

CONNECTING THE WORLD'S ASSETS

ORBCOMMTM

TEMPERATURE MANAGEMENT SOLUTIONS



Cold chain protection and compliance

Protect your temperature-sensitive cargo, reduce business risks and deliver perishable products safely, on-time and in compliance with regulation.

ORBCOMM offers the industry's most complete temperature management and monitoring solution. Ruggedized hardware that houses sophisticated technology delivers real-time and historical alerts and reporting to ensure carriers meet compliance requirements, prevent rejected loads and boost operational efficiency.

Reefer tracking and status

Using the dedicated Temperature Management workspace in FleetManager, review vehicle locations and utilization information, including dwell times, trip and stop information and more. Reefer status updates are provided every five minutes. Status information contained includes unit on/off, set-point, return air and discharge air, mode of operation, active alarms, fuel levels and hour-meter readings—and can be customized to each carrier.

Real-time alerts

Automatic error detection systems monitor temperatures and set variations and tolerances based on the cargo

carried. Intelligent, configurable alarms report 'out-of-range' conditions immediately with information to understand the severity of the problem. Reporting alerts users to any door openings or closing, their duration and location. Alarms can be configured to be reported by email and/or SMS text messages to multiple people.

Proof of temperature

Receive compliant, audited documentation to protect against load claims. Quickly and easily provide proof of in-transit temperatures in graph or table format to customers via email while the cargo is in transit or at their loading dock. Reporting can be scheduled over any timeframe.

Connect to operating data

Our Refrigeration Monitoring system connects to Thermo King, Carrier and other industry controllers and dataloggers to retrieve essential unit operational information. By feeding this data into advanced monitoring algorithms, automatic fault and error detection is provided.

Remote two-way control

Two-way control allows approved users to remotely control the reefer unit. Remote control features include: switching the reefer on/off, changing unit set-point, initiating defrost, clearing unit alarms and changing unit mode of operation from any location, at any time.

Reefer monitoring in the cab

Give drivers a real-time view of the reefer status while on the move. The Reefer Monitoring app runs on in-cab devices and provides a real-time view of reefer settings, temperatures and immediate notification to the driver if a problem occurs.

Maintenance planning

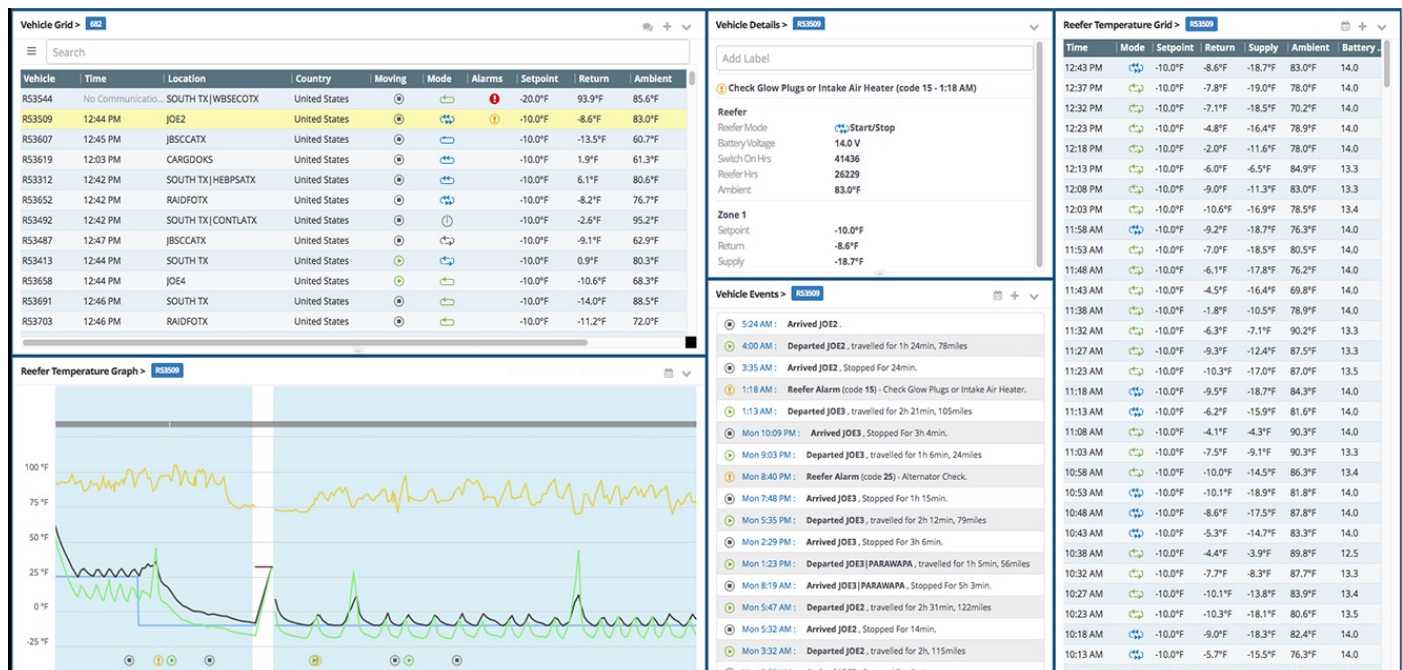
Schedule reefer services and inspections based on reefer run hours (e.g. every 1,500 diesel hours), time elapsed (e.g. every six months) or distance. ORBCOMM will automatically advise carriers when services are due, overdue and/or schedule the next service when completed.

Fuel monitoring

ORBCOMM provides fuel sensors with an accuracy of <0.5 gal and reports the fuel level in the reefer tank every five minutes. All fuel fills are detected showing fuel level increase (as a percentage or volume) including time and location. This information is presented with exact time, date and location data, enabling you to match purchases to receipts.

Polygon geofencing and watchbox alerts

Geofence an unlimited number of locations using polygon geofencing. Run reports on dwell times per location or group of locations. Watchboxes will alert you when a vehicle enters or leaves a location within time periods.



Temperature monitoring, reefer status updates, detailed reefer information and reported events.

CALL: 1.800.ORBCOMM **EMAIL: SALES@ORBCOMM.COM** **VISIT: 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.