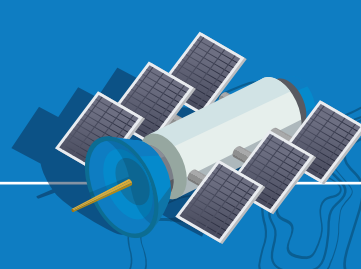


# Satellite vs. Cellular Asset-Tracking Comparison Chart

Satellite and cellular technologies are two distinct asset-tracking methods that have benefits for specific purposes and use-cases.

Let's explore the main differences between them:

## Coverage Area



### Satellite

Satellite-based asset tracking works virtually anywhere on Earth, relying on satellite communication in orbit. It can provide global coverage, including remote and rural areas where cellular networks might not be available or reliable.

### Cellular

Cellular asset tracking operates within the coverage area of cellular networks. While cellular coverage is widespread in urban and populated regions, it may not be available in remote areas or areas with poor signal reception.

## Connectivity



### Satellite

Satellites communicate directly with the asset, enabling connectivity even in isolated regions. This makes satellite tracking suitable for assets in deserts, oceans, mountains, and other remote locations.

### Cellular

Cellular asset tracking relies on the presence of cellular towers. The tracking capability may be limited or lost if an asset is outside the cellular coverage area or in a location with weak signal strength.

## Cost



### Satellite

Satellite-based tracking solutions are more expensive upfront due to the hardware and satellite communication costs.

### Cellular

Cellular tracking solutions are generally more cost-effective as they utilize the existing cellular infrastructure. However, costs can increase if the asset travels in areas with high roaming charges or data usage.

## Data Transmission



### Satellite

Satellite tracking can handle data transmission from assets to the central system without relying on terrestrial infrastructure, which can benefit areas with limited or no cellular coverage.

### Cellular

Cellular tracking relies on the cellular network for data transmission. It offers higher data transfer rates than satellite, especially in areas with good cellular coverage.

## Power Consumption



### Satellite

Satellite tracking devices often require more power, as they need to communicate with satellites in space.

### Cellular

Cellular tracking devices tend to consume less power, which can extend the battery life of the asset tracker.

## Near real-time tracking



### Satellite

Satellite tracking can provide near-real-time location updates, even in remote regions. This comes with increased costs and power consumption than cellular counterparts.

### Cellular

Cellular tracking can also offer near real-time tracking as long as the asset remains within the cellular coverage area, often reporting at a higher frequency for less cost than satellite.

## Application and Use Case

### Satellite

Satellite tracking is commonly used for assets that travel in remote and global locations, such as ships at sea, aircraft, wildlife monitoring, and outdoor expeditions.

### Cellular

Cellular tracking is often used for assets that operate primarily in urban or populated regions, such as vehicle fleets, package deliveries, and construction equipment.

Have questions about which solution is best for you?

Call us today and start keeping track of what matters most. 