



Reefer Transport: 7 Key Challenges that can Cause Rejected Loads

Temperature-controlled freight carriers work in a rapidly changing work environment due to FSMA rules, more discerning customers, increasing complexity of reefer units and rising cargo values. How prepared are you if something goes wrong with the refrigerated freight you're carrying?

The Problem of Rejected Loads

Failing to meet these challenges can lead to rejected loads. Delivering cargo at the wrong temperature can spiral into costs so significant that they far outweigh the invoice value of the job. When a load is rejected:

- The transporter has to compensate the shipper for the cargo, either by direct payment or through an insurance claim.
- The cargo has to be disposed of in an environmentally friendly manner, which can be expensive for the transporter.
- If an insurance claim is paid out, the transporter can face an increase in premiums for years following the claim.

But the most significant cost is the damage to the transporter's reputation. Losing one's reputation as a quality service provider can result in a reduction of business. Reputation with a customer is built slowly, but it can be lost instantly with one spoiled load.

Traditional avoidance methods

Many transporters try to mitigate the risks associated with refrigerated cargo by:

- **Renewing fleet equipment regularly:** The younger the equipment, the less likely it is to cause a problem. However, this adds complexity. Modern refrigeration units are complex and can have more than 200 fault codes.
- **Training drivers:** Training drivers on best practices in refrigerated cargo handling and operation of the refrigeration unit is a pro-active measure. But with increased driver turnover, a focus on driving more safely and increasingly complex refrigeration

units, drivers have less time to spend managing their cargo temperatures.

• Using temperature dataloggers:

Dataloggers are useful tools for analysis and reporting, but they can't see problems until the damage is already done.

• Paying insurance premiums:

Transportation owners spend a lot of money on insurance policies to protect their business in the event of an incident. But insurance doesn't cover the loss of customer goodwill and the potential damage to your reputation as a transportation provider.



1. Hot Loads

Industry experts agree that **as much as 32% of all cargo is loaded at the wrong temperature.** This is often due to poor loading practices, where produce is left sitting at a loading dock for a long time. The driver starts to travel with no idea the cargo is at the wrong temperature.

The FSMA Sanitary Transportation rule covers a number of specific areas. One of its elements is time/temperature control. This ensures continuing temperature maintenance during the operation and covers pre-cooling, loading and unloading. Transporting a load at the wrong temperature—"a hot load"—puts compliance and financial pressure on carriers. The risk of a load spoiling is higher if the temperature of the cargo is incorrect. Loads can be rejected on delivery, which results in compensation payouts and can impact on insurance premiums and inspections by officials can result in fines or even jail time.

Using advanced temperature monitoring can prevent "hot loads" by detecting a problem within 30 minutes of its occurrence. Automatic notifications go directly to the carrier, who can work on rectifying the situation.



2. Equipment Failure

It's a fact of life; sometimes equipment can break down. It's the same with refrigeration units. **If a reefer unit fails, the potential of your entire shipment or order can fail.**

In the event of a breakdown, knowing about it is as good as being able to fix it. Installing active alarms can help to combat the damages caused by reefer equipment failure. These signal directly to the back office in the event of a malfunction. The dispatcher can look at addressing the issue and advise the driver, who can remedy the situation from where they are.

3. Driver Error

Modern refrigeration units can have over 200 alarm codes. **That's 200 potential problems that can threaten assets.** Even if drivers spent hours each day reviewing information booklets, they probably still wouldn't be familiar with every make and model of reefer unit available. Drivers already carry a lot of responsibility for staying safe and timely on the roads, without studying manuals for reefer units.

Automatic error detection systems can prevent driver error. Continuous reports send status information to the back office, which can track and identify any problems. Human error can play a part in the transportation process.

