

### FREQUENTLY ASKED QUESTIONS

Below you'll find some answers to questions about GPS tracking system services and solutions.

### WHAT IS GPS?

The Global Positioning System (GPS) is a group of 27 Earth-orbiting satellites (24 in operation and three extras in case one fails). When people talk about a "GPS," they usually mean a GPS receiver. The U.S. military developed and implemented this satellite network as a military navigation system but now lets everyone use the signals.

### HOW DOES GPS WORK?

A common misconception among most people is how GPS works. GPS (Global Positioning System) satellites should not be confused with communication satellites used for wireless communications. They are two completely separate satellite networks. All of our systems use GPS satellites for location purposes. Our real-time systems then use various wireless networks (including satellite wireless) to communicate the location data so our customers can use the vehicle tracking GPS to locate the vehicles/assets in real-time.

### HOW DOES GPS VEHICLE TRACKING SYSTEM WORK?

A GPS antenna is tethered to the unit with a lead wire (typically 10-15 feet). The GPS antenna collects the GPS data and feeds it to the unit. The unit does some processing of events and speeds. Additionally, the GPS vehicle tracking unit has a wireless modem inside, similar to ones found in cell phones. This modem is used to communicate with Global Tracking's systems. The GPS data is sent directly from the vehicle's unit to our servers, where we process the information for the user. All of this happens in real-time.

# CAN I CONCEAL THE GPS TRACKING SYSTEM FROM MY DRIVERS?

Our units are quite small and are often installed discretely.

# WHAT IS THE DIFFERENCE BETWEEN GPS AND SATELLITE COMMUNICATIONS?

GPS (Global Positioning System) satellites should not be confused with communication satellites used for wireless communications (see wireless communications below). They are two completely separate satellite networks and applications. All of our systems use GPS satellites for location purposes, and then use various wireless networks (including satellite wireless) to communicate the location data in real-time.

## WHAT SHOULD I LOOK FOR IN A REAL-TIME GPS TRACKING SYSTEM?

For Real-time GPS tracking, the wireless network is used to communicate the GPS data from the vehicle/asset, so location, speed and stop times can be viewed in Real-time. Think in terms of how mobile phones work. There are two types used: Digital Cellular, and Satellite. Obviously, digital cellular is more popular due to cost. This is the same with communicating real-time GPS data for vehicle tracking.

Wireless Networks: Cellular vs. Satellite

- Digital cellular hardware is less expensive
- Digital cellular monthly service fees are less expensive
- Digital cellular superior network reliability

A digital cellular-based system is the best way to go for the vast majority of companies that want to use a real-time system for nearly any type of tracking.

Satellite Wireless Communications (not to be confused with GPS satellite networks)

Due to the fact that (1) hardware is typically more expensive, (2) monthly service fees are high, (3) satellite communications networks are unreliable; a satellite network for vehicle tracking is rarely recommended by us. Only when 100% coverage is an essential customer requirement will we recommend a system that uses satellite for communications.

#### Web-based Hosted Software

A demonstration of any GPS system should show the software and reporting capabilities. The web hosted software interface determines the mapping and reporting features that the system offers as well as the overall end user experience. The features available on the software are largely dependent on the capability of the actual hardware (see Examining Hardware).

#### Hardware

The hardware is the actual GPS unit and antennas that are mounted in the vehicle. Most GPS units contain a mini motherboard with a GPS chipset and a wireless modem (real-time systems). They may also include memory and software which determines the hardware features. One of the most critical components of the unit is the wireless modem. You should always purchase a unit that contains a wireless modem from a 1st tier manufacturer such as Motorola or Sierra Wireless.

### Polling Rate & Monthly Fees

All real-time systems have a monthly fee. In most cases the monthly fee covers the hosted web tracking and reporting fees and the wireless network fees.

### Monthly Fees

When it comes to tracking your vehicles for fleet management purposes, unlimited use is crucial. You want to pay a flat monthly fee for unlimited use and unlimited polling.

### Polling Rate

The polling rate is the frequency at which the GPS unit is configured to report its location. It determines how close to real-time a vehicle's location can be viewed, as well as the detail within specific reports. The lower the polling rate, the closer to real-time the information is available.