

Box Stuffing & Loading Process Monitoring

AVANTE CONTAINER TRANSPORT SECURITY SYSTEM AND SERVICES

AVANTE provides web-based 24/7 end-to-end tracking services of cargo using its RFID ZONER™-RELAYER™ container security devices, carrier-based and yard based fixed site communication links and association of personnel badges to provide cargo container visibility and security management:

- Leasing a set of SMART-TRAKKER™ consists of one set of RFID ZONER™-RELAYER™ container security devices (two ZONER™-CTID tags and one RELAYER™-CTOR), three personnel ZONER™-SSID badges and one carrier-based communicator of RELAYER™-CTCR (equipped with GPS, GPRS and SATCOM).
- Optional fixed site installation of networks of nodal and real-time locating system of RELAYER™-RTLS readers along the supply chain.
- Flexible service charges based on scheduled regular reporting and real-time exception reporting. This cost effective supply chain security system and visibility solution does not require capital investment. Return of investment (ROI) in using this patented transport security system is immediate and can be tailored to your specific requirements.

Besides content inspection and monitoring, "transparent" staff monitoring for processes of stuffing, loading and handling is key to minimize risks:

- Finding out if any containers carry weapon-of-mass destruction when they have already landed on the nation's soil is just unacceptable in terms of mitigating a supply chain security threat. In addition to inspection at the source, transparent stuffing and loading by having all those present and responsible carry proper badges that can be monitored automatically in every phase of the inter-modal transportation process adds many synergistic benefits. The ZONER™ personnel badge-tag is engineered to be recorded by a RELAYER™ reader attached to the outside of the container. A record is kept by the reader of all those present in every step of the critical transportation process.

AVANTE Container Security System includes Real-Time Locating & Monitoring Capability using an Active RFID ZONER™-RELAYER™ reader network

- Place two or more RFID “ZONER™” devices inside the container.
- Integrate with optional radioactive, chemical and biological sensors inside the container upon sealing from an approved shipping agent.
- Monitor any tampering and activity inside containers with RFID-sensors during transit from starting point to the container loading port.
- If chemical, biological or radioactive sensor modules are used, data is collected and reported at the dock or in extreme cases, in real-time and reported to the local authorities.

- For most applications, the sensor modules may be recycled after confirmation of cargo safety. Container locks and seals may be opened and sensors retrieved for use with other containers. Replace seal and place multiple RFID “ZONER™” devices inside the containers before loading into international carrier.
- RELAYER™ reader-monitor is in constant communications with ZONER tags that are collecting and reporting the sensor and signal strength data along with time-stamp and tag identification.
- RELAYER™ reader-monitor also monitors the presence and absence of the driver(s) and for how long if they ever move away from the container.
- AVANTE also provides RELAYER™ reader-monitors to a cellular-satellite communication module that can provide real-time reporting capabilities.

AVANTE container security management solution incorporates RFID ZONER™, ZONER™ with sensors, and RELAYER™ network technological solutions to solve the last three out of four core elements of the “Container Security Initiative (CSI)”:

- Using intelligence and automated information to identity and target high-risk containers.
- Pre-screening those containers identified as high-risk at the port of departure, before they arrive at U.S. ports.
- Using detection technology to quickly pre-screen high-risk containers
- Using smarter, tamper evident containers