TeraHop networks

Transportation and Intermodal Asset Monitoring

Locate — Track — Monitor

TeraHop's Transportation and Intermodal Asset Monitoring System (TIAMS) — can detect, monitor and communicate freight status data including condition and GPS location of goods while ensuring cargo remains sealed within shipping containers while en-route.

TeraHop's TIAMS collects data automatically, wirelessly and hands-free. It's a portable solution that delivers accurate data even in remote locations and severe conditions, and is ideal for companies that want to drive efficiencies and increase profitability by working better, faster and smarter.

Increase Profitability and Decrease Operational Costs

- Know the location of freight, equipment, personnel and vehicles
- Optimize container, vehicle and equipment utilization
- Know the total cost of ownership of equipment and vehicles
- Reallocate human resources from manual data collection to revenue-generating activities

Streamline Data Collection/Input
Replace time-consuming and error prone manual data collection and input with automatic, accurate, timely and hands-free, wireless collection. The result? Faster and smarter decisions.

Minimize Waste
Stop manually searching the site or yard for containers, inventory, and tractor-trailers. Save fuel, labor and equipment by getting location and status on demand.

Eliminate Yard Equipment Downtime and Increase Asset Life and Utilization
Collect location, actual engine idle and runtime measurements and manage cost-saving utilization and preventative maintenance accurately.

Increase Customer Service
Boost customer loyalty with auditable and reliable freight data.

Reduce Inventory Loss
Reduce inventory reduction from theft, mishandling, or expiration with improved tracking and status data.

Cost Savings That Improve Your Bottom Line
TeraHop's TIAMS for third-party logistics providers, fleet managers, distribution centers, shippers, intermodal facilities and marine terminals gives you a competitive edge at the lowest total cost of ownership. And integrating TIAMS with your existing asset management and transportation software solutions delivers a quick ROI.

Let us show you how TeraHop's Transportation and Intermodal Asset Monitoring System will save you money and increase productivity.

Transportation and Intermodal Asset Monitoring System Overview

Locate — Track — Monitor

TeraHop's Transportation and Intermodal Monitoring System — (TIAMS) accurately monitors freight related equipment, containers, and tractor-trailers. Get on demand visibility into the location and status of trailers, inventory and equipment in the yard, and audit trail information from the journey for validation.

No Cellular or Satellite Subscriptions

TIAMS uses patented wireless technology combined with GPS to communicate real time asset location without the need for cellular or satellite subscriptions in the yard. While en-route the system gathers GPS location, lock cut, temperature, shock and tilt data.

Installation is Fast and Easy, No External Power Needed

TIAMS easily attaches to inventory, containers, tractor-trailers and equipment and operates using a variety of battery or vehicle based power options.

TIAMS Works Wherever You Do

TIAMS can easily communicate where no other systems can. TIAMS Portable Data Collectors attached to assets operate cooperatively to extend wireless reception into areas impervious to traditional radio and cellular devices.
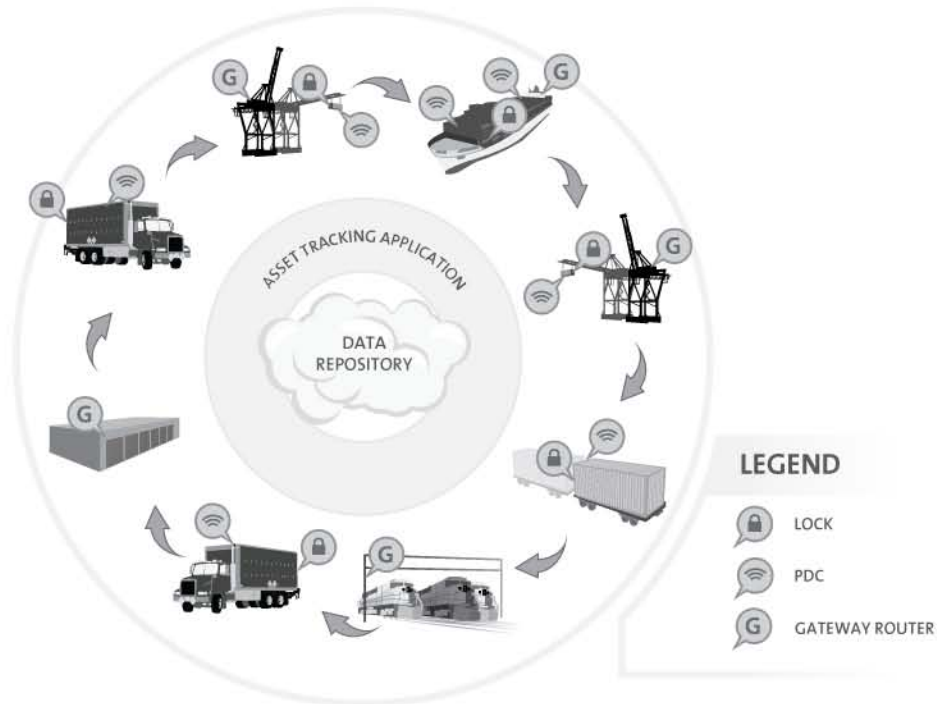

ASSET TRACKING APPLICATION

DATA REPOSITORY

LEGEND

LOCK

PDC

GATEWAY ROUTER

TeraHop's TIAMS Brings the Network to the Site

Portable Data Collectors (PDCs) are easily attached to inventory, containers, tractor-trailers and equipment. PDCs act as local sensor and wireless network routers. Each PDC contains radios, antennas, GPS, a controller, memory, sensors and batteries internal to the housing. The Portable Data Collectors operate 24/7 and automatically create hopping paths to communicate with other PDCs and directly with TeraHop's Gateway Router (GR). PDCs hold their data until they automatically detect a GR and forward their data on.

Gateway Routers can be carried by any vehicle or mounted to any structure at the site. A GR holds all collected data until connected to the TIAMS server via wireless or a standard Ethernet interface.

From the GR-generated information, site-wide data can be viewed from a computer, or smart phone, located at the site or at any other location with a wireless connection. TeraHop's TIAMS will interface with your existing Warehouse Management System (WMS) and Transportation Management System (TMS) allowing data visibility by all your operations groups.