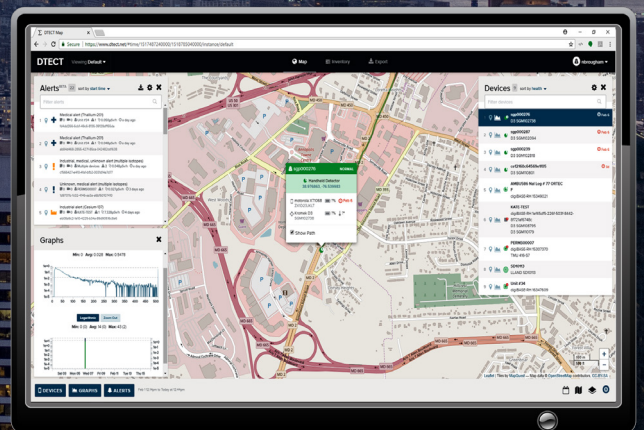




Static Node

A discreet way to monitor radiation levels in a fixed location

Connected to the SIGMA network



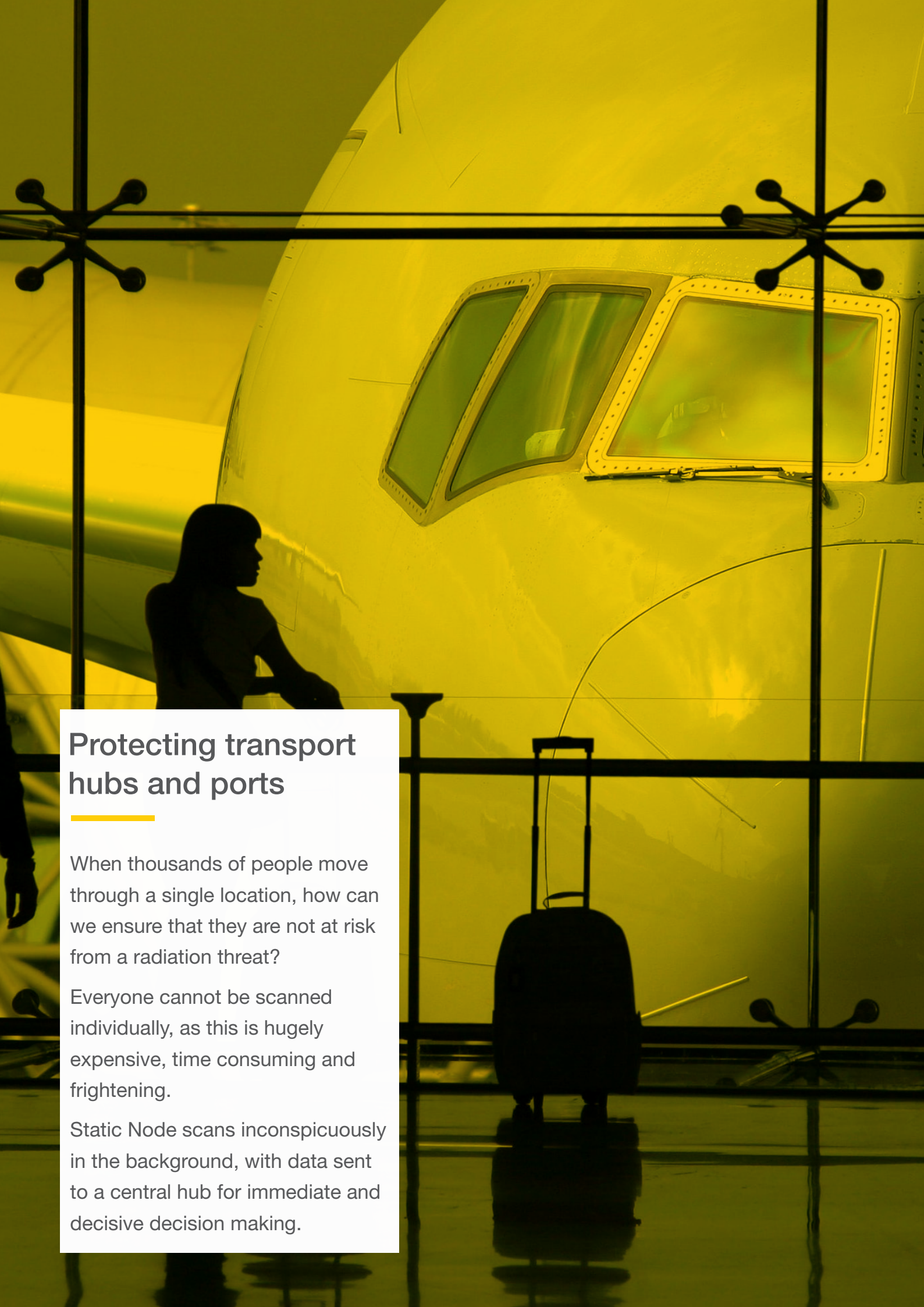
Static Node

Protecting the people and infrastructure of our cities, transport hubs and ports

The Static Node provides continuous radiation monitoring of national infrastructure at a fixed location and is designed to be used in conjunction with the SIGMA platform to provide comprehensive monitoring of radioactive activity. It is discreet, small and highly sensitive to any potential threats.



