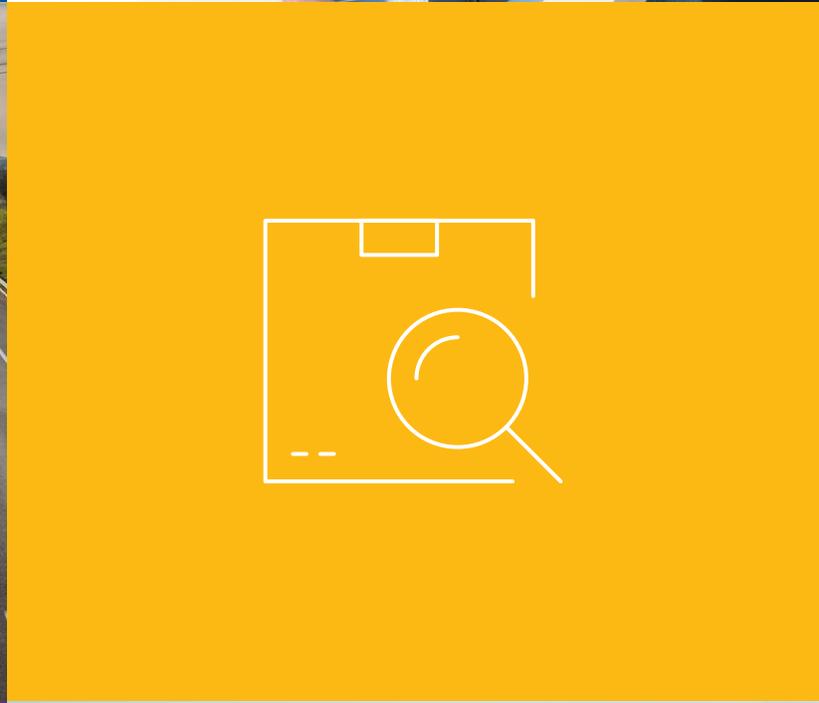
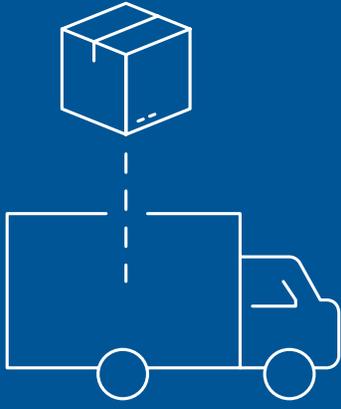


# Managing Supply Chain Disruptions and Mitigating Risk

**Use IoT Sensor Technology to Eliminate  
Blind Spots in Your Supply Chain**



A Carrier Company



# Where is my Cargo Right Now?

## Potential Consequences of Not Knowing Where Your Cargo is in the Supply Chain

- Poor supply chain control
- Slow response to changing supply networks
- Lost revenue
- Risk of cargo theft and pilferage
- Missed delivery fines
- Poor customer service
- Inability to measure logistics partners' performance
- Material shortages
- Interruption to post-delivery processes such as manufacturing or installation
- Customer retention
- Brand reputation



# Change and Disruption is the New Normal

Now, more than ever, global supply chains are being stretched to their limits and being forced to make constant adjustments to lanes, regions, carriers, and modes of transit. Companies must be nimble and flexible to keep up. As the rate of change and disruption increases, control and visibility can be lost resulting in serious breakdowns in the supply chain. Without comprehensive visibility across the entire supply chain, chaos is often the result.

## Risk Mitigation Through Real-Time Global Visibility

Real-time cargo tracking using IoT sensors solves one of the most difficult challenges for manufacturers and shippers. It provides in-the-moment factual visibility into the location of your cargo while it's in transit across multiple modes of transit and carriers, which is especially critical if you have time-sensitive delivery requirements.

