



# **The Smart Cold Chain**

## Real-time connectivity, visibility and traceability for refrigerated transportation

Improper temperature control is among one of the top reasons why perishable goods are wasted in cold chain transport. Without a complete solution in place, cold chain fleets may struggle to meet strict food safety regulations and have a higher risk of spoiling loads.

ORBCOMM provides fleets with the data and tools to reduce the risk of spoiled goods and help comply with regulations while also reducing costs, increasing operational efficiency and improving customer service.

# Intelligent cold chain monitoring

ORBCOMM delivers end-to-end telematics solutions that enable comprehensive management and control of refrigerated trailers, containers and other assets in the supply chain on land, rail or sea.



## The smart cold chain: key benefits

#### **Reduce claims**

Around-the-clock temperature monitoring and automated alarms allow for quick, corrective action when issues with a load are detected; helping prevent cargo spoilage, minimize losses due to claims and significantly reduce insurance premiums.

## Make compliance easy

Simplify compliance with food safety regulations such as the Food Safety Modernization Act (FSMA) through the continuous collection and retention of temperature data that makes it easy to share proof of temperature as required.

#### Increase profitability

Optimize asset utilization, turn times, trailer pools and tractor-to-trailer ratios with comprehensive fleet reports and geofences. Reduce detention and maintenance costs and minimize downtime.

#### Keep assets visible

Maintain contact with drivers and visibility of assets with optional dual-mode cellular and satellite communications, keeping fleets connected in areas where the cellular network is unreliable, unavailable or compromised by severe weather.

#### Streamline handoffs

Ensure loads maintain appropriate temperature setpoints when switching hands to preserve the integrity of the cold chain and protect your business from liability. Streamline the distribution of refrigerated cargo with arrival and departure notifications to minimize time spent at loading docks.

#### **Reduce fuel costs**

Save on fuel costs by identifying opportunities to optimize equipment operation and detecting issues such as fuel theft or improper invoicing.

### Improve efficiency

Use sophisticated monitoring systems that connect directly to refrigeration units to and handle reefer functions remotely, so your driver doesn't have to.

## Improve customer service

Build customer loyalty by providing them with shipment visibility so they can see delivery times, streamline load and unload crews, and speed up the distribution of goods.

## **Key features**

### Flexible reporting

Access critical fleet and cargo status data anywhere from the cloud-based ORBCOMM platform, from our mobile app or right from your Transportation Management Systems (TMS) portal. Our flexible APIs and comprehensive third-party integrations seamlessly deliver rich trailer data to your existing dispatch or proprietary enterprise system.

### **Two-way commands**

Direct integration with the leading refrigeration unit manufacturers, including Thermo King, Carrier, Daikin and Star Cool, enable advanced temperature reporting, real-time alerts and remote reefer control. Change temperature set points and mode of operation, initiate a pre-cool or pre-trip inspection, power a unit and more—all from a centralized location.

### **FSMA-ready**

Receive notifications when asset temperatures are optimal for loading or when they deviate outside specified parameters. Automate the collection and retention of temperature data, and store temperature records for up to a year to easily provide to authorities.

## **Temperature charts**

See reefer temperature on a dynamic chart for a specific date range. Export temperature values to a .csv file for further analysis and to easily share data.

#### **Automated alerts**

Get notified of sudden temperature fluctuations, equipment malfunctions, unscheduled stops,

In the first year after deploying ORBCOMM's cold chain telematics solution, C.R. England saw total claims caused by temperature damage go down by 44%, saving hundreds of thousands of dollars.



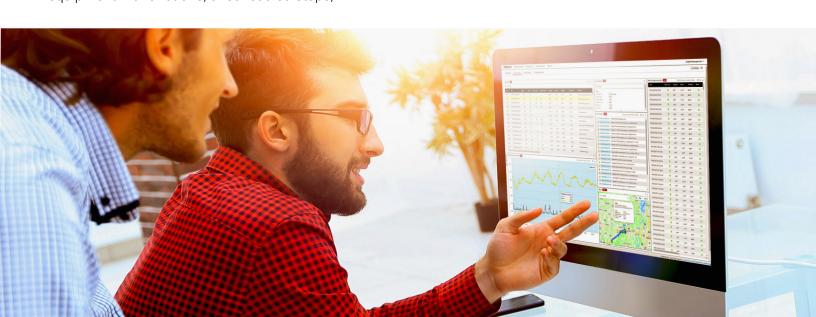
unauthorised door openings and more. Receive regular updates on operating mode, running hours, battery, fuel levels and more. Receive alerts via email or text to individuals or groups.

### **Fuel analytics**

Save money on fuel by optimizing reefer operation, detecting theft and validating fuel purchases. Comprehensive reports allow you to assess performance for different refrigeration systems and identify reefer settings that help improve fuel economy.

#### **Smart geofences**

Receive automated departure and arrival notifications to streamline load and unload cycles, optimize trailer assignment, improve turn times and monitor for detention.



## **Five reasons to choose ORBCOMM**

Choose a solution that's proven itself through 30 years of operation and 500,000 assets in the field, 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.

Seamless integration
We have unique integrations with all major reefer OEM models, including Thermo King and Carrier, which enable dual-mode connectivity, accurate temperature readings and remote management control at every point in the supply chain. Additional 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.

**End-to-end**Our solutions feature proprietary, best-inclass 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.

FSMA compliance
We've added advanced features to simplify compliance with FSMA regulations. Seamlessly monitor and manage reefer temperature, remotely adjust temperature ranges, receive pre-cool notifications, automate data collection and storage, streamline record sharing and enable the digitization of records and documents for easy access.

Single-source solutions
Eliminate the risk and complexity of sourcing multiple providers. Unlike our competitors, we provide integrated, proprietary end-to-end solutions for nearly every asset class. The devices, the connectivity and the platform are all designed to work together, and there's only one number to call if an issue arises.

For more information on our solutions or to book a demo: Email: sales@ORBCOMM.co.kr | Call: 82.2.3444.7311

Visit our website www.ORBCOMM.co.kr



ORBCOMM is a pioneer in IoT technology, empowering customers with insight to make data-driven decisions that help them optimize their operations, maximize profitability and build a more sustainable future. With 30 years of experience and the most comprehensive solution portfolio in the industry, ORBCOMM enables the management of over a million assets worldwide for a diverse customer base spanning transportation, supply chain, heavy equipment, maritime, natural resources and government. For more information about how ORBCOMM is driving the evolution of industry through the power of data, visit www.orbcomm.com.