- **High-performance Detection**
Utilises Kromek's proven CsI and non-He³ detection platforms
- **Uninterruptible Power Source**
Seven day battery backup if power is lost
- **Embedded PC**
No ancillary equipment required to transmit data back to the central network
- **Unattended**
Fixed to infrastructure and transmits to the SIGMA network unaided
- **Works When Unconnected**
Seven day data storage if connectivity is lost
- **Secure**
No user interface, enclosed electronics prevents tampering. Secure emergency plug-in comms
- **Connectivity**
Both wired and cellular connectivity options available
- **Discreet**
Small form factor allows device to be mounted anywhere

A photograph of an airport terminal with a yellow-green tint. In the foreground, a person's silhouette is seen from the side, looking towards a large window. Through the window, the cockpit of an airplane is visible, with two windows and a person inside. A suitcase is also visible in the foreground, silhouetted against the window. The scene is framed by dark window frames and structural elements.

Protecting transport hubs and ports

When thousands of people move through a single location, how can we ensure that they are not at risk from a radiation threat?

Everyone cannot be scanned individually, as this is hugely expensive, time consuming and frightening.

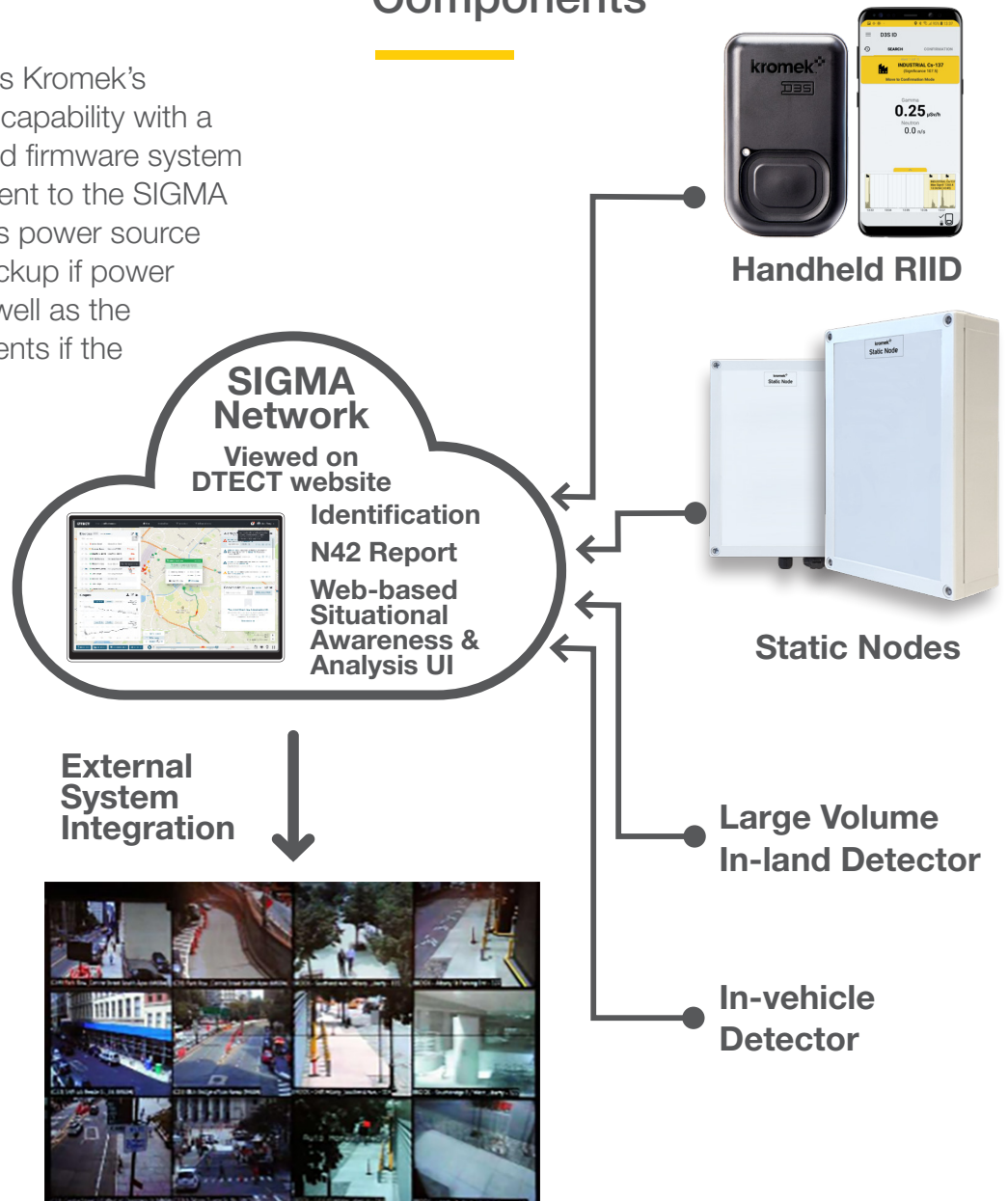
Static Node scans inconspicuously in the background, with data sent to a central hub for immediate and decisive decision making.