Whether you are a manufacturer waiting for a vital inbound component, or a shipper wanting to avoid late delivery fees, knowing the status of your cargo at any given moment during the shipping cycle could help you avoid significant ramifications. Even one or two late arrivals due to unexpected supply chain disruptions could have a major impact, including costly labor charges, lost business, unwanted fines, critical production delays, dissatisfied customers and a damaged brand reputation. Other risks include theft, pilferage and the potential for product to be damaged or contaminated while in transit.

## When What You Have Isn't Working Well...

Many cargo tracking systems and technologies leave companies in a bind, as they only provide limited visibility from a mix of carrier and third-party logistics (3PL) feeds. Asset-based tracking technologies and scanning tools—such as hard-wired telematics and electronic-logging devices—track trucks, trailers and containers rather than the cargo itself. While the data from these systems can be useful, it is the cargo's whereabouts at any given moment that is most important.

Further, integration and operational challenges often arise as companies attempt to associate a continually changing number of trucks or trailers along the shipping route to their actual cargo. This often results in significant gaps or insufficient coverage at various legs of the shipping journey, particularly when there are multiple modes of shipping or a variety of logistics partners involved.

## TRACK YOUR CARGO EVERY STEP OF THE WAY

- Cargo-Level Tracking
- Real-Time Visibility
- Proactive Alerts
- Disruption Management
- Penalty Avoidance

## Recapture Control of Your Shipments

Sensitech's continuous cargo monitoring via real-time sensor technology allows access to powerful information.

We provide you with a global, easy-to-use service that supplies you with the ability to track a shipment at the cargo level in real time—every step of the way, from origin to final destination. You can literally have visibility into your supply chain and current transit data whenever you need it, with continuous real-time alerts about delays or at-risk shipments.

With Sensitech's sensor-based tracking technology, you can improve on-time performance, reduce costs and proactively communicate more effectively with customers and partners. Our technology and services allow you to:

- Gain real-time visibility for every link in the supply chain for greater control.
- Monitor shipments in real time while in transit to avoid costly impacts.
- Identify shipments at risk of theft and facilitate risk mitigation and cargo recovery when needed.
- Provide up to the minute assessment of shipment risk through analytics.
- Proactively manage delays and schedule changes to optimize logistics operations.
- Address supply chain interruptions to improve on-time delivery and drive continuous supply chain optimization.
- Provide proactive status updates to your customers in real time
- Improve overall logistics performance with greater speed, efficiency, and superior customer service for every shipment

## Make Real-Time Visibility Work for You

With Sensitech's IoT sensor-based solutions, your tracking program is up and running in a matter of days, not months or years.

The sensors are easy to use, and can be deployed without any operational complexity, complicated integration, or the need to buy and maintain costly hardware. Moreover, with real-time in-transit data available at any time, you'll no longer have to wonder about your cargo's whereabouts.

### DEPLOY QUICKLY AND EASILY

Sensitech sensors are applied at distribution centers, contract manufacturing sites and 3PL locations—much like a label would be applied during the packing or staging process. The tracking device travels with your cargo through its entire journey, with no disruption at the shipping or receiving dock. The sensors require no capital expense, ongoing maintenance or configuration, and they can be disposed of or recycled after use. You simply order pre-configured sensors for your shipments in the same way you order shipping labels and boxes.

We ship as many sensors as you need, and all you do is push an activation button and place them with your cargo. The battery-operated devices start working immediately via global cellular networks to provide immediate data on your cargo.

### GET AUTOMATED ALERTS FOR FAST DECISION MAKING

When your cargo is in transit, you'll receive automated real-time location alerts and reporting on demand, with visibility across each carrier or mode of transport—all without the need for any integration with other systems. You can automatically receive notifications of key status indicators, such as late departures, extended stops, arrivals and pre-alerts for behind-schedule shipments. These alerts are available via email, mobile app, and secure web-based application.

This level of visibility allows you to make intelligent decisions in the moment—not after the fact—so you can address supply chain disruptions and take action before they have a costly impact. For example, if you have highly trained personnel waiting for a critical shipment that has been delayed, they can be reassigned or rescheduled to avoid incurring costly labor charges for idle staff. And if you're a shipper, you can alert your customer to any delays so you can reduce or eliminate late fees and improve customer satisfaction and retention.

