TeraHop networks

Yard Asset Monitoring Value Proposition

A Real Difference

NO cell/satellite subscription fees.

NO infrastructure needed.

Portable and rugged—It works wherever you do.

Automatic, wireless & hands free data collection.

Easy to use, easy to set up. Really.

A Real Savings

Save $21,000 a year on data collection and input.

Reduce searching by just 3 hours a day and save $18,000 a year.

Save $2,800 a year — reduce yard truck drive and idle time by just 2 hours a day.

Save thousands by monitoring equipment vitals and service.

Know the total cost of equipment ownership.

Locate — Track — Monitor
TeraHop Networks, Inc.™ Yard Monitoring System—(YMS) automatically provides the information companies need to efficiently monitor and manage their mission critical yard based assets — inventory, trailers and equipment — in real time.

TeraHop's YMS is a patented, state-of-the-art, portable solution that delivers accurate real time data and is ideal for companies that want to drive efficiencies in their yard to increase profitability. Site-wide data can be viewed from a computer, or smart phone, located at the site or any other location with a wireless connection.

Streamline Data Collection/Input – Stop the Morning Yard Walkthrough
Replace time consuming and error prone manual data collection and input with automatic, accurate, timely and hands-free, wireless collection resulting in faster and better-informed decisions.

Eliminate Waste – No More Manual Yard Checks
Stop driving around the yard searching for inventory or trailers, which increases fuel and labor costs, wastes resources and equipment time and reduces productivity.

Optimize Yard Truck Maintenance
Collect actual engine idle and runtime measurements and manage cost-saving preventative maintenance accurately. Late maintenance can cause repairs in the thousands of dollars and doing maintenance too often increases cost of ownership.

Increase Profitability with TeraHop Network's Yard Asset Monitoring System
- Know where your trailers, inventory and equipment are in the yard at all times.
- Optimize yard and equipment utilization.
- Reallocate human resources from manual data collection to revenue generating activities.
- Know the total cost of equipment ownership.

Cost Savings That Improve Your Bottom Line
A typical company's estimated savings using the TeraHop YMS:

Task	Weekly Hours Saved	Hourly/Per Gallon Rate	Total Annual Savings
Data Collection/Input	30 hours	$15	$21,000
Eliminate Manual Yard Checks	15 hours	$25	$18,000
Reduce Drive/Idle Time	10 hours	$3	$2,800
Reduce Yard Truck Maintenence	25%		Current costs reduced by 25%
Total Annual Savings			**$41,800+**

Let us show you how TeraHop's YMS will save you money and increase productivity.

> " We chose TeraHop because it delivers all the features we need and works in any environment we do. We estimate a savings of more than $60,000 a year compared to other solutions. They've solved an important problem for us. "
>
> Bill Grady, CEO, KLB Construction

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TeraHop networks

Yard Asset Monitoring System Overview

Locate — Track — Monitor
TeraHop Networks, Inc. Yard Monitoring System — (YMS) accurately monitors all assets typically found in a yard. Get real time visibility into the location of trailers, inventory and equipment in the yard, wirelessly and automatically.

No Cellular or Satellite Subscriptions
The YMS uses patented wireless technology combined with GPS to communicate real time asset location without the need for cellular or satellite subscriptions.

Installation is Fast and Easy, No External Power Needed
Bolt to inventory, trailers and equipment and monitor virtually anything for location at the site. The YMS operates using a variety of battery or vehicle based power options.
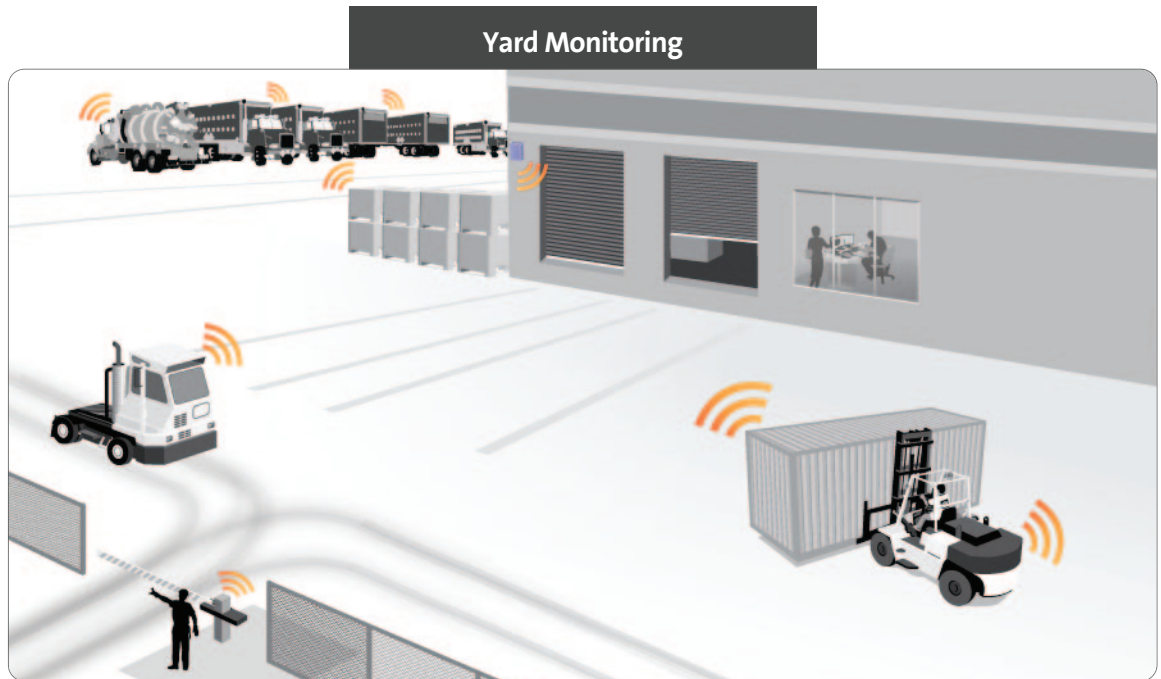
The YMS Works Wherever You Do
The YMS can easily communicate where no other systems can. YMS Portable Data Collectors attached to assets operate cooperatively to extend wireless reception into areas impervious to traditional radio and cellular devices.

Optimize Yard Equipment Maintenance
Collect actual engine idle and runtime measurements and manage cost-saving preventative maintenance accurately.

Yard Monitoring

> " When we got the actual run times of our equipment we discovered we were overestimating it by 30 to 40%. We were taking our machines out of service for routine maintenance nearly twice as often as we should have. It's a clear case where TeraHop saved us a great deal of money and, just as important, time. "
>
> **Richard Glass**
> **Technology Manager**
> **KLB Construction**

TeraHop's YMS Brings the Network to the Site

Portable Data Collectors (PDCs) are easily attached to inventory, trailers and equipment. PDCs act as a local sensor and wireless network router and 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 Wireless Data Uplink (WDU). PDCs hold their data until they automatically detect a WDU and forward their data on.

Wireless Data Uplinks can be carried by any vehicle or mounted to any structure at the site. A WDU holds all collected data until it is able to upload to a server via wireless or a standard Ethernet interface.

From the WDU-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 YMS will interface with your existing Warehouse Management System (WMS) and Transportation Management System (TMS) allowing yard visibility by all your operations groups. It's that simple.