



TransitGate RadWatch™ Overview

- TransitGate RadWatch is comprised of Detection Units (DUs) with TAGS Sensors deployed in transit gates (and optionally “upstream” in public areas) to provide Gamma Radiation Surveillance for an entire transit system.
- The DUs and Sensors installed in Transit Gates provide surveillance at system core entrances and exits. These DUs can be integrated with existing Transit Gate security systems, such as cameras, to provide real-time responses to threats.

Targeted Automatic Gamma Spectroscopy™ Radiological Sensor

- The Targeted Automatic Gamma Spectroscopy (TAGS™) Radiological Sensor is capable of detecting Radiological Dispersal Devices (“dirty bombs”) and Radiological Exposure Devices (“silent bombs”), and distinguishing these malicious devices from acceptable radiation sources routinely found in any Public Transit environment under surveillance.

Detection Unit

- Detection Units (DUs) collect gross gamma and TAGS measurements from Sensors, augment these with location and timing data and send them to the RWS. The DU manages all encryption and communication to the RWS.
- All DUs and Sensors are ruggedized for the transit system environment.

RadWatch Server™

- The RadWatch Server (RWS) simultaneously collects data from all DUs in the network and analyzes the data to determine the “threat level” of detection events.
- Alarm emails and SMS text messages, with appropriate detection event information, are generated automatically by the RWS and sent to pre-set recipients.
- Collected data is stored and viewable via TRWM. Integration with other security systems, including data access, is available via RWS’s API.

Transit RadWatch Manager™

- The Transit RadWatch Manager (TRWM) software dynamically displays measurement, location, time, and color coded “threat level” information retrieved from the RWS on the Transit System map. The TRWM provides a system-wide view and individual station views showing individual gate status.
- The TRWM provides complete radiological threat information, including visual and audible incident alerts, in real-time to transit system operations, security and emergency staff.

TAGS Radiological Sensor

Spectroscopy: supports TAGS detection
 Range: 3 m (3σ for 100 μCi Cs137)
 Volume: 0.1 L
 Physical Dimensions: 2” x 2” x 10”
 Weight: 2 lbs
 Operation Temperature: -40°C to +60°C

Detection Units

Supported Sensors:
 MDI TAGS Radiological sensor
 Spectroscopy: supports TAGS detection
 Connectivity: Ethernet
 Sampling Rate: 500 milliseconds
 Power: 120V AC
 current: 272 mA
 Physical Dimensions: 10” x 8” x 1”
 Weight: 2 lbs
 Operation Temperature: -40°C to +60°C

RadWatch Server™

Processor: Xeon dual-core +
 Hard Disk Space :
 software: 1 GB +
 data storage: 100 GB +, RAID 5
 RAM: 4 GB
 Operating System: Windows Server 2003+
 Database Technology: MySQL, SQL Server,
 Oracle, DB2
 Bandwidth Required: 1 Mbps
 Applications Installed: Relay Server, Data
 Manager, Location Manager, Database

Transit RadWatch Manager™

Processor: Pentium 4+, Pentium M+
 Hard Disk Space: 100 MB
 RAM: 1 G
 Operating System: Windows XP
 Bandwidth Required: 52 kbps

Patents pending in US, Canada and Europe