Eliminate blind spots and ensure complete visibility of freight transport operations with always-on backup satellite communications.

Whether you're looking to protect valuable cargo, ensure the integrity of temperature-controlled loads, comply with regulations or improve utilization, complete visibility of the location and status of transport assets and cargo is key to running a profitable and efficient operation. Traditional asset tracking solutions rely on the cellular network to transmit critical data, but what happens when the flow of data is disrupted by interruptions in the cellular network?
The Case for Satellite

Blind spots in the cellular network are common in mountainous regions, sparsely populated locations and rural areas. And even in urban areas where cellular coverage should be widely available, heavy traffic can cause network congestion, preventing critical asset data from reaching fleet managers on time. Cellular networks are also susceptible to bad weather and natural disasters. When storms, hurricanes, tornadoes and earthquakes hit, they regularly knock networks out of commission and these outages can last for days or weeks, depending on severity.

ORBCOMM is the only provider of asset tracking solutions that owns a satellite constellation dedicated to industrial IoT communication. Our telematics solutions are the only ones in the market that can use backup satellite connectivity for enhanced reliability. Dual-mode—cellular and satellite—delivers the best of both worlds; the unbeatable reliability and reach of satellite when cellular is down, and the economical cellular network when it’s available.

Key Benefits

Stay on top of critical information

Our solution automatically switches between cellular and satellite networks based on availability to ensure the consistent flow of data and alerts from every driver, trailer, and reefer in your fleet. If the device is unable to connect to the cellular network, it will automatically switch over to satellite to ensure the timely delivery of critical information, so you can quickly detect and mitigate potential issues.

Stay compliant

To maintain compliance with regulations like the U.S. Food Safety Modernization Act (FSMA) and protect loads, fleets are required to monitor cargo area temperature and ensure proper temperature ranges are maintained during transportation. When it comes to perishables, every minute counts. With satellite, fleet managers get notified when temperatures deviate outside normal ranges, when a reefer shuts off during an active trip or when equipment malfunction occurs—even if the cellular network is down or out of reach. Two-way control over satellite also enables operators to remotely set temperature, turn a unit back on or start a pre-cool to ensure a reefer is properly cooled for a load.

Satellite delivers ubiquitous coverage virtually anywhere in the world and is less susceptible than cellular to blind spots due to congestion, region, natural disasters and weather conditions.
**Enhance last mile delivery**

High performance in the last mile is crucial to freight transportation. Often, drivers enter more densely populated areas in the last mile, where cellular networks can become congested and unreliable. With satellite and cellular, fleets can more effectively ensure coverage, maintaining operational efficiency in the last mile by being able to properly communicate ETAs, yard arrivals, slot times, signature captures, departure times, possible delays and other critical data. Satellite ensures uninterrupted visibility of shipments, with cellular supporting coverage when satellite line of sight is not available, so cargo owners can efficiently allocate crews and coordinate end logistics.

**Protect from cargo theft**

Traditional telematics solutions can be vulnerable to illegal cell network jammers, which force the telematics device offline, preventing it from sending alerts. Cell network jammers can also prevent drivers from using their cell phones to report a situation. Similarly, theft can occur in remote areas with unreliable cellular coverage. A dual-mode solution ensures continuous location and status reports to help carriers detect theft, enable traceability and facilitate recovery.

**Future-proof your telematics system**

In many regions of the world, legacy cellular networks are being shut down, with 4G LTE and 5G replacing 3G and 2G networks. The short lifespan of cellular networks can pose a challenge for fleets when it comes protecting their investment and choosing the right IoT solution.

ORBCOMM’s satellite network is presently set to deliver connectivity through at least 2035, significantly extending the life of our telematics solutions and protecting customers from issues caused by cellular network shutdowns.

**Proven ROI**

Blind spots in the cellular network can be costly—causing claims due to spoiled loads, loss of business or reputation, fines from missed compliance and poor customer service to name a few. They can all add up quickly and significantly affect a fleet’s profitability. Today, more stringent competition, broader service availability and significant improvements in the technology have made satellite communications more accessible and affordable than ever.

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**Key Features**

**Easy add-on**

Choose satellite as an accessory when you purchase your fleet telematics solution or add it later as needed. The hardware required for satellite connectivity can be installed quickly to help minimize trailer downtime.

Once the satellite communications device is installed, all subsequent firmware updates are completed over the air to minimize interruptions to operations.

**Automatic failover**

The solution is designed for automatic failover to ensure always-on communications. When connection to the cellular network is lost, the device automatically switches to satellite until connectivity with the cellular network is re-established.

**Least-cost routing**

Our advanced telematics solution takes full advantage of the capabilities and characteristics of both the satellite and cellular networks. Airtime least-cost routing ensures the most affordable network available is used, every time. Devices can also be programmed to send and receive larger amounts of data while on cellular, and limit data transfers to critical information when on satellite for improved cost savings.

**Global coverage**

Satellite delivers ubiquitous coverage virtually anywhere in the world and is less susceptible than cellular to blind spots due to congestion, region, natural disasters and weather conditions.

**Two-way control**

Cellular and satellite networks offer two-way connectivity when it comes managing refrigerated trailers. This allows constant communication between the telematics device and the back office, but it also enables fleets to control transport assets from a centralized location without engaging drivers or sending personnel to the field.

**Real-time communications**

ORBCOMM’s satellite and cellular solutions deliver real-time, low latency communications to ensure complete visibility of fleet operations and access to the right information at the right time.
Five reasons to choose ORBCOMM

1. **Proven**
   Choose a solution that’s proven itself through 25 years of operation and 2.1 million global subscribers, and has been widely deployed by some of the biggest names in the industry, including companies like Prime, C.R. England, Walmart, C&S Wholesale, Hirschbach Motor Lines, Maersk, Target, Tyson Foods, Werner Enterprises and more.

2. **Seamless integration**
   Enhanced integration with TMS systems like McLeod and TMW allows customers to get actionable trailer data from their existing dispatch application, eliminating the need to learn a new software.

3. **End-to-end**
   Our solutions feature proprietary, best-in-class technology and include intelligent IoT telematics devices, seamless satellite and cellular connectivity and a powerful management platform, all backed by end-to-end customer support through all aspects of deployment and beyond.

4. **Always connected**
   We own and operate the world’s first and only commercial satellite network dedicated to machine-to-machine communications. With optional backup satellite service, our solutions deliver uninterrupted connectivity with every transport asset in the fleet, even when the cellular network is out of reach or compromised by bad weather or natural disasters.

5. **Every asset class, one solution**
   Get a single view of all your assets—trucks, dry trailers, reefers, containers and chassis—on one screen with the ORBCOMM platform. A unified view makes it easier for dispatch, safety, compliance, operations, IT and executives to manage all aspects of the fleet from one easy-to-use application.

Contact us today at info@orbcomm.com to see how our comprehensive dual-mode telematics solutions can optimize the way you do business, or visit us at www.orbcomm.com

Learn more about our transportation solutions

- **Mixed Fleet Solution**
  Easily manage multiple assets with one simple telematics solution.

- **The Smart Cold Chain**
  Real-time connectivity and traceability for refrigerated transportation.

- **The Smart Truck**
  Fleet management solutions for drivers, back offices and fleet managers.

- **The Smart Trailer**
  Trailer tracking solutions for dry van fleets.

Ask your rep or see all of our solution sheets at www.orbcomm.com