™</sup>

Detecting and identifying illicit nuclear material and discriminating this from naturally occuring radiation and medical isotopes is a task well suited to the Bruker Sentry<sup>™</sup>. This new system benefits from a high sensitivity and provides a fast response time thanks to its state-of the-art Scintillation Detector. Housed in an inconspicuous generic backpack, the system displays results on a PDA. A discreet earpiece, connected to the PDA, keeps the wearer updated on detection status over a wireless link. Status and alarm notifications combine spoken isotope identification along with spoken values for radiation intensity.

Whilst the Sentry is designed for use by roving personnel teams to cover expansive areas such as sports stadiums, airports, train stations and concerts, it can also be used as a temporary checkpoint, simply by positioning it adjacent to foot or vehicular traffic. The Bruker Sentry detects radioactive materials by their gamma emissions and employs a 3" x 3" (~76 x 76 mm) scintillation crystal for isotope identification. This allows the operator to discriminate between non-threat sources, such as medical and naturally occurring isotopes, and restricted isotopes of 'special nuclear' (fissionable) material that should not normally be found in a civilian environment. This rapid discrimination saves valuable time and avoids unnecessary negative impacts on the civil liberties of people that are undergoing radiation therapy.

Full technical details of Sentry are shown in the Sentry Product Specification Sheet, a copy of which is available upon request.



### **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<sup>®</sup> 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 throughlife-costs of your investment.



#### **Bruker Detection** Division of

Bruker Daltonik GmbH Leipzig · Germany

detection@bruker.com

#### www.bruker-cip.com

#### **Bruker Detection**

Division of Bruker Daltonics Ltd.

Coventry · United Kingdom Phone +49 (341) 2431-30 Phone +44 (2476) 855-200 detection@bruker.com

#### Bruker Detection Corp. Find us on

40 Manning Road Manning Park

Billerica, MA · USA Phone +1 (978) 663-3660 BDCsales\_US@bdal.com

facebook. You Tube twitter

Linked in