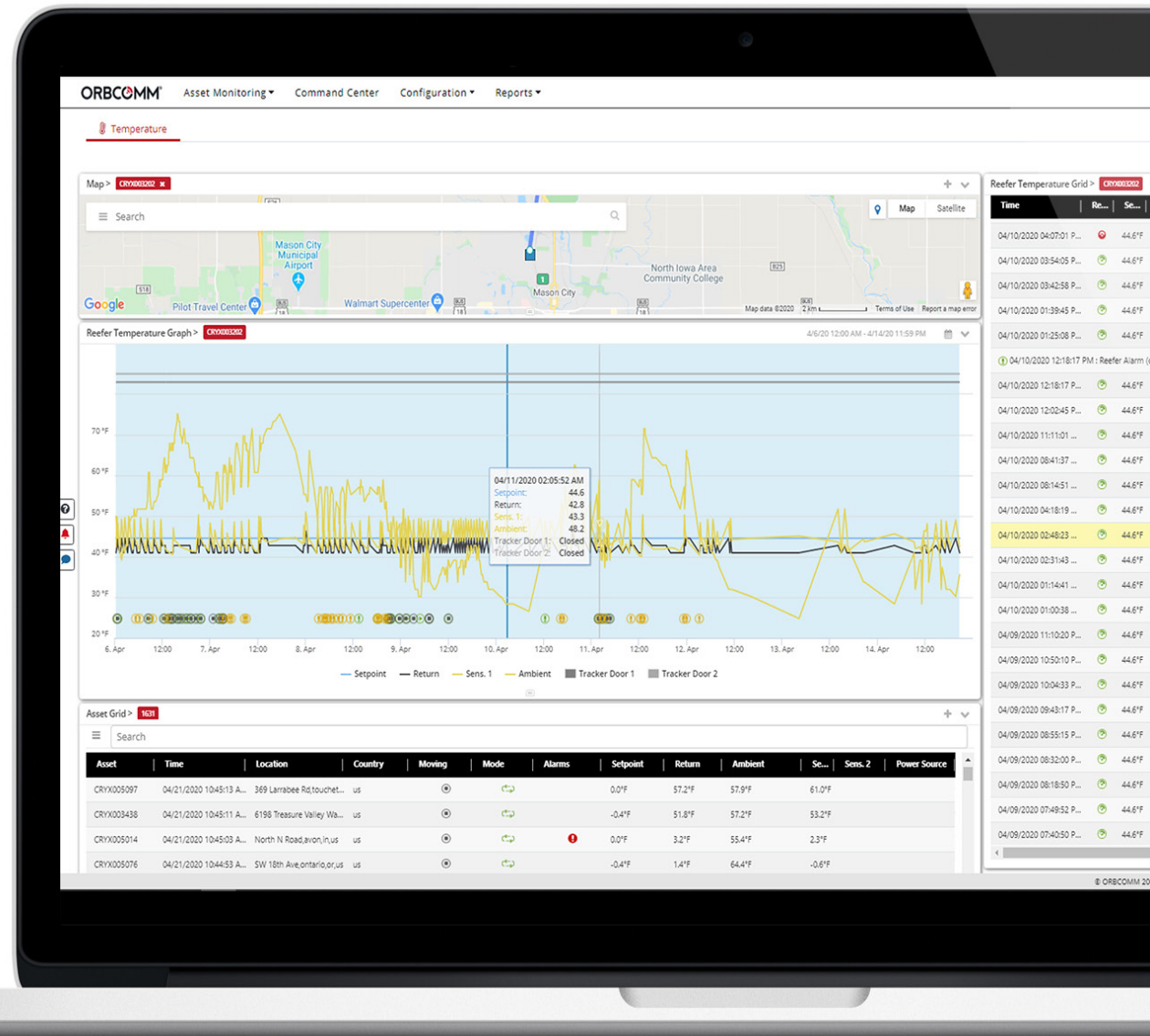
A driver, for example, could change a set-point to 3.5°F instead of -35.0°F. This could be disastrous for the cargo, making the entire load unusable. This will be identified in reports to the back office through automatic error detection.



4. Late Notification

Timing is key for temperature-sensitive cargo like fruit, vegetables, or pharmaceutical products. Saving a load after the fact is one thing but being able to **rectify the situation before the problem occurs** is another entirely. Carriers need to be able to identify issues before they crop up. Real-time data with immediate notifications help to stop hot loads in their tracks.

Real-time cargo temperature monitoring can give early warnings of any issues. These solutions are configurable to the type of cargo and carriers can set variations based on the tolerance level of the produce. Notifications are instant for 'out-of-range' temperature conditions with comprehensive reporting of sensors. It removes the responsibility from the driver, who has little visibility of the controller when on the move. Four hours could go by before a driver inspects the trailer.



