

Fleet tracking gives businesses a competitive advantage, but generating real-time data can be challenging.



Limited connectivity in remote areas and roaming between multiple carrier coverage areas



Tracking exact location of moving vehicles is difficult



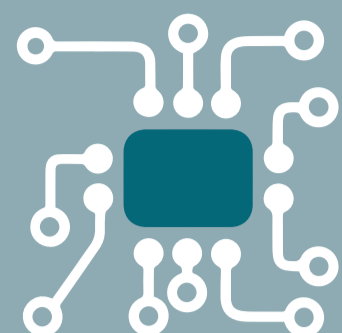
Assets are geographically dispersed over large coverage areas



Operating costs are high and driver safety is imperative



Advances in IoT and sensor technology have resulted in a new generation of fleet tracking solutions, capable of not just remotely tracking a fleet, but also sensing the environment that it is in.



BENEFITS OF FLEET TRACKING

Five key takeaways:



Reduced costs



Improved driver behavior



Increased fleet life cycle management



More efficient business operations



Better visibility of remote assets

Source: www.marketresearch.com/press-release/vehicle-tracking-market-will-see-growth-over-7-10-2024-2018-09-20

These technological advances mean that companies can now track the location of their fleet and driver behavior virtually anywhere in the world.



USE CASES FOR FLEET TRACKING



Personal Vehicles



Tractor-Trailers



Government Vehicles



Delivery Trucks



Commercial Fleets

FLEET TRACKING – MANUAL VS AUTOMATED



Manual vehicle tracking involves dispatching, calling or texting drivers, whereas automated vehicle tracking uses satellite or cellular connectivity to remotely monitor a vehicle's location, speed and status.

MANUAL

Calling or texting drivers with little to no vehicle info, such as location, speed and status.



- ✓ Relies on dispatching, calling and texting drivers to confirm location, status and mileage.
- ✓ Requires behavioral training and financial incentives to reduce fuel spend, speeding and idling.
- ✓ Dependent on logs, delivery reports and customer feedback to verify on-time/late arrivals.
- ✓ Requires open lines of communication and/or elimination of take-home vehicle policy.

AUTOMATED

Uses satellite and cellular network coverage to remotely monitor vehicle location, speed and status.



- ✓ Provides 24/7/365 vehicle data in near-real time.
- ✓ Reduces wasteful fuel costs and excessive idling with start, stop, speed and idling reports.
- ✓ Improves service delivery by reviewing vehicle journeys and optimizing driver routes.
- ✓ Creates triggered alerts to keep drivers in/out of certain geographic areas.

FLEET TRACKING – BUILD VS BUY

Companies can build their own fleet tracking solution with embedded connectivity or buy a pre-packaged, market-ready solution. Answering these questions can help define which solution is right for you.

- ? How quickly do you need to deploy the solution?
- ? What type of geographic coverage do you need?
- ? Do you have the in-house resources to build your own solution?
- ? Does your solution need to be customised or have additional sensors?
- ? Will you need to track in remote or low-coverage areas?

BUY

Good option if:

- ✓ Need short time to market
- ✓ Lack of in-house development resources
- ✓ No special customisation or sensors required
- ✓ Lack of up-front capital to build a solution

Pre-packaged solution:

- ✓ Wired, OBD or battery-powered devices
- ✓ Network connectivity
- ✓ Cloud-based application
- ✓ Satellite solution if cellular not available
- ✓ AirVantage® IoT platform



BUILD

Good option if:

- ✓ Have time to develop a solution
- ✓ Require customisation or sensors
- ✓ Have in-house expertise and resources
- ✓ Have financial resources to build a solution

Semtech offers the following stand-alone components and services:

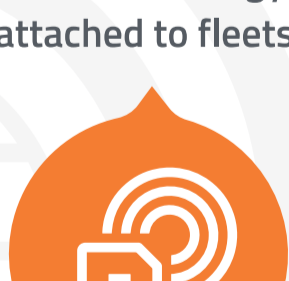
- ✓ Smart Connectivity
- ✓ Ready-to-Connect solution
- ✓ IoT modules and gateways
- ✓ AirVantage® IoT platform



THE SOLUTION

Devices

Smart devices pre-configured with IoT technology are attached to fleets.



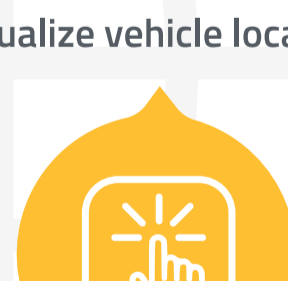
Network

Network coverage that provides device-to-cloud connectivity connects the device to the application.



Application

Cloud applications provide software and mobile apps to visualize vehicle location.



START WITH SEMTECH

The new generation of asset tracking solutions present major business opportunities. By partnering with Semtech, companies can benefit from the competitive advantages offered by these cutting-edge technologies



Deploy Quickly, Efficiently and with Low Up-Front Capital Costs with a MANAGED SERVICE



- ✓ OBD 'in cab' solutions for car fleets and trucks to monitor driver behavior
- ✓ Wireless, battery-powered devices for cargo and shipping
- ✓ Wired solutions for tractor-trailers or trucking applications
- ✓ Satellite solutions for remote tracking where cellular is not available like disaster relief or transmodal shipping

Manage Your Fleet Tracking Deployment Through a Single Point of Management



- ✓ Monitor and control devices across entire global IoT network with single interface
- ✓ Track operational behavior in the field and remotely upgrade the device
- ✓ Tracks device health and performance from a central dashboard
- ✓ Manage your whole suite of SIMs, whether that is a Semtech SIM or a SIM from a third-party MNO