Static Node

The Static Node combines Kromek's existing proven detection capability with a custom-built hardware and firmware system which allows data to be sent to the SIGMA network. It utilises a mains power source with additional battery backup if power is lost for any reason, as well as the ability to store measurements if the connection is lost.


It's totally discreet: a passer-by would see an everyday, inconspicuous, opaque box with no user interface to avoid tampering.

SIGMA Platform Components



SIGMA Network

Static Nodes connect to the SIGMA network. Using SIGMA's DTECT web-based user interface, each unit can be monitored in real-time on a map from a remote and centralized location. The location of all units is displayed, and any threats can be identified. Isotope identification, as well as any associated spectral data and other information, is sent to the network instantly. This instant transfer of data allows decisions to be made quickly and efficiently when every moment matters.



Superior Detection and Identification

The Static Node houses Kromek's proven and tested CsI(Tl) gamma ray spectrometer and a non-He³ compact thermal neutron scintillator detector. This combination of both gamma and neutron detection enhances the Static Node's ability when identifying both special nuclear material and low gamma emitters. The spectroscopic capability of the Static Node allows instant identification using the SIGMA Network, but also means that associated spectra are sent to the network automatically for secondary adjudication.

Creating the ultimate field of detection

The SIGMA Program

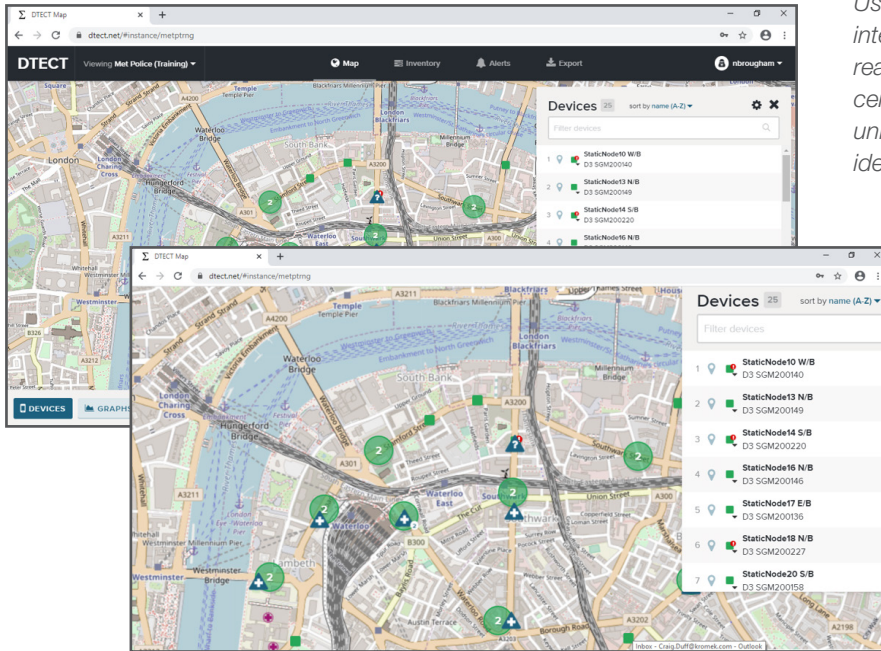
The SIGMA Network, developed as a US DHS/DARPA program, is a comprehensive network providing:

- Cost-effective, continuous radiation monitoring
- Networkable systems covering large cities or regions
- Real-time mapping with increased sensitivity

It has been successfully deployed in cities and with security forces in varying operations: urban, tactical and event-based scenarios.

Optimal coverage can be obtained using fixed location Static Nodes with Kromek's handheld portable detectors. Networked mobile detectors capable of collectively pooling data support information gained from static detectors and significantly extend real-time coverage of radioactive threats or the illicit trafficking of radioactive materials. This means all areas are covered. Large volume in-land and in-vehicle detectors are also available.





Using SIGMA's DTECT web-based user interface, each unit can be monitored in real-time on a map from a remote and centralized location. The location of all units is displayed, and any threats can be identified.





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