5. Immediate Proof on Delivery

If something does go wrong, the driver or carrier is usually the first one to get the blame. If things do go wrong, **carriers need evidence to back up the conditions of the transported cargo.** Compliance, auditing and documentation are vital for each refrigerated unit.

If a temperature query occurs, temperature monitoring solutions provide proof of in-transit monitoring and consistent vehicle updates. The information is instantly delivered to the shipper or receiver to avoid extra costs or possible disruption.

6. Regulatory Compliance

Regulations on this theme are only set to increase and become more stringent to **ensure clear audit trails in the event of a temperature problem.**

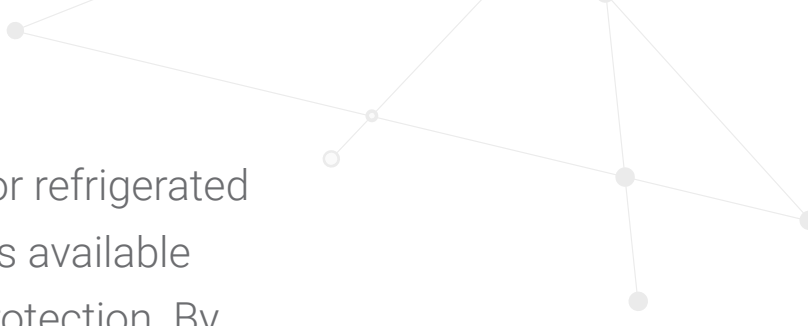
Fleets can ensure compliance by improving procedures, implementing the correct monitoring technology and training drivers in temperature and record management for each shipment. This ensures cargo is protected in real-time with an audit trail to prove it.

7. Lack of Control from Head Office

New regulations can introduce complex systems and procedures. There are enough distractions for drivers on the road without having to worry about fixing an accidental defrost. **This is when remote, two-way control can and does save the day.**

Temperature management systems allow approved users two-way reefer unit control in the event of a problem. Remote control features include switching the reefer on/off, defrost initiation, clearing alarms or changing the mode of operation from any location at any time.





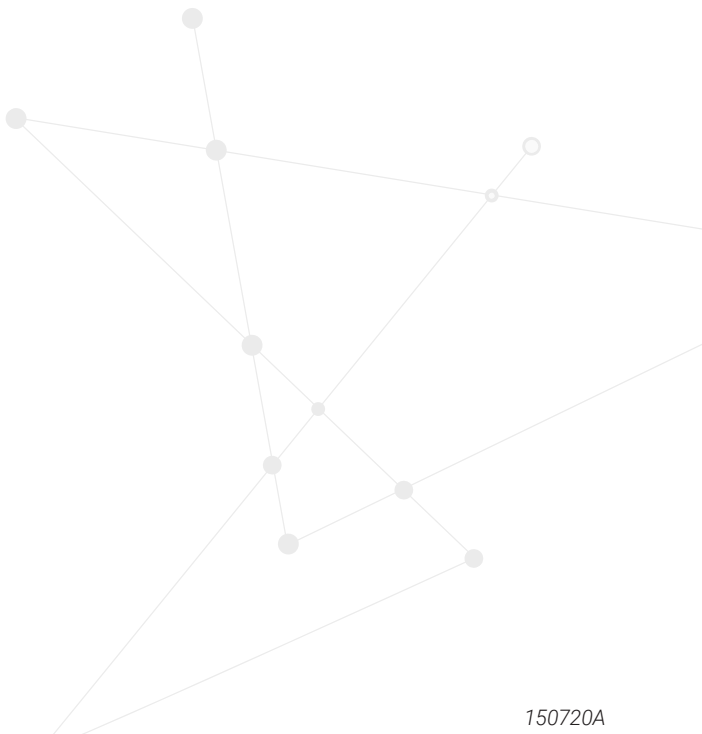
The 7 challenges discussed in this document are real concerns for refrigerated transport owners. But there are comprehensive, in-depth solutions available to meet them. ORBCOMM's cold chain solutions afford you full protection. By providing complete control of the environment—in real-time, remotely, on any device and from any browser—we protect your temperature-sensitive cargo, reduce your business risks and deliver perishable products safely, on-time and in compliance with rules and regulations.

Contact us for a demo to see our advanced temperature management solution in detail: email sales@orbcomm.com or call 1-800-ORBCOMM (or outside the US at +1-703-433-6329).

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