

# Logistics Insourcing with Supply Chain Visibility Platforms

For many enterprises, the cargo that flows through their global supply chain is a top mission-critical component of the business. With the current trends of supply chain chaos continuing into the foreseeable future, many companies have embraced insourcing of key logistics functions in an effort to manage potentially serious inventory risks. Complex international supply chains are challenging systems to manage well. Without adequate insight on the location of assets, the status and the safety of cargo, and accurate predictions of cargo ETA, these efforts to insource logistics operations may fail to adequately deliver on inventory risk management.

From the first mile to the last mile of complex supply chains – across borders, through intermodal distribution, logistics, and warehousing – AKUA's secure, persistent environmental monitoring and tracking services provide in-transit visibility of goods and shipments across the globe enabling customers to:

- Track the location of crucial insourced assets (e.g., containers)
- Minimize cargo loss from theft, damage, or other spoilage via proactive alerts
- Contain losses due to demurrage/detention fees
- Perform powerful predictive analytics based on accurate cargo ETA predictions

AKUA combines the industry's most advanced tracking devices, proprietary multi-layer security, in-transit analytics, together with our SaaS platform to deliver full, end-to-end supply chain tracking and monitoring that transforms data into actionable information. Combining resilient devices with a broad range of supported communication protocols, no other vendor can truly match our capacity to deliver accurate real-time reports on the status of your cargo.



### **Devices & Sensors**

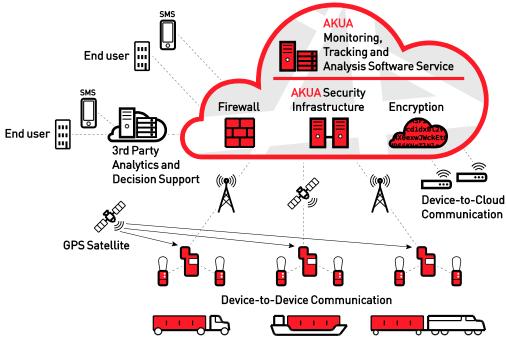
AKUA's customs-compatible Seal Lock Master (SLM) is an innovative, cost effective, and secure locking electronic seal (e-seal) and monitoring device that uses GPS and 4G & 3G cellular networks for cargo visibility and security of shipments in real time. It provides remote users with long-distance data on a shipment's location; tampers, breaches, and accesses; and condition and integrity.

AKUA's family of remote environmental sensors work in combination with our SLM or our Covert Tracking Unit (CTU)

to monitor and report environmental status (tamper, shock, light, temperature, and humidity) and issue real-time alerts in the event of breach or threshold exceptions.

#### The AKUA Solution

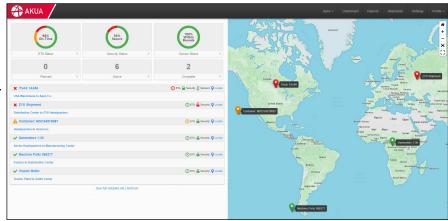
The AKUA solution tracks and continuously monitors intermodal cargo from first to last mile. AKUA SLMs, CTUs, and sensors provide real-time security and environmental monitoring, transmitting data over 4G & 3G cellular network to the AKUA visibility and security infrastructure. Using the AKUATrack or a proprietary application, supply chain stakeholders are aware of their shipment's location and status, and are alerted in the event of tampers, breaches, and accesses or sensor threshold violation.



#### AKUATrack

AKUATrack is a continuous in-transit visibility and analytics platform that provides control over sensors and devices to deliver end-to-end supply chain tracking and monitoring. Customers can choose from two types of service:

Software as a Service Accessed via any desktop of mobile browser, AKUATrack's single-platform solution provides 24-7, end-to-end in-transit visibility across complex supply chains and provides actionable data in real time enabling users to enhance operating effectiveness and efficiency; minimize loss from theft, damage, or other spoilage; and optimize the value of goods. The AKU-ATrack SaaS delivers real-time location, se-



#### AKUATrack Capabilities:

- Schedule and Routing Information
- Proactive alerts for in-transit cargo problems
- AKUA Mobile Application
- Security and Sensor Alerts
- Cargo Photos and Files

curity, and sensor data and presents it in user-friendly, easy to understand maps, graphs, tables, and reports. Users can opt-in to receive alerts in the event of breach detection, geofence ingress and egress, and/or sensor threshold exceptions.

Data as a Service DaaS provides direct access to information on the status of cargo for companies that require integration of tracking and monitoring data into a third-party or proprietary platform. AKUA can provide data feeds and custom integration.

## Benefits of Using AKUA for Your Insourced-Logistics Stack

The AKUA team has deep field experience with the practices and failings of many of the current logistics providers. The ugly fact about many "modern" logistics systems today is that they are based on out-of-date IT infrastructure that does a remarkably poor job at providing accurate data on the location, status, safety, and ETA of their cargo. For many global multi-modal shipping lanes, AKUA's devices, sensors and SaaS platform produce a source-of-truth that's simply unavailable from the current crop of top-rated logistics operations. AKUA helps organizations build more effective supply

Reduce risk of loss; increase likelihood of recovery

chains and enables them to:

- Improve operating effectiveness, achieve efficiencies in use of assets, resources, people
- Enhance just-in-time logistics with up-todate locations and ETA
- Safeguard product quality, improve process yields
- Decrease cost of demurrage and detention
- Build an adaptive, more resilient supply chain
- Prepare for USGOV-funded highthroughput "green lane" shipping prioritization now developing



## Why AKUA

AKUA brings together a strong heritage in cyber security, supply chain logistics, and big data analytics. Our principals and founders are recognized as leaders in creating smart supply chain technology and solutions and bringing security to the Internet-of-Things for supply chain logistics. By combining our legacy in cyber security and supply chain logistics, AKUA has created the industry's first global, end-to-end physical and cyber secure logistics solution.



Learn more at akua-inc.com