### TRACK YOUR CARGO ON REAL-TIME MAPS

In addition to real-time alerts, manufacturers and shippers can access the cargo's location at any time via Sensitech's secure, web-based tracking and monitoring platform or mobile app. You can view shipment locations via an interactive map to identify where your cargo is at any given moment. You can zoom in and out on the map, or filter by a variety of fields (such as product, origin, destination or alarm status) to narrow down the shipments you are interested in tracking. There is no software to upload and manage, making it easy for you to know where your cargo is at all times. These maps can also be embedded in existing customer-facing portals to provide seamless visibility without complex software integration.

### MAXIMIZE THE POWER OF YOUR DATA

To provide a comprehensive view of your shipping data, we can also integrate Sensitech IoT sensor data with your transportation management, enterprise resource planning (ERP) or other logistics systems via application programming interface (API) level integrations. This provides a holistic view of the timely and accurate information you need to effectively manage the shipment segment of your supply chain.

### FIND THE WEAK SPOTS IN YOUR SUPPLY CHAIN

You can't correct problems that you are unaware of, and this is especially true with complex shipments that use multiple shipping partners and transport modes. Shipping delays, interruptions and performance issues can be costly and root causes can be hard to pinpoint without the right data and tools.

Using Sensitech's IoT sensor data, our logistics reporting and analytics tools help you identify the causes of shipment issues to minimize disruptions. As you accumulate a wealth of shipment data over time, post-shipment analysis provides an accurate and factual way to measure logistics performance, address specific problems and drive improvements.

For instance, with reports measuring on-time performance, you have insightful data to analyze specific performance for carriers, origins, routes and destinations. This helps to isolate singular or reoccurring problem areas and provides a negotiation tool for improvement with carriers and other logistics partners.

## Know Where Your Cargo Is

### Change and Disruption Are the New Normal

Now, more than ever, global supply chains are being stretched beyond their limits forcing constant adjustments to lanes, regions, carriers, and modes of transit. Companies must be nimble and flexible to keep up. As the rate of change and disruption increases, control and visibility can be lost, resulting in serious breakdowns in the supply chain. Without comprehensive visibility across the entire supply chain, chaos is often the result.

In today's challenging supply chain environment, the ability to quickly pivot and respond to disruption is a key differentiator for leading supply chain organizations. Knowing the status of your cargo is more critical than ever. And with Sensitech's proven logistics expertise, global reach and advanced real-time IoT sensor technology, we can help you meet the challenge.

Contact us to find out how we can help you eliminate the complexity of in-transit cargo tracking through real-time visibility for every step in your supply chain.

#### CORPORATE HQ

+1 800-843-8367

+1 978-927-7033

[sensitech.clientservices@carrier.com](mailto:sensitech.clientservices@carrier.com)

#### EMEA REGIONAL HQ

+31 (0) 252 211 108

[sensitech.clientservicesEMEA@carrier.com](mailto:sensitech.clientservicesEMEA@carrier.com)

# About Sensitech

Sensitech Inc. is a global leader in delivering supply chain visibility solutions. Our innovative monitoring products and services help to maintain the quality, integrity and security of our customers' valuable products at every step in their journey, all around the world. For 30 years, leading companies in the food, pharmaceutical, industrial, consumer goods and other industries have relied on Sensitech to help protect their products—and their bottom lines.



[sensitech.com](https://www.sensitech.com)



A Carrier Company

Sensitech Inc. • Global Headquarters • 800 Cummings Center • Suite 258X • Beverly, MA 01915-6197  
1-800-843-8367 • +1-978-927-7033 • Fax: +1-978-921-2112 • [sensitech.clientservices@carrier.com](mailto:sensitech.clientservices@carrier.com)

©2020 Carrier. All Rights Reserved.