

# **SMART CONTAINER SHIPPING**

End-to-end visibility and management of intermodal freight transport assets



ORBCOMM's comprehensive telematics solutions enable uninterrupted, end-to-end visibility, traceability and management of dry and refrigerated containers, tank containers, chassis, gensets and cargo travelling through complex global supply chains on land and at sea for improved operational visibility and efficiency. Combining versatile IoT devices, sensors, applications and multiple comprehensive global connectivity options, ORBCOMM's solutions for container shipping allow customers to protect non-perishable and temperature-sensitive cargo, streamline load distribution, handoffs and delivery, improve customer service, reduce costs and more. Trusted by some of the biggest names in the industry, ORBCOMM's solutions are proven, with over 600,000 intermodal freight transport assets tracked worldwide.



## Smart container shipping: key benefits

#### Your entire fleet on a single unified platform

The ISO marine container supply chain is much more than just the boxes. Coordination of dry boxes, reefers, tank containers, chassis and gensets is vital to supply chain flow, as is the seamless hand off between different modes of transportation—from a ship to a truck, for instance. These assets generate different telematics data and the ability to gather it all in one place can add huge value to transport coordination, fleet optimization and the mitigation of supply chain breakdowns. ORBCOMM's flexible and open platform delivers visibility into the status and location of every asset in the fleet, no matter what type, including those with third-party telematics devices, depending on the use case.

#### Improve fleet utilization and minimize equipment losses

Using GPS data, geofences and advanced reports, operators can accurately predict ETAs and be notified when equipment arrives or leaves a specific location—ports, terminals, depots, and distribution centers—to streamline distribution and delivery as well as reduce dwell and cycle times. The disappearance or late return of assets can cause considerable expenses, disruptions and delays. By outfitting containers, chassis and other assets with smart IoT, equipment becomes connected, visible and easily traceable, anywhere.

#### Prevent cargo spoilage, tampering and theft

Protect temperature-sensitive loads, improve compliance and minimize claims with live data and alerts that notify

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you when temperature and other climate conditions deviate from normal ranges to ensure quick corrective measures are taken before it's too late. ORBCOMM's reefer monitoring solution interfaces with the native protocols of all major refrigerated OEMs to enable remote reefer control—adjust temperature settings, power a unit on or off, download data logs and more with a direct link to the reefer microcontroller. And when it comes to cargo security, ORBCOMM's solutions allow customers to remotely detect door locking and unlocking as well as loading, movement, theft and tampering to help protect cargo and ensure the security of equipment and the integrity of goods across various transport networks.

#### See, even at sea

Traditional container telematics solutions have black holes, particularly out at sea, where the critical stream of data is broken, posing a serious risk to temperature-controlled cargo. ORBCOMM's solution for the smart reefer sees through blind spots with multiple industry-leading IoT connectivity options that include terrestrial, satellite and innovative, non-proprietary vessel-based networks that ensure the uninterrupted flow of information. Add our pioneering satellite AIS data stream—we're the largest AIS data provider in the world—and enhance container visibility with accurate vessel position data anywhere.

#### Reduce maintenance, inspection and fuel costs

Gensets have substantial operating costs, most notably fuel—consuming a gallon of diesel per hour when running. The need to safeguard gensets from loss or theft, optimize fuel usage, automate inventory updates and fuel-level checks as well as ensure they're operating as expected are driving owners and operators towards greater adoption of remote genset monitoring technology. Additionally, valuable data on equipment operating hours, malfunctions, and other vital health signs can help streamline maintenance schedules, enable preventive maintenance and reduce unexpected failures, maximizing asset lifecycle.

### **Key features**

#### Live location and status data virtually anywhere

Our solution delivers uninterrupted, real-time asset and shipment location and status data as well as critical alarms for containers, chassis, gensets and other transports assets, on the move or idle at terminals, depots and yards, to ensure continuous visibility of operations. IoT enables a more connected supply chain that allows you to provide accurate ETAs, better coordinate crews, deploy contingency plans when delays are expected and improve forecasting, alleviating some of the challenges posed by today's tight container capacity market.

Rugged, purpose-built devices

We offer a wide range of smart IoT devices as well as wired and wireless sensors designed specifically to support a variety of transport assets and remote monitoring applications. Whether connected to equipment or powered via solar technology or long-lasting built-in batteries, our hardware is designed to operate for the life of the assets, supporting every use case within container shipping. ORBCOMM's devices are also rugged and built to withstand the elements, including some of the harshest weather conditions while at sea, in ports and on land.

#### **Global wireless connectivity**

With a 2G/3G/4G LTE cellular global SIM that eliminates roaming charges and provides reliable communications across the globe, along with NB-IoT, Bluetooth, LoRa

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and optional satellite connectivity, our solutions are designed to seamlessly switch to the most appropriate and least-cost network available to ensure economical, uninterrupted data flow as assets move through the supply chain.

#### **Futureproofed technology**

ORBCOMM understands that one solution does not fit all and that when it comes to deploying IoT technology on intermodal freight transport assets, the ability for the solution to adapt to different customer requirements and scale to support new and upcoming technologies is key. Our telematics devices are engineered to support the latest in IoT technology with multiple network connectivity options, optional satellite communications, multiple on-vessel wireless communication technologies, wired and wireless external sensors and more.



### Five reasons to choose ORBCOMM

ORBCOMM is a pioneering global leader in industrial IoT. Choose a solution that has proven itself through decades of experience and expertise, with more than 2.2 million subscribers overall and market share leadership in global cold chain telematics.

End-to-end
Our solutions feature best-in-class technology and include intelligent IoT telematics, seamless multiple connectivity modes and powerful multi-asset management and vessel-based platforms, ensuring all assets deliver information from road, rail or sea.

Supporting communication standards and data models set by the COA and DCSA, ORBCOMM devices and open platforms allow easy data sharing with

partners, customers and other stakeholders and integrate seamlessly with third-party devices, data streams and enterprise platforms.

Always connected
With our vessel-based network, proprietary satellite-based AIS data service, multiple terrestrial and satellite network technologies and 24/7 data monitoring services, ORBCOMM offers unmatched global coverage to support diverse use cases and uninterrupted future-proof information streams, even for assets far at sea.

Complete support
With global best-in-class multilingual sales, service and 24/7/365 technical support teams, we support customers from assessment to deployment to ongoing free customer care.

The challenges and requirements within the global supply chain can be trying for any business. As global leaders in industrial IoT, **ORBCOMM has the solutions, experience and expertise** to connect your supply chain assets, protect your cargo and improve your operational efficiency.

Contact us today at info@orbcomm.com for more information on our complete offering, or visit us at www.orbcomm.com



ORBCOMM is a global leader and innovator in the industrial Internet of Things, providing solutions that connect businesses to their assets to deliver increased visibility and operational efficiency. The company offers a broad set of asset monitoring and control solutions, including seamless satellite and cellular connectivity, unique hardware and powerful applications, all backed by end-to-end customer support, from installation to deployment to customer care. ORBCOMM has a diverse customer base including premier OEMs, solutions customers and channel partners spanning transportation, supply chain, warehousing and inventory, heavy equipment, maritime, natural resources, and government. For more information, visit www.orbcomm.com.

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