

Is SIM-based tracking an alternative to GPS tracking?

If you are familiar with GPS tracking you must have heard about [SIM-based tracking software](#) too. Many people believe that it is a better and more efficient option than GPS tracking. But, is it really the case? Let's find out in this article.

Here, we'll compare SIM-based tracking with GPS tracking, know the pros and cons of each and find out which of the two is better.

So let's begin!

What is SIM-based Tracking?

There's no rocket science in [SIM-based tracking](#). It uses SIM cards to track the location of a mobile device using the information provided by the SIM card inserted into the device. A SIM card, or Subscriber Identity Module, is a small card inserted into a mobile device that contains information related to the user's subscription, such as their phone number and network authentication details.

In simple terms, it helps track the GPS coordinates saved through the driver's cell phone network. However, drivers must give their permission to track their vehicles for the same.

Let's understand its pros and cons to gain better clarity;

Pros and Cons of SIM-based Tracking

Pros	Cons
Wide Coverage: Since SIM-based tracking uses the coordinates of the nearest cellular towers to track the device location, it offers broader coverage than traditional GPS tracking.	Cellular network dependency: This is one of the biggest limitations of SIM-based tracking. Since it relies on cellular networks, it faces challenges in data transmission in areas with limited or no cellular coverage.
Easy to set up: SIM based tracking majorly requires three components ; a SIM card, a mobile phone and the driver's consent. Therefore, it is comparatively easier to set up than GPS tracking.	Inaccuracy: SIM-based tracking catches the location of the nearest tower, hence the whereabouts of the vehicle might not be always accurate.

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Now, let's know about traditional GPS tracking and its pros and cons.

Read Blog: [SIM-based Tracking is Helping Businesses Boost Efficiency and Profits](#)

What is Traditional GPS Tracking?

GPS, short for Global Positioning System, is a modern technology that uses multiple satellites to identify the location, speed, and path of the vehicles. The signals from these satellites are received by the GPS receivers installed in the vehicles. These receivers are further responsible for transmitting the data to a centralized system. Using **fleet management software**, fleet managers can access this data and know the precise location of their vehicles.

Like every other technology, this also has its own set of advantages and disadvantages, let's know about them in the below section;

Pros and Cons of GPS Tracking

Pros	Cons
Precise location tracking: This is probably one of the biggest pros of GPS tracking. It allows accurate tracking of vehicles in real-time, giving fleet managers the ability to track vehicle movements effectively.	Internet Dependency: GPS tracking requires proper internet connectivity. This becomes a limitation in remote areas where the network might not be that strong.
Reliable technology: Over the years, GPS tracking has established itself as a proven and effective technology in fleet management.	Data Delays: Since GPS tracking relies on satellite signals, data transmission in areas with poor satellite visibility can become a problem. For example, dense forests or indoor spaces.
Enhanced security: Due to its ability to provide accurate location insights of vehicles, GPS tracking can be utilized in recovering stolen vehicles.	Signal Interference: GPS signals can be affected by numerous factors such as physical barriers, skyscrapers and electromagnetic interference. This can further lead to inaccuracies in determining the location.

Now that we have compared both technologies, let's know whether SIM-based tracking is better than [GPS tracking](#) or not.

Is SIM-based Tracking a Better Alternative to GPS Tracking?

Although SIM-based tracking has a wider range, is comparatively easy to set up and offers instant real-time updates, it comes with its own set of limitations. Since it catches the location of the nearest tower, the location of the vehicle tracked by this technology might not always be accurate.

On the other hand, GPS tracking has been used by fleet businesses for a long time. It offers a precise location and has been widely used by security personnel to recover stolen vehicles. Therefore, it has established its reliability in the fleet management world.

Summing up, SIM-based tracking can be effective in areas with low internet connectivity and reduces the need of setting up a GPS device. However, it would not be right to say that it is a better alternative than GPS tracking.

If interested in exploring vehicle tracking software driven by geospatial analytics and [advanced video telematics software](#), schedule a demo with us!

Read more:

- [SIM-based Tracking vs Mobile Tracking: What is Right For You?](#)
- [Why GPS Tracking is Important in Fleet Business to Stay Ahead of the Curve](#)